



UMDNJ
FINAL ANNUAL INSTITUTIONAL PROFILE
June 30, 2013

University of Medicine and Dentistry of New Jersey
Office of Institutional Research – University Office of Academic Affairs

INTRODUCTION

This Profile, dated as of June 30, 2013, is the final UMDNJ Annual Institutional Profile.

On July 1, 2013, the New Jersey Medical and Health Sciences Education Restructuring Act went into effect, changing the historic configuration of UMDNJ schools and units. Seven of the eight UMDNJ schools became part of a restructured Rutgers University. The UMDNJ-School of Osteopathic Medicine joined with Rowan University, and the University Hospital became a free-standing instrumentality of the State of New Jersey.

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June 30, 2013

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DEANS



Peter S. Amenta, MD, PhD
Dean, UMDNJ-Robert Wood Johnson Medical School



Thomas A. Cavalieri, DO
Dean, UMDNJ-School of Osteopathic Medicine



Cecile A. Feldman, DMD, MBA
Dean, UMDNJ-New Jersey Dental School



Robert L. Johnson, MD
Dean, UMDNJ-New Jersey Medical School

DEANS



Julie O'Sullivan Maillet, PhD
Interim Dean, UMDNJ-School of Health Related Professions



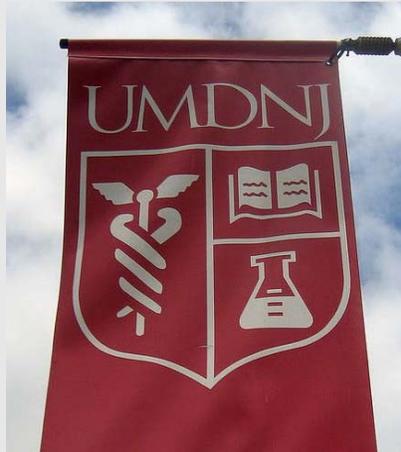
George Rhoads, MD, MPH
Interim Dean, UMDNJ-School of Public Health



Susan W. Salmond, EdD, RN
Dean, UMDNJ-School of Nursing



Kathleen W. Scotto, PhD
Dean, UMDNJ-Graduate School of Biomedical Sciences



PROFILE OF UMDNJ

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SCHOOLS

UMDNJ-Graduate School of Biomedical Sciences (GSBS)

GSBS at New Jersey Dental School

973-972-3728
185 South Orange Avenue, MSB C-696
Newark, New Jersey 07103

GSBS at New Jersey Medical School

973-972-4511
185 South Orange Avenue, MSB C-696
Newark, New Jersey 07103

GSBS at Robert Wood Johnson Medical School

732-235-5016
675 Hoes Lane, Room R-102
Piscataway, New Jersey 08854-8021

GSBS at School of Osteopathic Medicine

856-566-6282
42 East Laurel Road
University Doctors Pavilion
Suite 2200
Stratford, New Jersey 08084-1350

UMDNJ-New Jersey Dental School (NJDS)

973-972-4633
110 Bergen Street
Post Office Box 1709
Newark, New Jersey 07101-1709

UMDNJ-New Jersey Medical School (NJMS)

973-972-4538
185 South Orange Avenue, MSB C-671
Post Office Box 1709
Newark, New Jersey 07101-1709

UMDNJ-Robert Wood Johnson Medical School (RWJMS)

732-235-6300

Piscataway Campus

675 Hoes Lane
Piscataway, New Jersey 08854-5635

New Brunswick Campus

Clinical Academic Building
125 Paterson Street
New Brunswick, New Jersey 08903-0019

Medical Education Building
1 Robert Wood Johnson Place
New Brunswick, New Jersey 08903

Camden Campus

401 Haddon Avenue
Camden, New Jersey 08103-1506

UMDNJ-School of Health Related Professions (SHRP)

973-972-4276

Newark Campus

65 Bergen Street
Suite 120
Newark, New Jersey 07101-1709

Scotch Plains Campus

1776 Raritan Road
Scotch Plains, New Jersey 07076-2997

Stratford Campus

University Educational Center
40 East Laurel Road
Stratford, New Jersey 08084-1350

Piscataway Campus

675 Hoes Lane
Piscataway, New Jersey 08854-5635

UMDNJ-School of Nursing (SN)

973-972-4307

Newark Campus

65 Bergen Street, 11th Floor
Post Office Box 1709
Newark, New Jersey 07101-1709

Stratford Campus

University Educational Center
40 East Laurel Road, Suite 2025
Stratford, New Jersey 08084-1350

UMDNJ-School of Osteopathic Medicine (SOM)

856-566-6764

Academic Center
One Medical Center Drive
Stratford, New Jersey 08084-1501

UMDNJ-School of Public Health (SPH)

732-235-9700

New Brunswick Campus

335 George Street
Liberty Plaza, Suites 2100 and 2200
Post Office Box 2688
New Brunswick, New Jersey 08903

Tobacco Dependence Program
125 Paterson Street, Suite 2300
New Brunswick, New Jersey 08903

Piscataway Campus

683 Hoes Lane West
Piscataway, New Jersey 08854-5635

Newark Campus

65 Bergen Street
Post Office Box 1709
SSB, Room 701
Newark, New Jersey 07101-1709

Stratford/Camden Campus

University Educational Center
40 East Laurel Road, Suite 2025 (Rooms 2033-2035)
Stratford, New Jersey 08084-1350

DEGREE AND CERTIFICATE PROGRAMS

The University of Medicine and Dentistry of New Jersey offers the following degrees and certificates in a total of 53 programs: MD, DO, DMD, PhD, DCN, DCLS, DNP, DPT, DrPH, MS, MSCLS, MBS, MSN, MPH, Master, BS, BSN, AS, AAS, Post-doctoral certificates, Post-master's certificates, Post-baccalaureate certificates and Undergraduate certificates.

Field	Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
Medicine	MD MD DO	NJMS RWJMS SOM	
Dentistry/Dental Science	DMD MS Master	NJDS NJDS NJDS	
Graduate Dental Education*	Certificate	NJDS	
Biodefense	Certificate	GSBS	
Biomedical Sciences	PhD PhD, MS MS, MBS Certificate	GSBS GSBS GSBS GSBS	Rutgers University
Biomedical Programs**	PhD, MS PhD, MS	GSBS GSBS	Rutgers University
Biomedical Engineering	PhD, MS PhD	GSBS GSBS	Rutgers University NJIT
Clinical and Translational Science	MS Certificate	GSBS GSBS	
Environmental Sciences – Exposure Science	PhD	GSBS	Rutgers University
Neurosciences	Certificate	GSBS	

* Includes Endodontics, Oral Medicine, Orthodontics, Pediatric Dentistry, Periodontics and Prosthodontics.

** Includes Anatomy, Biochemistry, Biomedical Engineering, Cell & Developmental Biology, Cell and Molecular Biology, Cellular & Molecular Pharmacology, Microbiology & Molecular Genetics, Molecular Pathology & Immunology, Neurosciences, Oral Biology, Pharmacology, Physiology, Physiology & Integrative Biology, Stem Cell Biology, and Toxicology.

Field	Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
Pharmacological Sciences	Certificate	GSBS	
Stem Cell Biology	Certificate	GSBS	
Public Health	PhD DrPH MPH Certificates*	SPH SPH SPH SPH	Rutgers University Rutgers University Rutgers University and NJIT
Biostatistics	MS	SPH	
Health Care Management	MS	RWJMS	Rutgers University
Urban Systems - Urban Health	PhD	SN	Rutgers University and NJIT
Nursing Practice	DNP	SN	
Advanced Practice Nursing	Post-master's Certificates**	SN	
Nursing	MSN BSN	SN SN	
Nursing Informatics	MSN Post-master's Certificate	SN SN	
Allied Health Technologies	BS BS	SHRP SHRP	Bloomfield College Fairleigh Dickinson University Felician College Georgian Court University New Jersey City University Ramapo College of NJ Rutgers University - Newark
Biomedical Informatics	PhD MS	SHRP SHRP	
Cardiac Sonography	Certificate	SHRP	

* Includes General Public Health, Clinical Epidemiology, Environmental and Occupational Health, Global Public Health, Public Health Preparedness, and Public Policy and Oral Health Services Administration

**Includes Acute Critical Care, Adult Health (Psychiatric and Mental Health Nurse Practitioner), Clinical Trials Research Nurse, Family Nurse Practitioner in Emergency Care, Family Health, Gerontology, Nursing Education, Nursing Informatics, Nurse Anesthesia, Nurse Midwifery, Oncology and Women's Health.

Field	Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
Clinical Laboratory Sciences	DCLS MSCLS BS BS	SHRP SHRP SHRP SHRP	Bloomfield College Caldwell College College of Saint Elizabeth Fairleigh Dickinson University Felician College Georgian Court University Kean University Monmouth University New Jersey City University New Jersey Institute of Technology Ramapo College of NJ Rutgers University Saint Peter's College
Clinical Nutrition	DCN MS	SHRP SHRP	
Clinical Trial Sciences	MS	SHRP	
Cytotechnology	Certificate	SHRP	
Dental Assisting	Certificate Certificate	SHRP SHRP	Brookdale Community College Essex County College Ocean County College Raritan Valley Community College Thomas Edison State College Union County College
Dental Hygiene	Certificate AAS	SHRP SHRP	Brookdale Community College Essex County College Ocean County College Raritan Valley Community College Thomas Edison State College Union County College
Radiologic Imaging Modalities	Certificate	SHRP	
Diagnostic Medical Sonography	Certificate	SHRP	
Dietary Management	Certificate Certificate	SHRP SHRP	Essex County College Hudson County Community College Ocean County College Raritan Valley Community College
Dietetic Internship	Certificate MS/Certificate	SHRP SHRP	Rutgers University (MS)

Field	Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
Health Care Informatics	Certificate	SHRP	
Health Information Management	Certificate BS BS	SHRP SHRP SHRP	Georgian Court University Fairleigh Dickinson University Felician College Kean University New Jersey City University Saint Peter's College Thomas Edison State College
Health Sciences	PhD MS BS BS	SHRP SHRP SHRP SHRP	New Jersey City University Thomas Edison State College
Health Care Management	MS	SHRP	
Medical Coding	Certificate	SHRP	
Medical Imaging Sciences	BS BS	SHRP SHRP	Bloomfield College Fairleigh Dickinson University Felician College Georgian Court University New Jersey City University Ramapo College of NJ Rutgers University Thomas Edison State College
Medical Laboratory Science	Certificate	SHRP	
Nuclear Medicine Technology	Certificate	SHRP	
Occupational Therapy Assistant	AS	SHRP	Camden County College County College of Morris Cumberland County College Hudson County Community College Mercer County Community College Ocean County College Passaic County Community College Raritan Valley Community College Salem Community College Warren County College
Physical Therapy	DPT DPT	SHRP SHRP	Rutgers University-Camden
Physician Assistant	MS	SHRP	

Field	Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
Professional Counseling	Certificate	SHRP	
Psychiatric Rehabilitation	PhD MS	SHRP SHRP	
Psychiatric Rehabilitation & Psychology	BS BS	SHRP SHRP	Felician College Georgian Court University Kean University
Psychosocial Rehabilitation & Treatment	AS	SHRP	Burlington County College Camden County College Cumberland County College Essex County College Middlesex County College Passaic County Community College Ocean County College Raritan Valley Community College Union County College Warren County Community College
Radiologist Assistant	MS	SHRP	
Rehabilitation Counseling	MS	SHRP	
Respiratory Care	AS	SHRP	Essex County College Hudson County Community College Middlesex County College Ocean County College Raritan Valley Community College Union County College Warren County Community College
Respiratory Therapy	AAS Certificate	SHRP SHRP	Atlantic Cape Comm. College Burlington County College Camden County College Cumberland County College Gloucester County College Ocean County College Salem Community College
Vascular Sonography	Certificate	SHRP	

DUAL-DEGREE PROGRAMS

Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
MD/PhD	NJMS/GSBS RWJMS/GSBS RWJMS	Rutgers University Princeton University
MD/MPH	NJMS/SPH RWJMS/SPH	Rutgers University and NJIT
MD/MBA	NJMS RWJMS	Rutgers University Rutgers University
MD/JD	RWJMS RWJMS	Rutgers University Seton Hall University
MD/MS in Biomedical Informatics	RWJMS/SHRP	
MD/MS in Clinical & Translational Science	RWJMS/GSBS	
MD/MS in Health Care Management	RWJMS	Rutgers University
MD/MSJ	RWJMS	Seton Hall University
MD/Certificate in Oral & Maxillofacial Surgery	NJMS/NJDS	
DO/JD	SOM	Rutgers University
DO/MBA	SOM	Rowan University
DO/PhD	SOM/GSBS	
DO/MA Health Care Ethics	SOM	St. Joseph's University
DO/MS	SOM/GSBS	

Degree/Certificate	UMDNJ School(s)	Partner Institution (if any)
DMD/MPH	NJDS/SPH	Rutgers University and NJIT
DMD/MS in Biomedical Informatics	NJDS/SHRP	
DMD/PhD	NJDS/GSBS	
PhD/PharmD	GSBS at RWJMS	Rutgers University
MS/MPH	GSBS/SPH	Rutgers University and NJIT
Master of Biomedical Science/MPH	GSBS/SPH	Rutgers University and NJIT
MS/MBA	GSBS	Rutgers University
MSN/MPH	SN/SPH	Rutgers University and NJIT
MS in Biomedical Informatics/ Certificate in Graduate Dental Education	SHRP/NJDS	
DPT/PhD	SHRP/GSBS	
MPH/PsyD	SPH	Rutgers University and NJIT
MPH/JD	SPH	Rutgers University School of Law - Camden
MPH/MS in Physician Assistant	SPH/SHRP	Rutgers University and NJIT
MPH/MBA	SPH	Rutgers University and NJIT
MPH/PharmD	SPH	Rutgers University and NJIT

ARTICULATED EDUCATIONAL PROGRAMS

Degree	Affiliated Institution	Program Length (years)
UMDNJ-New Jersey Medical School		
BS/MD	Stevens Institute of Technology	7
	New Jersey Institute of Technology	7
	The College of New Jersey	7
	The Richard Stockton College of New Jersey	7
	Montclair State University	7 or 8
	St. Peter's College	7
BA/MD	Caldwell College	7
BA or BS/MD	Drew University	7
	Rutgers, The State University of New Jersey College of Arts and Sciences	7 or 8
UMDNJ-Robert Wood Johnson Medical School		
BA or BS/MD	Rutgers, The State University of New Jersey (any School on any campus)	7 or 8
	Rutgers, The State University of New Jersey (New Brunswick campus) (ACCESS-MED)	8
	Seton Hall University (ACCESS-MED)	8
UMDNJ-New Jersey Dental School		
BS/DMD	New Jersey Institute of Technology	7
	Rowan University	7
	New Jersey City University	7
	Ramapo College of New Jersey	7
	Fairleigh Dickinson University	7
	Montclair State University	7
	Caldwell College	7 or 8
Baccalaureate/DMD	Saint Peter's University	7
	Rutgers, The State University of New Jersey	7
	North Carolina Central University	7
UMDNJ-School of Osteopathic Medicine		
BA or BS/DO	The Richard Stockton College of New Jersey	7
Baccalaureate/DO	Rutgers, The State University of New Jersey-Camden	7
	Monmouth University	8
UMDNJ-Graduate School of Biomedical Sciences		
BA or BS/PhD	New Jersey City University	
BS/PhD	Montclair State University	
MS/PhD	Montclair State University	
	University of Puerto Rico, Mayaguez Campus	

Degree	Affiliated Institution	Program Length (years)
UMDNJ-School of Health Related Professions		
BS/MS in Physician Assistant	Rutgers University	
	Montclair State University	
	Ramapo College of New Jersey	6
	Saint Peter's University	6
	New Jersey Institute of Technology	6
BS in Biology/MS in Physician Assistant	Felician College	6
BA in Biology/MS in Physician Assistant	Kean University	6
BS/Doctor of Physical Therapy*	Kean University	
	Ramapo College of New Jersey	
BS/Doctor of Physical Therapy	Montclair State University	
	Felician College	
	William Paterson University	
	Saint Peter's University	6
	Fairleigh Dickinson University	6
	New Jersey Institute of Technology	6
BA/Doctor of Physical Therapy	Yeshiva University	7
BS/MS in Biomedical Informatics	Ramapo College of New Jersey	6
DI/Master of Science in Dietetic Internship	Rutgers University	
UMDNJ-School of Public Health		
BS/MPH and BA/MPH	Rutgers, The State University of New Jersey	
BS/MPH	William Paterson University	
	The Richard Stockton College of New Jersey	

* formerly BS/MS PT program

PIPELINE AND ACADEMIC SUPPORT PROGRAMS AT UMDNJ

UMDNJ offers numerous pipeline programs to non-UMDNJ students and other participants. These programs prepare students for future enrollment in a health professions school or program.

Academic support programs for UMDNJ students are also offered that supplement the academic curriculum with special projects or activities.

Following is a list of UMDNJ pipeline and academic support programs. Many of these programs are described in more detail in the Public and Community Service Section of this Profile beginning on page 105.

UMDNJ PIPELINE AND ACADEMIC SUPPORT PROGRAMS			
Name of Program	Program Sponsor	Collaborating or Cooperating Facility	Program Site
Access Med Program	RWJMS Office of Multicultural Affairs/Special Academic Programs	Seton Hall University; Rutgers University-New Brunswick	New Brunswick/Piscataway (NB/P)
Biomedical Careers Program	RWJMS Office of Multicultural Affairs/Special Academic Programs	Seton Hall University; Rutgers University - New Brunswick; Robert Wood Johnson University Hospital	(NB/P)
Decision for Dentistry	NJDS		Newark
Educational Opportunity Fund Academic Program	SHRP		
Freshman Introduction to Skills and Training (FIRST) Program	NJMS	NJMS Hispanic Center of Excellence (HCOE) Health Careers Opportunity Programs (HCOP)	Newark
Gateway to Dentistry	NJDS		Newark
Health Science Careers (Pre-College Program)	SHRP	High Schools in New Jersey	Scotch Plains
Med Prep Scholars Summer Research	NJMS		
Medical Science Academy	SOM		Stratford
Mini Medical School for High School Students Achieving Excellence in the Sciences	RWJMS		NB/P
National Youth Leadership Forum on Medicine	SOM	National Youth Leadership Forum on Medicine	Stratford
Northeast Regional Alliance (NERA) MedPrep Scholars Program	NJMS	Health Careers Opportunity Program (HCOP) grant	
Pre-Matriculation Summer Program	RWJMS Office of Multicultural Affairs/Special Academic Programs		NB/P.
Pre-Matriculation Program	SOM Center for Teaching and Learning		Stratford
Pre-Medical Honors Program	NJMS		Newark
Robert Wood Johnson Foundation	NJMS		

UMDNJ PIPELINE AND ACADEMIC SUPPORT PROGRAMS (Continued)			
Name of Program	Program Sponsor	Collaborating or Cooperating Facility	Program Site
Rutgers-Camden Visiting Students	Biology Department, GSBS at SOM		Stratford
Science Enrichment Program	RWJMS		
Science Scholars Academy	RWJMS Office of Multicultural Affairs/Special Academic Programs		NB/P
SMART (Science, Math and Related Topics) Program	NJMS Department of Family Medicine		Newark
Summer Clinical Internship Program	RWJMS		
Summer Pre-Medical Research and Education Program (PREP)	SOM	NJ Commission on Higher Education - Educational Opportunity Fund (EOF)	Stratford
Summer Research	NJMS	NJMS Hispanic Center of Excellence (HCOE)	Newark
Summer Student Research Programs	NJMS, RWJMS, NJDS SOM and SHRP		
Summer Youth Scholars Program	NJMS	NJMS Hispanic Center of Excellence (HCOE)	Newark
SURP - Summer Undergraduate Research Program in Neuroscience	RWJMS Department of Neuroscience and Cell Biology	Rutgers University	NB/P
UMDNJ-School of Osteopathic Medicine DO ShaDOw Program	SOM	Cherry Hill East High School, Cherry Hill West High School, Charles Brimm Medical Arts High School	Stratford
Undergraduate Summer Research Program	GSBS		Newark Piscataway Stratford
Urban Scholars Program	SHRP		

Source: UMDNJ-Office of the University Registrar, December 31, 2012.

**GRADUATE MEDICAL AND DENTAL
EDUCATION**

PROGRAM TOTALS, 2012-13*

School	Number of Active GME or GDE Programs
New Jersey Medical School	49
Robert Wood Johnson Medical School	43
School of Osteopathic Medicine	21
New Jersey Dental School	3
Total Active Programs	116

* Active programs only. See "Housestaff Totals by Program" beginning on page 98 for a list of programs by School.

Source: Survey of UMDNJ GME and GDE Programs and Housestaff, UMDNJ-Office of Institutional Research. Data as of September 1, 2012

ACCREDITING AGENCIES

The University is accredited by the **Middle States Commission on Higher Education**. In addition, the University's Schools, educational programs and post-graduate training programs are also accredited where pertinent accrediting agencies exist (see list below).

Program	Accrediting Agency
<i>New Jersey Medical School Robert Wood Johnson Medical School</i>	
MD	Liaison Committee on Medical Education (LCME)
Allopathic residency programs	Accreditation Council for Graduate Medical Education (ACGME)
Podiatric Medicine and Surgery (NJMS)	Council on Podiatric Medicine Education of the American Podiatric Association (CPME)
OB/GYN Maternal Fetal Medicine	American Board of Obstetrics and Gynecology
Reproductive Endocrinology & Infertility	American Board of Obstetrics and Gynecology
Psychology Internship - Adult and Child and Adolescent	American Psychological Association
Surgery - Breast Surgery (RWJMS)	The Society for Surgical Oncology
<i>UMDNJ-School of Osteopathic Medicine</i>	
DO	American Osteopathic Association (AOA) - Commission on Osteopathic College Accreditation (COCA)
Osteopathic internship & residency programs	American Osteopathic Association (AOA)
<i>UMDNJ-New Jersey Dental School</i>	
DMD	Commission on Dental Accreditation (CODA) of the American Dental Association
Dental residency programs & postgraduate certificates	Commission on Dental Accreditation (CODA) of the American Dental Association
<i>UMDNJ-School of Public Health</i>	
PhD, DrPH, MS, MPH	Council on Education for Public Health (CEPH)
<i>UMDNJ_School of Nursing</i>	
BSN, MSN, DNP & post-master's certificates	Commission on Collegiate Nursing Education (CCNE)
MSN - Nurse Anesthetist Track	Council on Accreditation (COA) of Nurse Anesthesia Educational Programs
MSN - Nurse Midwifery Track	Accreditation Commission for Midwifery Education (ACME)

Program	Accrediting Agency
UMDNJ-School of Health Related Professions	
Cardiac Sonography	Commission on Accreditation of Allied Health Education Programs (CAAHEP) - Joint Review Committee for Diagnostic Medical Sonography
Coordinated Dietetic Program	Accreditation Council for Education in Nutrition and Dietetics (ACEND)
Cytotechnology	Commission on Accreditation of Allied Health Education Programs (CAAHEP)
Dental Assisting	Commission on Dental Accreditation (CODA) of the American Dental Association
Dental Hygiene	Commission on Dental Accreditation (CODA) of the American Dental Association
Diagnostic Medical Sonography	Commission on Accreditation of Allied Health Education Programs (CAAHEP) - Joint Review Committee for Diagnostic Medical Sonography
Dietary Management	Association of Nutrition and Food Professionals (ANFP-Approved Programs)
Dietetic Internship	Accreditation Council for Education in Nutrition and Dietetics (ACEND)
Health Information Management	Commission on Accreditation for Health Informatics and Information Management Education
Medical Laboratory Science	National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) - Commission on Allied Health Education and Accreditation
Nuclear Medicine Technology	Commission on Accreditation of Allied Health Education Programs (CAAHEP) - Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCEPNMT)
Occupational Therapy Assistant	Accreditation Council for Occupational Therapy Education (ACOTE)
Physical Therapy – SHRP has two accredited PT programs: one in Newark and one in Stratford	Commission on Accreditation in Physical Therapy Education (CAPTE)
Physician Assistant	Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)
Radiologist Assistant	American Registry of Radiologic Technologists (ARRT)
Rehabilitation Counseling – Dual accreditation	Council on Rehabilitation Education (CORE) Council for Accreditation of Counseling & Related Educational Programs (CACREP)
Respiratory Therapy/Respiratory Care – SHRP has two accredited RT programs: one in Newark and one in Stratford	Commission on Accreditation for Respiratory Care (COARC)
Vascular Sonography	Commission on Accreditation of Allied Health Education Programs (CAAHEP) - Joint Review Committee on Education in Cardiovascular Technology

UMDNJ MEDICAL / DENTAL FIRST-YEAR TUITION HISTORY

<i>Academic Year</i>	<i>Resident Tuition</i>	<i>Percent Increase in Resident Tuition</i>	<i>Non-Resident Tuition</i>	<i>Percent Increase in Non-Resident Tuition</i>
1971 - 1972	\$750	--	\$1,000	--
1972 - 1973	\$1,100	46.7%	\$1,750	75.0%
1973 - 1974	\$1,100	0.0%	\$1,750	0.0%
1974 - 1975	\$1,100	0.0%	\$1,750	0.0%
1975 - 1976	\$1,750	59.1%	\$3,000	71.4%
1976 - 1977	\$3,000	71.4%	\$4,000	33.3%
1977 - 1978	\$4,000	33.3%	\$5,000	25.0%
1978 - 1979	\$4,000	0.0%	\$5,000	0.0%
1979 - 1980	\$4,500	12.5%	\$5,625	12.5%
1980 - 1981	\$5,000	11.1%	\$6,240	10.9%
1981 - 1982	\$5,500	10.0%	\$6,875	10.2%
1982 - 1983	\$6,325	15.0%	\$7,905	15.0%
1983 - 1984	\$6,825	7.9%	\$8,530	7.9%
1984 - 1985	\$7,175	5.1%	\$8,965	5.1%
1985 - 1986	\$7,535	5.0%	\$9,860	10.0%
1986 - 1987	\$8,000	6.2%	\$10,500	6.5%
1987 - 1988	\$8,250	3.1%	\$10,825	3.1%
1988 - 1989	\$8,660	5.0%	\$11,365	5.0%
1989 - 1990	\$9,093	5.0%	\$11,933	5.0%
1990 - 1991	\$10,457	15.0%	\$13,723	15.0%
1991 - 1992	\$11,053	5.7%	\$14,505	5.7%
1992 - 1993	\$11,550	4.5%	\$15,158	4.5%
1993 - 1994	\$12,128	5.0%	\$15,916	5.0%
1994 - 1995	\$12,795	5.5%	\$16,791	5.5%
1995 - 1996	\$13,295	3.9%	\$17,445	3.9%
1996 - 1997	\$14,492	9.0%	\$22,679	30.0%
1997 - 1998	\$14,927	3.0%	\$23,359	3.0%
1998 - 1999	\$15,509	3.9%	\$24,270	3.9%
1999 - 2000	\$16,052	3.5%	\$25,119	3.5%
2000 - 2001	\$16,694	4.0%	\$26,124	4.0%
2001 - 2002	\$17,362	4.0%	\$27,169	4.0%
2002 - 2003	\$18,143	4.5%	\$28,392	4.5%
2003 - 2004	\$19,776	9.0%	\$30,947	9.0%
2004 - 2005	\$20,567	4.0%	\$32,185	4.0%
2005 - 2006	\$21,390	4.0%	\$33,472	4.0%
2006 - 2007	\$22,246	4.0%	\$34,811	4.0%
2007 - 2008	\$23,136	4.0%	\$36,203	4.0%
2008 - 2009	\$25,218	9.0%	\$39,461	9.0%
2009 - 2010	\$26,227	4.0%	\$41,039	4.0%
2010 - 2011	\$30,948	18.0%	\$49,657	21.0%
2011 - 2012	\$32,805	6.0%	\$52,636	6.0%
2012 - 2013	\$34,445	5.0%	\$55,268	5.0%
2013 - 2014	\$35,823	4.0%	\$57,479	4.0%

Source: UMDNJ Tuition Rates Schedule, Academic Year 2013-2014

UNIVERSITY LIBRARIES

The University of Medicine and Dentistry of New Jersey's University Libraries exist in a rapidly changing environment. Like all 21st century academic health sciences libraries, we are hybrid facilities, preserving past knowledge while offering the latest electronic resources, information services and enabling technologies. To do this well necessitates acquiring and licensing extensive scholarly resources, enabling ready and straightforward access to them, and using both traditional and cutting-edge methods of acquisition, access and delivery of service to users. New scholarly material is produced at a pace that requires dynamic research libraries to be more nimble and flexible than ever before to insure ubiquitous access. New emphases in research and teaching, and the heightened expectations of the UMDNJ user community, require that our libraries be proactive in anticipating needs, customizing information services that respond to user requirements and designing facilities that enable new kinds of interaction.

The future integration with the Rutgers University Libraries poses new opportunities for access to more extensive research collections covering a wider array of disciplines which will provide enhanced support to further the academic, research and clinical care missions of the health sciences enterprise. The Libraries will serve the larger entity, Rutgers Biomedical and Health Sciences, and will organizationally align with the Rutgers University Libraries on July 1, 2013.

The UMDNJ Libraries currently embrace the 21st century concepts of knowledge management. These include the systems and processes used to acquire, organize, store, access, retrieve, teach and disseminate knowledge and information in a variety of digital formats, while preserving access to print books and journals as well as other unique archival resources. The University Libraries provide a critical portal, where scholarship is discovered and used, where collaborative education takes place, and where students, faculty and staff can find the expert assistance of highly trained librarians. The scholarly resources made available by the UMDNJ Libraries, combined with effective knowledge management, are crucial competitive assets in an era of massive change in health care and information technology.

Reliable access to scholarly resources and provision of timely information services to the students, housestaff, faculty, and staff remains our primary goal. The Libraries provide information access, in particular, to electronic scholarly resources both onsite and remotely. Currently, UMDNJ faculty, students and staff have access to 84 electronic databases, 799 major electronic books in the health sciences and 4,784 of the most highly rated scholarly electronic journals in the health sciences. Utilization of licensed electronic resources, online books and journals exceeded 1.5 million uses in FY2012.

The University Libraries aggressively support electronic journal subscriptions, having cancelled all but a few print journals at each of our campus libraries. As a result of this change, retaining access to high quality electronic content and archival collections is a major priority. Any cost savings associated with migrating from print to digital journals has been used to retain and expand access to electronic journals.

Currently, all UMDNJ libraries are fully wireless environments. The libraries strive to provide flexible learning and study spaces for all users. The Smith Library in Newark recently added 48 new study seats and 12 new wired tables for the recharging of

portable devices. Monitors were added to each of the eight study rooms for ease of projection from student laptops. A large screen digital signage display was recently added at the library entrance which provides timely announcements on library topics.

Technologies are currently being implemented that will enhance digital library services to the University community. The Libraries now offer mobile optimized Web sites for ease of access to needed resources from handheld devices. A Quick Search feature was introduced on all of the campus libraries' Websites. Ease of use of electronic resources from mobile handheld devices utilizing QR code was implemented with grant funding this year.

The UMDNJ Libraries contribute to the University's community service goal with the availability of **HealthyNJ**, an extensive consumer health Website (<http://www.healthynj.org>). **HealthyNJ** assists consumers to rapidly identify authoritative, patient/consumer information tailored to a wide range of cultural, education, and language needs. HealthyNJ celebrated its 12th anniversary this year, with newly added features and content. Currently, there are over 400 total topics in the Diseases and Conditions and Health and Wellness portals. Of these, over 200 topics are fully available in Spanish. The site has recently been enhanced with "Read Me First" entries for simple, plain language text.

The University Libraries continue to work collaboratively to enhance knowledge management in the clinical practice, education, research, and community service to meet the increasing challenges facing UMDNJ as a major academic health center. The Libraries play a critical support role in supporting learning and the creation and dissemination of new scholarly resources. The libraries strive to be an active catalyst for scholarly communication and knowledge management.

UNIVERSITY LIBRARIES

<http://libraries.umdj.edu/>

NEWARK CAMPUS

UMDNJ – George F. Smith Library of the Health Sciences

30 Twelfth Avenue, P.O. Box 1709, Newark, NJ 07101-1709
(973) 972-4580

<http://libraries.umdj.edu/newarklib/>

NEW BRUNSWICK/PISCATAWAY CAMPUS

UMDNJ-Robert Wood Johnson Library of the Health Sciences

One Robert Wood Johnson Place, New Brunswick, NJ 08903-0019
(732) 235-7610

<http://libraries.umdj.edu/rwjlweb/>

STRATFORD CAMPUS

UMDNJ-Health Sciences Library at Stratford

One Medical Center Drive, Stratford, NJ 08084-1501
(856) 566-6800

<http://www.umdj.edu/stlibweb/>

CAMDEN CAMPUS***The Reuben L. Sharp Health Science Library***

The Cooper Health System, One Cooper Plaza, Camden, NJ 08103-1489
 (856) 342-2525

<http://libraries.umdj.edu/camlbweb/>

UMDNJ and Coriell Library (Study Annex)

401 Haddon Avenue, Camden, NJ 08103-1505
 (856) 757-7740

<http://www.umdj.edu/camlbweb/index.html>

Library resources and services are provided to the University community at the Scotch Plains campus by means of electronic linkages.

**UNIVERSITY LIBRARIES STATISTICAL
HIGHLIGHTS - FISCAL YEAR 2013**

	TOTAL
Access to Libraries Resources	
Gate Count	338,209
Circulation	11,338
Information Services	
Database Accesses/End User	1,621,203
Database Accesses/Librarian Mediated	613
Reference Questions Answered	5,479
Education Session (Formal Teaching) Participants	5,831
Interlibrary Cooperation	
Lending to Libraries	9,030
Borrowing from Libraries	4,240
Collection	
Book Volumes	82,530
Electronic Books	852
Journal Volumes	157,583
Print Journal Subscriptions	26
Electronic Journal Subscriptions	4,960
Database Subscriptions	87
Personnel	
Professional Staff (FTE)	35
Support Staff (FTE)	22.6

CENTER FOR CONTINUING & OUTREACH EDUCATION (CCOE)

Purpose

Consistent with its responsibility as an academic medical center, the University of Medicine and Dentistry of New Jersey (UMDNJ), through the Center for Continuing and Outreach Education (CCOE), provides a comprehensive program of continuing education with the goal of improving the quality of patient care by providing lifelong educational opportunities for physicians, nurses, pharmacists and other healthcare providers. Using the vast resources of UMDNJ's eight medical, science, and health-related schools, CCOE serves as the university's focal point for providing continuing education to healthcare providers. In doing so, CCOE supports UMDNJ's commitment to facilitate the translation of discoveries at the basic science level to the actual treatment, management, and prevention of disease.

Content

The content of the CCOE continuing education program encompasses a broad range of practice areas determined through a comprehensive needs assessment process. In the context of nationally-established competencies for healthcare providers, the content of educational interventions is derived from experts, national specialty guidelines and consensus statements, observed quality management indicators, and the needs of learners. The content of continuing education is matched to those assessed needs and addresses strategies to resolve the knowledge or skill deficit of the healthcare provider.

Target Audience

CCOE serves several principal audiences. The local audience includes the staff of internal or affiliated institutions that participate in regularly scheduled series programs (including grand rounds, M&M conferences, tumor boards, and other series).

Regional learners participate in off-site activities throughout New Jersey planned and sponsored by CCOE. These activities provide education on new developments in medicine, and those competencies necessary for relicensure and recertification.

CCOE also reaches national and international audiences who look to UMDNJ as a source of expertise based on the reputation of the university and the distinctions earned by distinguished faculty. Such programs often involve partnerships with specialty societies and joint sponsors.

Types of Activities

CCOE chooses its educational design as a means to assure that the education offered matches the learning styles of its learners, is appropriate to the learning objectives, and provides the mechanisms and processes to sustain change in clinician behavior. Educational interventions foster active participation in learning using techniques such as pre- and post-assessments, case studies and question-and-answer sessions.

Options for activity delivery include:

- Live conferences and workshops
- Regularly scheduled series
- Enduring materials
- Performance and quality improvement initiatives
- Internet-based education

Expected Results

CCOE seeks to improve the knowledge, competence and performance of its learners. CCOE evaluates its effectiveness in achieving this goal through various educational outcomes measurement (EOM) mechanisms. These mechanisms are determined based on the intended result of the activity and will include, but not be limited to, learning assessment instruments such as pre-and post-assessments; case studies that determine ability of learner to apply knowledge to patient care; anecdotal reports from learners based on their observation of patients subsequent to the learning episode; and actual chart entries through quality management resources.

The analysis of EOM data will form the basis of improvements to CCOE's overall CE Program. A process of continuous quality improvement is fundamental to CCOE and the determination of improvements and active management of the implementation of planned improvements is a part of all staff meetings, management meetings, and meetings of the CME committees at both the New Jersey Medical School and Robert Wood Johnson Medical School. This program of quality assessment and improvements is directly tied to the commitments made in the CE Mission and are in concert with the Accreditation Council for Continuing Medical Education, Accreditation Council for Pharmacy Education, and the New Jersey State Nurses Association/American Nurses Credentialing Center.

Accreditations

CCOE holds the following accreditations:

- UMDNJ-CCOE is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. UMDNJ-CCOE holds an Accreditation with Commendation (six-year term), adhering to all 22 of the ACCME updated criteria for providers.
- UMDNJ-CCOE is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.
- UMDNJ-CCOE is an approved provider of continuing nursing education by the New Jersey State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Our History

CCOE was originally established as The Office of Continuing Medical Education in 1970. In 1991, UMDNJ realized the critical nature of the continuing education function and reorganized the office as the Center for Continuing Education in the Health Professions (CCE), with several focused educational divisions.

In early 2001, CCE was further strengthened by the addition of the Division of Outreach and a change in name to the current Center for Continuing and Outreach Education (CCOE). Today, CCOE has expanded its role by providing leadership in developing educational activities to serve learners external to the UMDNJ community, in addition to the learners within the university and local region.

CCOE is a vital part of the university community and employs an experienced staff of professionals. The Center works closely with voluntary physician leadership in two active CME committees at Robert Wood Johnson and New Jersey Medical Schools to oversee

all continuing education sponsored by both medical schools, including a comprehensive regularly scheduled series program that covers most clinical disciplines of medicine. Through outreach programs, CCOE has extended education opportunities to learners throughout the United States and the world.

CCOE Staff

CCOE is currently staffed by a group of ten professionals. The organization consists primarily of program management and central administrative and support staff. Program management staff work with UMDNJ schools and faculty from UMDNJ's campuses and units, and other educational partners to develop and implement educational activities. Central administrative and support staff for the various business resources provide services that support the continuing education programming, including registration, finance/accounting, marketing, and information technology services. These internal resources allow greater efficiencies in workflow, control of data, and financial management of continuing education activities and the overall continuing education program.

CENTERS AND INSTITUTES

UNIVERSITY

Center for Continuing and Outreach Education
Institute for the Elimination of Health Disparities
International Center for Public Health, Inc.
New Jersey AIDS Education and Training Center
New Jersey Center for Biomaterials
Samuel L. Bailey Huntington Disease Center at UMDNJ

NEW JERSEY MEDICAL SCHOOL AND UNIVERSITY HOSPITAL

AIDS Education and Training Center (AETC) National Resource Center
Cardiovascular Research Institute
Carroll M. Leevy Center for Liver Diseases
Center for Advanced Proteomics Research
Center for Biophysical Pathology
Center for Bloodless Surgery and Medicine
Center for Healthcare Ethics
Center for Human Development and Aging
Center for Macular Degeneration Treatment and Research
Center for Neuromuscular Disorders
Center for Rehabilitation Services
Center for Reproductive Medicine
Center for Skull Base Surgery
Center for Vascular Disease
Center for Ventilatory Support Alternatives & Pulmonary Rehabilitation
Cochlear Implant Center
Community Training Center
Cornea and Laser Vision Institute
Cystic Fibrosis Center
Eye Institute of New Jersey
New Jersey Medical School Global Tuberculosis Institute at UMDNJ
Institute for Ophthalmology and Visual Science
Institute of Genomic Medicine
Low Back Pain Rehabilitation Center
Multiple Sclerosis Diagnosis and Treatment Center
Neurofibromatosis Center of New Jersey
Neurological Institute of New Jersey
New Jersey Breast Imaging Center
New Jersey Medical School Center for BioDefense
New Jersey Medical School Center for Immunity and Inflammation
New Jersey Medical School Hispanic Center of Excellence
New Jersey Medical School Spine Center
New Jersey Medical School Sports Medicine Center
New Jersey State Trauma Center
North Jersey Orthopaedic Institute
Northern New Jersey Spinal Cord Injury Center
Ophthalmic Center for Minimally Invasive Treatment
Ophthalmic Clinical Trials Center

Pediatric Comprehensive Epilepsy Center
 Peripheral Nerve Center
 Psychiatric Screening Center
 Ruy V. Lourenço Center for the Study of Emerging and Re-emerging Pathogens
 Ruy V. Lourenço Student Health Advocates for Research and Education
 (SHARE) Center
 Sickle Cell Disease Center
 The Autism Center
 University Center for Plastic and Reconstructive Surgery
 University Craniofacial Center of New Jersey
 University Hospital Comprehensive Pain Management Center
 University Hospital Comprehensive Stroke Center
 University Transplantation Center
 University Women's Health Center
 Women's Wellness Center
 Young Fathers Program

ROBERT WOOD JOHNSON MEDICAL SCHOOL

Advanced Center for Parkinson's Disease Research (Richard E. Heikkila Center
 of Excellence)
 Antenatal Diagnostic Center (Camden)
 Biliary-Pancreas Disease Center
 Cancer Institute of New Jersey
 Cardiac Arrhythmia Center
 Cardiovascular Institute of New Jersey
 Center for Advanced Biotechnology and Medicine
 Center for Biomedical Imaging and Informatics
 Center for Biostatistics
 Center for Child and Reproductive Environmental Health
 Center for Clinical and Translational Science
 Center for Coronary Artery Disease Reversal
 Center for Healthy Families and Cultural Diversity
 Center for Hematopoietic Stem Cell Transplantation
 Center for HIV Infection
 Center for Molecular Therapeutics
 Center for Neurodegenerative and Neuroimmunologic Diseases
 Center for Neuroscience
 Center for Psychopharmacology Research
 Center for Stress Management and Behavioral Medicine
 Child Health Institute of New Jersey
 Clinical Center of EOHSI
 Colorectal Care Center (Camden)
 Comprehensive Epilepsy Center
 Comprehensive Sleep Disorders Center
 Cooper Center for In Vitro Fertilization (Camden)
 Corporate Wellness Center
 Crohn's and Colitis Center of New Jersey
 Cystic Fibrosis Center
 Dean and Betty Gallo Prostate Cancer Institute at CINJ

Digestive Disease Center
Elizabeth M. Boggs Center on Developmental Disabilities-The University
 Affiliated Program of New Jersey
Environmental & Occupational Health Sciences Institute
Eric B. Chandler Health Center
Gastrointestinal and Liver Tumor Center
Genitourinary Tumor Study Group Center
Geriatric Assessment Service
Gerontological Institute
Heart Center of New Jersey
Heart Failure Center
Hypertension Outpatient Center
Infant APNEA Center (Camden)
Institute for Reproductive and Perinatal Genetics
Institute for the Study of Child Development
Ira B. Black Center for Stem Cell Research
Leukemia/Lymphoma Study Center
Lipid Disorder Center
Lyme Disease Center
Melanoma and Sarcoma Center
National Institute of Environmental Health Sciences Center of Excellence
Neuromuscular and ALS Center
New Jersey Comprehensive Breast Care Center
New Jersey Pain Institute
New Jersey Regional Hemophilia Program
Osteoporosis Center
Ozone Research Center
Perinatal Institute
Regional Cleft/Craniofacial Programs of Southern New Jersey (Camden)
Psoriasis Clinic Research Disease Center
Robert Wood Johnson Dialysis Center
Scleroderma Program
SIDS Center of New Jersey
Sports Medicine Center
Stem Cell Institute of New Jersey
The Robert Wood Johnson Autism Center
Thoracic Tumor Study Group Center
Thrombosis Center
Trauma Center
University Center for Disaster Preparedness and Emergency Response
University Center for Reproductive Endocrinology and Fertility
Vascular Center of New Jersey
Women's Health Institute

NEW JERSEY DENTAL SCHOOL

Advanced Technology Education Center
Center for Oral Infectious Diseases
Center for Pharmacogenomics & Complex Disease Research
Center for Temporomandibular Disorders and Orofacial Pain

Ina and Howard Drew Maxillofacial Imaging Center
 Special Care Treatment Center
 Northeastern Minority Oral Health Research Center
 University Craniofacial Center of New Jersey
 University Dental Center at Galloway
 University John H. Cronin Dental Center (Northfield)
 University Dental Center at Somerdale
 Metheny Center of Medicine and Dentistry (Peapack)

SCHOOL OF OSTEOPATHIC MEDICINE

Cell and Gene Therapy Center
 Center for Information Mastery (CIM)
 Center for Weight Loss and Metabolic Control
 Center for Mental Health Treatment for Persons with Intellectual Disabilities
 Center for Mood Disorders and Neuromodulation Therapies
 Center for Teaching and Learning
 Center for Wellness
 Child Abuse Research Education and Service (CARES) Institute
 Geriatric Education Center
 NeuroMusculoskeletal Institute (NMI)
 New Jersey Institute for Successful Aging (NJISA)
 Pain and Headache Center

SCHOOL OF HEALTH RELATED PROFESSIONS

Center for Advanced and Continuing Education
 Center for the Study and Promotion of Recovery from Severe Mental Illness
 Institute for Complementary and Alternative Medicine
 Institute for Nutrition Interventions
 Center for Recovery/Integrated Employment Institute
 BioPharma Education Initiative

SCHOOL OF NURSING

Center for Life Long Learning
 François Xavier Bagnoud Center
 The Northeast Institute for Evidence Synthesis and Translation (NEST) at
 UMDNJ-School of Nursing
 Stanley S. Bergen, Jr., MD Center for Multicultural Education, Research and
 Practice

SCHOOL OF PUBLIC HEALTH

Centers for Education and Training
 Center for Global Public Health
 Center for Health Economics and Health Policy
 Center for School and Community-Based Research and Education
 Center for Tobacco Surveillance & Evaluation Research
 New Jersey Center for Public Health Preparedness at UMDNJ

UNIVERSITY BEHAVIORAL HEALTHCARE

Behavioral Research and Training Institute
Comprehensive Services on Aging (COPSA) Institute for Alzheimer's Disease
and Related Disorders
Institute for Alzheimer's Disease and Related Disorders
Violence Institute of New Jersey at UMDNJ

MAJOR TEACHING FACILITIES

NEW JERSEY MEDICAL SCHOOL

- University Hospital
- Hackensack University Medical Center
- Department of Veterans Affairs, New Jersey Health Care System – East Orange
- Barnabas Health:
 - Saint Barnabas Medical Center
 - Newark Beth Israel Medical Center
 - Monmouth Medical Center
- Saint Joseph's Regional Medical Center

ROBERT WOOD JOHNSON MEDICAL SCHOOL

- The Cooper Health System
- Robert Wood Johnson University Hospital
- Meridian Hospitals Corporation/Jersey Shore University Medical Center
- University Medical Center at Princeton
- Raritan Bay Health Services Corporation/Raritan Bay Medical Center
- Somerset Medical Center

SCHOOL OF OSTEOPATHIC MEDICINE

- Kennedy Memorial Hospitals-University Medical Center
- Lourdes Health System

UNIVERSITY HEALTH CARE FACILITIES

Cancer Institute of New Jersey

195 Little Albany Street
New Brunswick, New Jersey 08901

New Jersey Medical School-University Hospital Cancer Center

205 South Orange Avenue
Newark, New Jersey 07101

Child Health Institute of New Jersey

89 French Street
New Brunswick, NJ 08901

Eric B. Chandler Health Center

277 George Street
New Brunswick, New Jersey 08901

Eric B. Chandler Health Center Church Street Annex

123 Church Street
New Brunswick, NJ 08901

New Jersey Medical School Doctors Office Center

90 Bergen Street
Post Office Box 1709
Newark, New Jersey 07101-1709

New Jersey Medical School - The North Jersey Orthopaedics Institute

33 Overlook Road
MAC Suite L02
Summit, New Jersey 07901

UMDNJ – North Jersey Orthopaedics Institute

142 Palisades Avenue, Suite 205
Jersey City, New Jersey 07306

New Jersey Medical School - The Institute of Ophthalmology and Visual Science

556 Eagle Rock Avenue, Suite 206
Roseland, New Jersey 07068

New Jersey Medical School - National Tuberculosis Center

225 Warren Street, 1st Floor
Newark, New Jersey 07101
(Pulmonology)

Robert Wood Johnson Medical School Clinical Academic Building

125 Paterson Street
New Brunswick, New Jersey 08901-1977

UMDNJ-University Hospital

150 Bergen Street
Post Office Box 1709
Newark, New Jersey 07101-1709

UMDNJ-Ambulatory Care Center

140 Bergen Street
Newark, New Jersey 07103

University Behavioral HealthCare at Newark

183 South Orange Avenue
Post Office Box 1709
Newark, New Jersey 07101-1709

University Behavioral HealthCare at Piscataway

671 Hoes Lane
Piscataway, New Jersey 08854-1392

Robert Wood Johnson Medical Group

Department of OB/GYN – MFM
292 Bloomfield Avenue – 2nd Floor
Montclair, New Jersey 07042

**Robert Wood Johnson Medical Group Family Practice at
Monument Square**

317 George Street
New Brunswick, New Jersey 08901

Robert Wood Johnson Medical Group at Monroe

18 Centre Drive, Suite 104
Monroe Twp., New Jersey 08831

Robert Wood Johnson Medical Group at Princeton

800 Bunn Drive, Suite 303
Princeton, New Jersey 08540

Robert Wood Johnson Medical Group at Somerset

One Worlds Fair Drive
Somerset, New Jersey 08873

School of Osteopathic Medicine – The University Doctors at Cherry Hill

Rutgers Casualty Building
2250 Chapel Avenue, Suite 110 – Family Medicine
Cherry Hill, New Jersey 08002

2250 Chapel Avenue, Suite 100 – Psychiatry
Cherry Hill, New Jersey 08002

School of Osteopathic Medicine – The University Doctors at Hainesport

310 Creek Crossing Blvd. – Family Medicine
Hainesport, New Jersey 08036

School of Osteopathic Medicine – The University Doctors at Hammonton

373 White Horse Pike – Family Medicine
Hammonton, New Jersey 08037

School of Osteopathic Medicine – The University Doctors at Stratford

University Doctors' Pavilion – New Jersey Institute for Successful Aging,
NeuroMusculoskeletal Institute, Headache Center, CARES Institute,
Family Medicine, Surgery, Obstetrics & Gynecology, Medicine, Physical
Therapy, Orthopedics, Osteopathic Manipulative Medicine, and Sports
Medicine
42 East Laurel Road
Stratford, New Jersey 08084-1350

Academic Center – Wellness Center/Nutrition & Weight Loss
One Medical Center Drive
Stratford, New Jersey 08084-1350

109 East Laurel Road – Center for Excellence for the Mental Health Treatment of
Persons with Intellectual Disabilities
Stratford, New Jersey 08084

School of Osteopathic Medicine – The University Doctors at Voorhees

Pavilions at Voorhees – Internal Medicine
2301 Evesham Road, Suite 202
Voorhees, New Jersey 08043

School of Osteopathic Medicine – The University Doctors at Washington Township

570 Egg Harbor Road – Family Medicine, Medicine, Obstetrics & Gynecology,
Orthopedics, Surgery, and NeuroMusculoskeletal Institute
Suite C2
Sewell, New Jersey 08080

400 Medical Center Drive – Internal Medicine
Suite – E
Sewell, New Jersey 08080

405 Hurffville-Cross Keys Road – Pediatrics/Adolescent Medicine
Suite 203
Sewell, New Jersey 08080

School of Osteopathic Medicine – Hospital-Based Units

Lourdes Medical Center of Burlington County
218 Sunset Road
Willingboro, New Jersey 08046

Our Lady of Lourdes Medical Center
1600 Haddon Avenue
Camden, New Jersey 08101

Kennedy Memorial Hospital – Stratford Division
18 East Laurel Road
Stratford, New Jersey 08084

Kennedy Memorial Hospital – Washington Township Division
435 Hurffville-Cross Keys Road
Turnersville, New Jersey 08012

Kennedy Memorial Hospital – Cherry Hill Division
2201 Chapel Avenue West
Cherry Hill, New Jersey 08002

New Jersey Dental School (334 operatories)
110 Bergen Street
Newark, New Jersey 07101-1709

New Jersey Dental School Center for Dental and Oral Health
90 Bergen Street, Suite 7700
Post Office Box 1709
Newark, New Jersey 07101-1709

New Jersey Dental School Statewide Network for Community Oral Health
University Dental Center at Galloway
4 East Jimmy Leeds Road
Building 2, Suite 6
Galloway, New Jersey 08205

University Dental Center at Matheny Medical and Educational Center
65 Highland Avenue
Post Office Box 339 Main Street
Peapack, New Jersey 07977

University Dental Center at Somerdale Square
13 Somerdale Square
Somerdale, New Jersey 08083

University John H. Cronin Dental/Medical Center
235 Dolphin Avenue
Northfield, New Jersey 08225

School of Health Related Professions Allied Dental Clinic
1776 Raritan Road
Scotch Plains, New Jersey 07076

School of Nursing Mobile Health Project
65 Bergen Street, 8th Floor
Newark, New Jersey 07101-1709

The Jordan and Harris Community Health Center
11 Hawkins Court
Newark, NJ 07105

CLINICAL AFFILIATES

UMDNJ-NEW JERSEY MEDICAL SCHOOL

Atlantic Health Systems Hospital Corp./Morristown Medical Center (UME)	Jersey City Medical Center (Affiliated Residency Program)
Atlantic Health Systems Hospital Corp /Overlook Hospital (UME & Affiliated Residency Program)	Kessler Institute for Rehabilitation (UME & Affiliated Residency Program)
Care Alternatives (Hospice) (UME)	Methany Medical and Educational Center (UME)
Children's Eye Care Center w/Clara Maass Medical Center (UME & Joint Affiliated Residency Program)	Newark Extended Care (Home Care Agency) (UME)
Children's Specialized Hospital (UME & Affiliated Residency Program)	New Community Extended Care Facility (Nursing Home) (UME)
Chrill Visiting Nurse Association (Home Care Agency) – (UME)	New York Beth Israel (Affiliated Residency Program)
Clara Maass Medical Center (Affiliated Residency Program)	NY Presbyterian–Columbia School of Medicine (Affiliated Residency Program)
Compassionate Care Hospice (Home Care Agency) – (UME)	North Hudson Community Action Corporation (UME)
Englewood Hospital & Medical Center (Affiliated Residency Program)	Robert Wood Johnson University Hospital (Affiliated Residency Program)
Essex Valley Visiting Nurse Association (Home Care Agency) (UME)	St. Joseph's Visiting Health Services of NJ (Home Care Agency) (UME)
Greystone Park Psychiatric Hospital (UME & Affiliated Residency Program)	St. Michael's Medical Center (UME)
Hackensack UMC Mountainside (UME & Affiliated Residency Program (Note: formerly Mountainside Hospital))	Trinitas Regional Medical Center (UME & Affiliated Residency Program)
	Rutgers, University Behavioral HealthCare (Affiliated Residency Program)
	University Reproductive Associates (Affiliated Residency Program)
	Vitas (Home Care Agency) (UME)
	Wills Eye Hospital (Affiliated Residency Program)

UME = Undergraduate Medical Education:
Required 3rd & 4th year Clerkships

UMDNJ-ROBERT WOOD JOHNSON MEDICAL SCHOOL

Atlantic Health System/Mountainside Hospital (Affiliated Family Practice Residency Program)	New Jersey Department of Health and Senior Services Raritan Bay Medical Center
Capital Health System/Helene Fuld Medical Center Care One	Robert Wood Johnson University Hospital at Rahway
Carrier Foundation	Robert Wood Johnson University Hospital at Hamilton
CentraState Medical Center	Somerset Medical Center
Children's Specialized Hospital	Southern Ocean County Hospital
Cooper Medical Center	St. Joseph's Medical Center (Affiliated Family Practice Residency Program)
Deborah Heart and Lung Center	St. Peter's University Hospital
Department of Veterans Affairs, NJ Health Care System	Rutgers University Health Services
Francis E. Parker Memorial Home	Rutgers - University Behavioral Health Care
Hunterdon Medical Center (Affiliated Family Practice Residency Program)	University Medical Center at Princeton
John F. Kennedy Medical Center	University of Pennsylvania Health System
Matheny School and Hospital	Warren Hospital (Affiliated Family Practice Residency Program)
Meridian Health System	West Jersey Hospital (Affiliated Family Practice Residency Program)
<ul style="list-style-type: none"> • Ocean Medical Center • Riverview Medical Center 	

UMDNJ-NEW JERSEY DENTAL SCHOOL

Access One, Inc. (Atlantic County)	Matheny Medical and Educational Center (Peapack)
Atlantic County Contract	Metropolitan Area Neighborhood Nutrition Agreement (MANNA) Alliance
City of Philadelphia AIDS Activities Coordinating Office (AACO)	South Jersey AIDS Alliance
Cooper Health System, Early Intervention Program	Southern New Jersey Regional Family HIV Treatment Center
Gloucester County Special Services School District	State of NJ Department of Health and Senior Services
Kennedy Health Systems, Early Intervention Program	

UMDNJ-SCHOOL OF NURSING

Acelero Learning Center Early Head Start	Cooper Health System
Albert Einstein Healthcare Network	County of Middlesex
Alder Alphasia Center	Covenant House
Amboy Memorial Hospital	Deborah Heart and Lung Center
American Nurses Credentialing Center	Delaware Valley Urology
Ancora Psychiatric Hospital	Dominican College
Anna Sample Family Shelter	Drew University
Atlantic County Division of Public Health	Drexel University
Atlantic Health System (AHS) - Hospital Corp	East Orange General Hospital
Atlanticare Physician Group PA	East Orange Health & Human Services
Babyland Family Services, Inc	Eastern Children's Christian Retreat
Bayada Nurses, Inc	Edison State College
Bayonne Medical Center	Elijah's Soup Kitchen
Bergen Regional Medical Center	Englewood Hospital & Medical Center
Bergen Volunteer Medical Initiative	Englewood Hospital & Medical Center/Englewood Home Care
Bobbie's Babies	Eric B Chandler Health Center
Broadway House for Continuing Care	Essex County Hospital Center
Burlington County Health Department	Essex Valley VNA
Camden County CDI Headstart	Fairview Urban Renewal Associates, L.P.
Camden County OEO Head Start	Family Services Agency of South Jersey
Cancer Institute of New Jersey	Farleigh Dickinson University
Capable Adolescent Mothers	Felician College Division of Health Sciences Professional Nursing Program
Capital Health System, Inc.	FOCUS
Casa Israel	Garfield Board of Education
Cathedral Kitchen	Gateway-Northwest Maternal Child Consortium
Center for Family Guidance	GF Law Chambers
Center for Family Services	Greystone Park Psychiatric Hospital
Center for Women's Health	Hackensack University Medical Center
Central New Jersey Child & Mental Health Consortium	Hammonton School District
Chancellor Avenue Annex School	Henry J. Austin Health Center
Chancellor Avenue Elementary School	Henry P Becton School of Nursing
Children's Specialized Hospital	Hillsdale Health Department
Chilton Memorial Hospital	Hispanic Development Corporation
Christ Hospital	Holy Name Hospital - School of Nursing
Christian Health Care Center	Holy Redeemer Home Care
Church of the Visitation Relief Center	Home Health Agency of Hackensack Medical Center
City of Newark Department of Health and Human Services	Horizons Health Center
Clinton Hill Community & Early Childhood Center, Inc	Housing Authority of Plainfield
Community YMCA Services	Housing Authority of the Township of Irvington, New Jersey
Compassionate Care Hospice	Hudson Healthcare, Inc
Concept Media Division of Jobson Medical Information LLC	

Hunterdon Medical Center
 Integrity House
 Internet Medical Group
 Ironbound Community Corporation
 Irvington Health Department
 Jefferson Park Ministries, Inc
 Jefferson University Physicians and Thomas Jefferson
 University Hospitals, Inc
 Jersey City Medical Center
 Jersey City Medical Center (Nurse Residency
 Program)
 Jersey Shore Medical Center
 Jewish Home at Rockleigh
 JFK Medical Center
 Joslin Center
 Kennedy University Hospital
 Kessler Memorial Hospital
 Kindred Hospital New Jersey - Rahway
 Kingdom Charter School of Leadership
 La Casa de Don Pedro
 Laurel Springs Elementary School
 Lawnside School District
 Lindenwold Senior Center
 Livingston Health Department
 Long Island Jewish Medical Center
 Masonic Home of New Jersey
 MCOSS
 Medical Center of Ocean County
 Memorial Hospital for Cancer and Allied
 Diseases/Memorial Sloan Kettering
 Memorial Hospital of Burlington County
 Mental Health Resource Center
 Middlesex County Public Health Department
 Minute Clinic Diagnostic
 Montclair State University
 Montefiore Medical Center
 Morristown Medical Center
 Morristown Memorial Hospital
 Neighborhood Health Services Corporation
 New Jersey Veterans Home - Paramus
 New Jersey Veterans Memorial Home
 New York Methodist Hospital
 New York-Presbyterian Hospital
 Newark Beth Israel Medical Center
 Newark Beth Israel Medical Center (Anesthesia)
 Newark Community Health Center
 Newark Housing Authority
 Newark Preschool Council, Inc
 Newcomb Medical Center
 NJ Department of Environmental Protection, Center for
 Occupational Medicine
 NJ Veterans Memorial Home at Paramus
 North Hudson Community Action Corporation
 North Shore University Hospital
 Northern New Jersey Maternal Child Health
 Consortium
 NYU Hospitals Center
 Offender Aid and Restoration of Essex County
 Our Lady of Lourdes Medical Center
 Overlook Family Practice
 Palisades Medical Center
 Pascack Valley Hospital
 Phelps Memorial Hospital Center
 Physicians and Nurse Practitioners Group, PC
 Piscataway Senior Center
 Planned Parenthood
 Planned Parenthood of Metropolitan New Jersey
 Planned Parenthood/Great Camden Area
 Precious Littles Early Childhood Development Center,
 Inc
 Princeton Healthcare System
 PROCEED, Inc.
 Project HOPE
 Rahway Hospital
 Rancocas Hospital
 Raritan Bay Medical Center
 Ready Healthcare
 Reliance Medical Group, LLC
 Robert Wood Johnson University Hospital
 Robert Wood Johnson University Hospital - Hamilton
 Royal Adelaide Hospital
 RWJMS-Department of Pediatrics/Division of Genetics
 Saint Michaels Medical Center
 Salerno Medical Associates, LIP
 Samaritan Hospital
 SBHCS-Newark Beth Israel Medical Center
 SBHCS-St. Barnabas Medical Center
 Semmelweis University, Hungary
 Shore Memorial Hospital
 Silver Care Center
 Silver Court Nursing Center, Inc
 SolAmor Hospice Corporation
 Somerset Medical Center
 Southern Jersey Family Medical Centers, Inc
 Southern Ocean County Hospital (Meridian Hospitals
 Corp)
 SSM Ambulatory Care
 St Clare's Hospital
 St Francis Medical Center
 St James Hospital
 St John of God Health Center
 St Lukes-Roosevelt Hospital Center
 St Mary's Hospital
 St Peter's University Hospital
 St. Francis Medical Center
 St. Joseph's Regional Medical Center-St. Joseph's
 Wayne Hospital
 St. Mary's Hospital Community Mental Health Center
 St. Mary's Hospital in Passaic

St. Michael's Medical Center
 Staten Island University Hospital
 Sterling High School
 Summit Oaks Hospital
 Sunrise House
 Sunset Road Medical Associates, PA
 Team Charter Schools
 The Children's Health Fund (CHF)
 The Leaguers, Inc
 Thomas Edison State College
 Trenton Psychiatric Hospital
 Trinitas Hospital
 Underwood Hospital-Family Practice Center
 Underwood Memorial Hospital
 Union Township Public Schools
 United Health Care System
 United Hospitals Medical Center - Children's Hospital
 of New Jersey

University Correctional HealthCare
 University Health Services -Princeton University
 VA New Jersey Health Care Systems
 Valley Diagnostics
 Valley Hospital
 Veterans Affairs Medical Center Office of Research
 and Development
 Veterans Memorial Home
 Virtua Health, Inc
 Virtua Health, Inc. (ABSN)
 Virtua Medical Group, PA
 Visiting Nurse Affiliates
 Voorhees Pediatric Facility
 West Jersey Occupational Health Services
 Wiley Christian Retirement Community
 Women's Health & Counseling Center
 XLHome, PC
 YCS

UMDNJ-SCHOOL OF HEALTH RELATED PROFESSIONS

1st Cerebral Palsy of NJ
 A. Harry Moore
 A. R. Rehab & Physical Therapy Associates
 Abilities Center of Southern New Jersey Inc
 Absecon Manor
 Access Health
 Access Physical Therapy
 Access Rehab Centers
 Active Care Physical Therapy
 Adams Center at Long Island University
 Adena Health System
 Advance Housing, Inc
 Advanced Medical Imaging
 Advanced Physical Therapy Associates
 Advantage Rehab Services
 AKDHC
 Alamos-Belmont Rehabilitation Hospital
 Albert Einstein Healthcare
 Albert Einstein Medical Center
 Alfred I. DuPont Institute
 Alisa Nwachokor
 All Care Physical Therapy Center
 All Saints Healthcare System, Inc.
 Alliance Hand & PT, Inc.
 Alternatives, Inc
 Alvernia University
 Angela Skinner
 Arbor Glen Ctr & Genesis Eldercare Network
 ARC Kohler School
 Archway School
 Arizona Kidney Disease & Hypertension Center
 Ashland Facility Operations, LLC
 ASK Rehab
 Associated Rehabilitation Services
 At Home Medical
 Atlantic Cardiology Group
 Atlantic Care Behavioral Health
 Atlantic City Medical Center
 Atlantic Health System (AHS)
 Atlantic Orthopedic & Sports Physical Therapy
 Atlantic Rehab Services
 Atlantic Shore Sports Rehab
 Atlanticare
 Atrium at Matawan LLC dba Victoria Healthcare
 Center
 Atrium at Park Ridge dba Plaza Regency at Park
 Ridge
 Atrium at Princeton LLC dba Pavillions at Forrestall
 Atrium at Wayne
 Atrium Medical Center
 Aurora Healthcare
 Avanthi Rao PT
 Balanced Nutrition Inc.
 Bancroft NeuroHealth
 Banner Health
 Baptist Medical Center
 Barnabas Health-Clara Maass Medical Center
 Barnabas Health-Community Medical Center
 Barnabas Health-Kimball Medical Center
 Barnabas Health-Monmouth Medical Center
 Barnabas Health-Newark Beth Israel Medical Center
 Barnabas Health-Outpatient Center
 Barnabas Health-Saint Barnabas Medical Center
 Barneget Sports Rehabilitation & Physical Therapy
 Barone and Catania Cardiovascular Group
 Barstow Community Hospital
 Bay Sport Physical Therapy
 Bayonne Medical Center

Bayshore Community Hospital
 Bergen County Special Services School District
 Berkshire Physical Therapy
 Betty Bacharach Rehab Hospital
 Bio-Medical Applications of Fredericksburg Dialysis Inc.
 Bio-Medical Applications of Maine (BMA) aka S' Maine Dialysis
 Black River Technical College
 Boynton Beach Rehab Center
 BREAKTHRU Physical Therapy
 Bridgeway Rehabilitation Services
 Briody Healthcare
 Broadway Physical Therapy
 Bryn Mawr
 Burke Rehabilitation Hospital PT
 Burlington Cnty Spec Serv Sch Distr
 Burlington County College
 Butler County WIC
 Cabarrus Health Alliance
 Caldwell Therapy Center
 Camcare
 Camden-Clark Memorial Hospital
 Cape Cod Hospital
 Cape May County Special Services
 Cape Regional Medical Center
 Capital Care
 Capital Health System, Inc.
 Cardinal Health Radiopharmacy
 Cardiovascular Care Group
 Care One at Evesham
 CareOne at Morris
 CareOne at Teaneck
 CareOne, LLC
 Carolinas Medical Center - Lincoln
 Catholic Charities Diocese of Metuchen
 Catholic Charities Diocese of Trenton
 Cedar Crest Village, Inc.
 Celebrate the Children
 Center for Advanced Wound Care
 Center for Dermatology and Laser Skin Surgery
 Center for Family Services
 Center for Physical Therapy & Sports Rehab
 CentraState Healthcare System
 CentraState Medical Center
 Cerebral Palsy Center in Edison, NJ
 Cerebral Palsy Center of Camden County
 Cerebral Palsy Center of Gloucester & Salem
 Cerebral Palsy Center of North Jersey
 Cerebral Palsy Center of Union County
 Cerebral Palsy League
 Certified Medical Representatives Institute
 Cherry Hill PT Associates
 Children's Hospital of Philadelphia
 Children's Specialized Hospital
 Children's Therapy Services
 Chilton Memorial Hospital
 Christ Hospital
 Christiana Care Health Services, Inc
 Churchill Orthopedic Rehabilitation
 Cincinnati Children's Hospital Medical Center
 Clifton Springs
 Collaborative Support Programs
 Colonial Rehabilitation & Nursing
 Columbia University
 Columbus Hospital
 Community Action
 Community Cancer Center
 Community Food Bank of NJ
 Community General Hospital
 Community Health Center of Branch County
 Community Hospital Group
 Community Integrated
 Community Medical Center Scranton PA
 Community Physical Therapists
 Community Therapy Center
 Comprehensive Cardiovascular Consultants
 Comprehensive Sports Care Specialists
 Concentra Medical Centers
 Concord Hospital
 Continuum Health Alliance, LLC
 Cooper Health System
 Corederm
 CPC Behavioral Healthcare
 Crandall Corporate Dietitians
 Cranford Health and Extended Care
 Crozer Chester Medical Center
 Cumberland County Guidance Center - Psych Rehab
 Cybergistics, Inc.
 Dartmouth Hitchcock
 Davies Medical Center
 DaVita, Inc. (DVA Healthcare Renal Care)
 Delaware Division of Vocational Rehabilitation
 Delaware Valley Physical Therapy Associates
 Department of Veterans Affairs (VA)
 Diabetes Health Center/ Hunterdon Medical Center
 Diabetes Treatment Center
 Dialysis Clinic, Inc.
 Dialyspa
 Dianne Chiappetti
 Dietary Solutions
 DP Pediatric, LLC
 Dr. Derkasch
 Dr. Hayeck
 Dr. Michael Dill
 Dr. Minni Sharma
 Dr. Peter Fam
 Drug Information Association
 Duke University Health System d/b/a Durham Regional Hospital

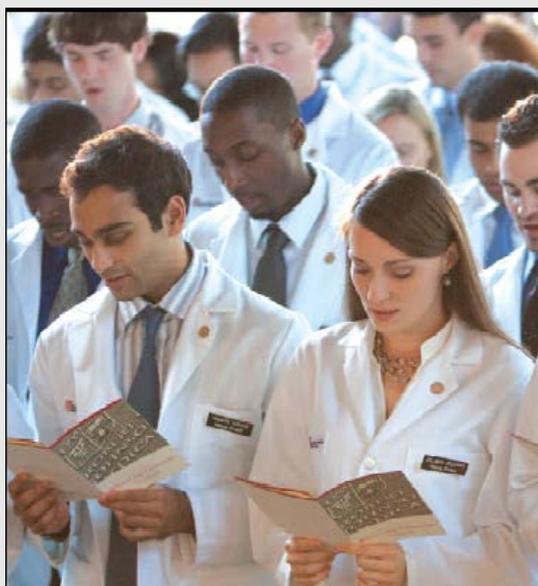
Durham County General Hospital
 DVA Healthcare-Southwest Ohio
 East Orange General Hospital
 East Penn Sports Medicine
 Easter Seal Rehab Center
 Easter Seals New Jersey
 Eastern Long Island Hospital
 Eastern Maine Medical Center
 El Paso County Hospital District
 Elmer Platz, PT
 Employment Horizons
 Englewood Cliffs Physical Therapy
 Englewood Hospital & Medical Center
 Erie County Medical Center
 Essex County Probation Department
 Essex County Vocational/Technical Schools
 Everfit Physical Therapy and Fitness
 Family Connections
 Family Service of Burlington County
 Faulkner Physical Therapy Group
 FEDCAP Rehabilitation Service Inc.
 First Children Schools
 First Health in Woodbridge
 Five Rivers Medical Center
 Flippany
 FMC of Ripley
 Forest Hill Healthcare Center
 Fox Infusion Inc
 Fox Rehabilitation Services
 Franklin Care Center
 Fresinus Medical Services, Inc.
 Garden Manor Extended Care Facility
 Garden/ Sullivan Hospital
 Gateway Day Treatment Program
 Generations Inc.
 Genesis Healthcare System
 Genesis Rehab Services
 Gloucester County Department of Health
 Gloucester County Special Services School District
 Goleta Valley Community Hospital
 Good Samaritan Hospital
 Goodwill Industries of Greater NY & Northern NJ Inc.
 Grandview Hospital
 Greenbrook Manor
 Greystone Park Psychiatric Hospital
 Hackensack University Medical Center
 Hackettstown Community Hospital
 Hackettstown Regional Medical Center
 HAHV Kingston Hospital
 Hanger Prosthetics & Orthotics
 Harmon House Care Center
 Harvard Community Health Plan
 Haym Salomon Home for Nursing Rehab
 Hazard Health and Rehabilitation Center
 Health Barn USA
 Health Center of Galloway
 Health Quest
 Healthcare Services Group Inc.
 Healthcare Virginia, Inc
 HealthSouth Corporation
 Heart & Vascular Center of New Brunswick
 Heartland of Miamisburg
 Heartland Rehab. Svcs.
 Helen Hayes Hospital
 Helping Hand Behavioral Health- Galloway
 Henrietta Goodall Hospital
 Her Health PT
 Heritage Community of Kalamazoo
 Hillsdale Community Health Center
 Holy Cross Hospital
 Holy Name Hospital
 Homewood at Crumland Farms
 Hoover Hospital
 Houston Foodbank
 Huggins Hospital
 Hunterdon Developmental Center
 Hunterdon Medical Center
 Hyde Park Counseling Center
 IHC Health Serv dba Pocatello Reg'l Med Ctr
 Image Guided Surgery and Aesthetics
 In Motion Physical Therapy
 Independence Rehabilitation
 Inglemoor Rehabilitation and Care Center
 Inglis House
 Inland Hospital Rehabworks
 Inspira Health Network-Medical Center at Vineland
 Integra Life Sciences, Inc.
 Intensive Therapeutics, Inc
 Intergrated Health Serv @ Somerset Valley
 IOM Health System, LP
 IslandSports Physical Therapy
 Ivy Rehab
 Jersey Central Physical Therapy & Fitness
 Jersey City Medical Center
 Jersey Coast Vascular Institute
 Jersey Shore Medical Center
 Jewish Family & Vocational Service of Middlesex
 County
 Jewish Hospital & Rehab Center
 JFK Medical Center/Community Hosp. Group
 Johns Hopkins Hospital
 John Knox Village
 John Mather Memorial Hospital
 Joyner Sports Medicine Institute
 Kachina Point
 Kean University
 Kennedy Hospitals
 Kennedy Hospitals @ Cherry Hill
 Kennedy Hospitals @ Stratford
 Kennedy Krieger Institute

Kern Medical Center
 Kessler Institute for Rehabilitation
 Keystone Human Services MidAtlantic
 Kindred Hospital
 Kinetic Physical Therapy
 Kopack Physical Therapy and Sports Medicine
 Korea University
 Ladacin
 Laurel House
 Lawnwood Regional Medical Center
 Lenape Valley Foundation
 Lenox Hill Hospital
 Lewes Physical Therapy
 Liberty Health Systems
 Life Care Medical Center
 Llanfair Retirement Community
 Lock Haven Hospital
 Logan Health Care Center
 Long Hill Township School District
 Long Island Sports and Rehab Center
 Lower Bucks County Hospital
 Lutheran Medical Center
 Lutheran Musculoskeletal Center, LLC
 Madison Spine and Physical Therapy
 Magee Rehab at Voorhees
 Main Line Health System
 Manna
 Manor Care Corporation
 Maple Lawn Medical Care Facility
 Maple Leaf Physical Therapy
 Margate Physical Therapy
 Maria Joseph Living Care Center
 Mariner Health Pendelton
 Marlboro Physical Therapy
 Marshfield Clinical Cytotechnology Program
 Martin Hospital Corporation
 Maryland SportsCare & Rehab
 Mason General Hospital
 Matheny Medical & Educational Center
 Matheny School and Hospital
 Maven Physical Therapy
 Meadow Park
 Meadowlands Hospital Medical Center
 Medbridge
 Medford Care Center
 Medical Center of Princeton
 Medical Imaging of Teaneck
 Medicorp Health System
 Memorial Medical Center at South Amboy
 Memorial Sloan Kettering Cancer Center (MSKCC)
 Memphis-Shelby County Health Dept.
 Mental Health Association of Essex County
 Mental Health Association of New Jersey
 Mental Health Association of Southeastern
 Pennsylvania
 Mercer Medical Center
 Mercy Health System
 Mercy Hospital
 Meridian Hospital Corporation
 Merit Care Hospital d/b/a Merit Care Medical Center
 "Merit Mountainside, LLC d/b/a Mountainside
 Hospital"
 Mesa County Board of Health
 Methodist Healthcare System of San Antonio, Ltd.
 Metrowest Braintree Rehab Associates
 Miami's Children's Hospital
 Midwest Dialysis Center
 Midwest Ear, Nose, & Throat Specialists
 Midwest Kidney Care
 Mile Square Physical Therapy
 Millennium Respiratory Services
 Misericordia University
 Modi, DeVang
 Mon Valley Community Health Services Inc
 Morristown Medical Group
 Morristown Memorial Hospital
 Morristown Sports Medicine Ctr
 Morse Geriatric Center
 Mount Carmel Guild Behavioral Healthcare System
 Mountainside Hospital
 Mt. Pleasant Retirement Village
 Mullaney & Associates Physical Therapy
 Multiple Handicapped Program
 Mundth, Jonathan
 NAVAJO Area Indian Health Service
 Nazareth Hospital
 Neighborhood Health Services Corporation
 Neilson Place
 Neurac Institute for Physical Therapy
 New England Hospital of Portland
 New Jersey Cancer Institute
 New Jersey Center of Physical Therapy
 New Jersey Dept. of Human Services
 New Jersey Hospital Association
 New Jersey Institute For Disabilities
 New York Presbyterian Hospital
 Newark Therapy Services
 Nixon Adult Day Center of San Jacinto
 North County Regional Hospital
 North Inc.
 North Jersey Rehab Service
 Northeast Arkansas Baptist Memorial Health Care
 Northeast Community Center for Behavioral Health
 Northern Hills Physical Therapy Associates
 Northern Westchester Hospital
 Northwest Essex Comm Healthcare Network
 Northwestern Human Services of Delaware County
 Northwoods Rehab & Extended Care at Hilltop
 NORWESCAP
 NovaCare Outpatient Rehab

Nutrition Management Consultants
 NYU Hospitals Center
 O'Bleness Health System
 Oakleaf Village of Lexington
 OBICI Hospital
 Occupational Therapy Consultants
 Olean General Hospital
 Olmsted Medical Center
 Opportunity Alliance
 Optimum Orthopedics
 Orchard Manor Residential Healthcare Facility
 Orthopedic Specialty Hospital
 Our Lady of Lourdes Health Care Services, Inc
 Our Lady of Lourdes Medical Center
 Overlook Hospital
 Palisades General Hospital
 Palisades Medical Center
 Palomar Pomerado Hospital
 Paragon, Inc.
 Passaic County Elks Cerebral Palsy
 Passaic Pediatrics
 Pathmark Stores, Inc.
 Pathways to Independence, Inc.
 Paul Schweitzer's Therapy and Rehab
 Pediatric Rehabilitation of North Jersey
 Pediatric Workshop
 Peninsula Regional Medical Center
 Penn State (The Milton S. Hershey Center)
 Pennsylvania Hospital
 Penobscot Valley Hospital
 Pfizer, Inc.
 PG Chambers School
 Philadelphia Post-Acute Partners
 Phillipsburg Physical Therapy
 Physical Therapy Sports Rehab
 Physiocare Rehabilitation
 Physiofitness
 Physiotherapy Corporation
 Portneuf Medical Center
 Preferred Therapy Solutions
 Presbyterian Hospital in the City of New York
 Princeton Healthcare System
 Princeton Radiology Associate
 Pro-Activity Associates
 Procure Rehabilitation
 Project Live, Inc
 Promise
 Prospect Heights Care Center
 Providence Hospital
 Provider Services
 Quest Diagnostics
 Racine/Kenusha Community Action
 Rahway Hospital
 RAI Dialysis
 Raritan Bay Medical Center
 Reading Dialysis
 Regent Care Center
 Rehab 2000, Inc.
 Rehab Connection
 Rehab Programs, Inc.
 Rehabworks
 Renal Centers of North Jersey
 Renal Treatment Centers-Illinois, Inc
 Request Physical Therapy
 Resources for Independent Living
 Richard Stockton College
 Richmond University Medical Center
 Rickard Rehab Services Inc.
 Ridgewood Physical Therapy & Rehabilitation Center,
 Inc
 Riptide Physical Therapy, Inc.
 Riverview Medical Center
 Robert Forster
 Robert Wood Johnson University Hospital - Hamilton
 Robert Wood Johnson-University Hospital
 Rochester Athletic Club
 Rolling Hills Hospital
 Roosevelt Institute For Rehabilitation
 Ross County Health Department
 Runnells Specialized Hospital
 Rutgers Cooperative Extension of Hunterdon County
 Rutherford County WIC Program
 Rutherford Regional Health System
 Sai's Biosciences Research Institute PVT, LTD
 Saint Peter's University Hospital
 Samaritan Bethany, Inc
 School of Nursing
 Sea View Hospital Rehabilitation Center and Home
 Seed of Health WIC
 SERV Center of NJ
 Seton Hall University
 Shady Lane Home
 Shore Memorial Hospital
 Sierra Vista Regional Medical Center
 Silver Care Center
 Simhadri Gupta, MD
 Soar Physical Therapy
 Sodexo-Christ Hospital
 Somerset Hills Physical Therapy
 Somerset Medical Center
 South Amboy Memorial Hospital
 South Bergen Jointure Commission
 South Jersey Hospital
 South Weymouth
 Southampton Hospital
 Southcoast Hospitals
 Southeast Alabama Medical Center
 Southeastern Orthopedic Specialist
 Southern Maine Medical Center
 Southern New England Rehab

Southern Ocean County Hospital (Meridian Hospitals Corp)
 Southwest Regional Medical Center
 Specialized Physical Therapy
 Spine and Orthopedic Physical Therapy Ctr.
 Spokane Sports Medicine
 Sports and Back Rehab
 Sports Physical Therapy at South Jersey
 Sports Physical Therapy Ctr. Of Bergen
 Sports Rehab and Physical Therapy
 Sports Rehab of Manhasset
 Sports Training Physical Therapy of NJ
 Sportscare
 St Francis Medical Center
 St. Andre
 St. Barnabas Outpatient Radiology Center
 St. Barnabas Rehabilitation Affiliates
 St. Bernards Healthcare
 St. Clare's Hospital Inc
 St. Cloud Health Care Center
 St. Francis Medical Center
 St. John of God Community Services
 St. Joseph Medical Center
 St. Joseph's Wayne Hospital
 St. Lawrence Rehabilitation Center
 St. Lucie County Health Department
 St. Luke's-Roosevelt Hospital
 St. Mary's Child Development Center
 St. Mary's Hospital
 St. Mary's Regional Medical Center-Lewiston Maine
 St. Michael's Medical Center
 St. Peter's University Hospital
 St. Peters Medical Center
 St. Tammany Parish Hospital Service District
 STAATS Physical Therapy
 State of Florida, Dept of Health, Palm Beach County Health Dept
 Staten Island University Hospital
 Strive Physical Therapy & Sports Rehab
 Sturgis Hospital
 Summa Wadsworth Rittman Hospital
 Sunny Days Early Childhood Developmental Services, Inc
 Tel Hai Retirement Community
 Temple University
 Tenet Health System Graduate
 Tenet Health System Hahnemann, LLC d/b/a Hahnemann University Hospital
 The Arc of Camden County
 The ARC of Somerset County
 The Cedars
 The Children's Medical Center
 The Cooper Health System
 The County of Camden
 The County of Gloucester
 The Friendly Home
 The Health Center of Plant City
 The Lennard Clinic, Inc
 The Medical Center at Princeton
 The New York and Presbyterian Facility
 The Orthopedic Group
 The Polk County Health Department
 The Silverstrom Group
 The University of Maryland Medical System Corporation
 The University of Michigan
 The Valley Hospital
 Therapeutic Associates
 Thomas B Finan Center
 Tidewater Physical Therapy
 To Better Health, LLC
 Total Renal Care, Inc.
 Township Sports Therapy & Work Hardening - Novacare
 Traditions at Bristol Village
 Trinitas Children's Therapy Services
 Trinitas Healthcare Corporation
 Trinitas Regional Medical Center
 Trinity Medical WNY
 Trinity Rehab, LLC
 Tripler Army Medical Center
 Triumph Healthcare
 Tufts Center for the Study of Drug Development
 Turning Point Inc.
 Underwood Memorial Hospital
 Union County Dept. of Human Services
 Union Hospital of Cecil County
 Uniontown Hospital
 United Cerebral Palsy of Philadelphia
 United Memorial Medical Center
 Universal Institute for Rehabilitation
 University Medical Associates
 University of Arkansas for Medical Sciences
 University of Hartford
 University of Pennsylvania Medical Center
 University of Pittsburgh Medical Center
 University of the Sciences in Philadelphia
 University Physicians Group
 US Foodservice
 US Renal Care
 VA Captain James Lovell
 VA Connecticut Healthcare System
 VA Hospital
 VA Medical Center
 VA Medical Center Lebanon
 VA Midsouth Healthcare Network VISN 9
 VA Network - South Texas
 VA New Jersey Health Care System
 VA New York Harbor Healthcare System (VISN 3)
 VA Pittsburgh Healthcare System

VA Stars and Strips Healthcare Network
VA Zablocki
Valley Community Hospital
Valley Health System
Valley Hospital
Van Pelt Physical Therapy
Vassar Brothers Hospital
Vineland Developmental Center
Vinton County WIC
Virginia Hospital Center
Virtua Health, Inc. (MSN)
Virtua Vorhees
Visiting Health Services Passaic Valley
Visiting Nurse Association of Central Jersey, Inc
VNACJ, Inc
Volunteers of America
Voorhees Pediatric Facility
Warren Hospital
Warren Manor
Wasatch Valley Rehabilitation
Waterville Osteopathic Hospital
Wayne Memorial Hospital
Wayne Physical Therapy Center
Wayneview Corp. dba Wayneview Care Center
Weisman Children's Rehabilitation Hospital
Welkind Rehab Hospital
WellStar Health System, Inc.
West Arm Therapy Services
West Bergen Mental Healthcare
West Caldwell Care Center
West Hudson Hospital
West Jersey Health System
West Oaks Hospital
West Palm Beach VA Medical Center
Western Maine Community Action
Westport Physical Therapy
WIC City of New Orleans
William Parker, MD
Woodbine Developmental Center
Woodcrest HCC
Woodrow Wilson Rehab Center
WVHCS Hospital
Yavapai Community Hospital Association
Yeled V Yalda Early Childhood Center Inc
York County Community Action
York Hospital (PA)
Young Adult Institute, Inc

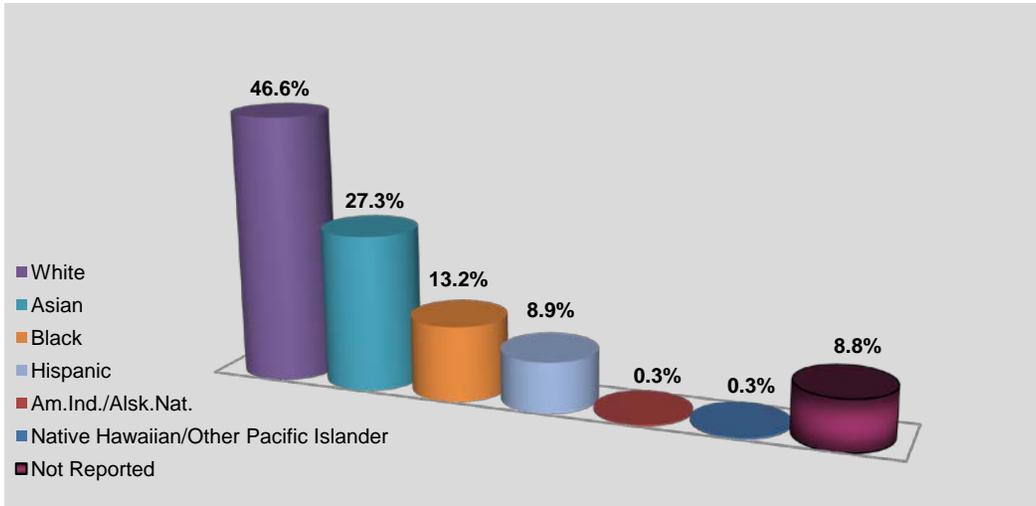


PROFILE OF THE STUDENT BODY

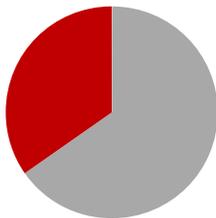
Enrollment, Fall 2012	
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PROFILE OF UMDNJ'S STUDENT ENROLLMENT FALL 2012 (N=6,972)*

Race / Ethnicity**



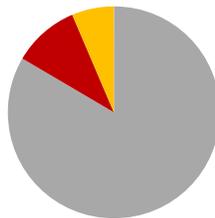
Gender



■ Female - 4,550 (65.3%)
■ Male - 2,422 (34.7%)

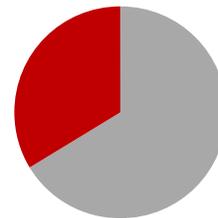
Residency

Excludes Distance Education (N=612)



■ New Jersey - 5,308 (83.4%)
■ Other States - 645 (10.1%)
■ Foreign Countries - 408 (6.4%)

Time Status



■ Full-Time - 4,625 (66.3%)
■ Part-Time - 2,347 (33.7%)

* Unduplicated headcount

** Beginning in 2009 and following U.S. federal guidelines, students may self-identify in more than one racial category. Students who selected more than one category (N=360) are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported prior to 2009.

Source: Office of the University Registrar: Data as of October 1, 2012.

Revised March 2013

ENROLLMENT IN SCHOOLS BY GENDER AND RACE / ETHNICITY¹

FALL 2012

	<i>Total Number Enrolled</i>	<i>% Black</i>	<i>% Hispanic</i>	<i>% Asian</i>	<i>% Women</i>	<i>% NJ Resident²</i>
NEW JERSEY MEDICAL SCHOOL	745	9.5	9.9	43.0	40.9	99.1
ROBERT WOOD JOHNSON MEDICAL SCHOOL	600	9.0	4.7	32.5	56.3	97.3
<i>New Brunswick/Piscataway Campus</i>	<i>534</i>	<i>8.2</i>	<i>4.7</i>	<i>33.9</i>	<i>55.6</i>	<i>97.0</i>
<i>Camden Campus</i>	<i>66</i>	<i>15.2</i>	<i>4.5</i>	<i>21.2</i>	<i>62.1</i>	<i>100.0</i>
SCHOOL OF OSTEOPATHIC MEDICINE	598	11.5	7.7	34.3	50.0	93.6
NEW JERSEY DENTAL SCHOOL	500	5.0	10.8	34.6	54.0	72.6
<i>Four Yr. DMD Program</i>	<i>361</i>	<i>6.4</i>	<i>11.9</i>	<i>28.5</i>	<i>53.5</i>	<i>91.1</i>
<i>Two Yr. DMD Program, MS, MASTER, CRT</i>	<i>139</i>	<i>1.4</i>	<i>7.9</i>	<i>50.4</i>	<i>55.4</i>	<i>24.5</i>
GRADUATE SCHOOL OF BIOMEDICAL SCIENCES³	1,263	9.0	8.9	40.1	55.9	57.6
<i>Newark Division</i>	<i>550</i>	<i>10.0</i>	<i>8.5</i>	<i>43.8</i>	<i>56.9</i>	<i>57.5</i>
<i>Piscataway Division</i>	<i>524</i>	<i>6.3</i>	<i>9.9</i>	<i>39.5</i>	<i>52.3</i>	<i>51.3</i>
<i>Stratford Division</i>	<i>189</i>	<i>13.8</i>	<i>7.4</i>	<i>30.7</i>	<i>63.0</i>	<i>75.7</i>
SCHOOL OF HEALTH RELATED PROFESSIONS	1,601	12.8	9.6	15.0	75.3	89.4
SCHOOL OF NURSING	1,393	23.5	8.8	13.1	87.0	88.4
SCHOOL OF PUBLIC HEALTH	368	19.0	9.0	29.6	71.2	82.9
<i>Newark Campus</i>	<i>109</i>	<i>27.5</i>	<i>9.2</i>	<i>25.7</i>	<i>68.8</i>	<i>79.8</i>
<i>New Brunswick/Piscataway Campus</i>	<i>235</i>	<i>14.5</i>	<i>9.4</i>	<i>31.9</i>	<i>71.1</i>	<i>83.0</i>
<i>Stratford Campus</i>	<i>24</i>	<i>25.0</i>	<i>4.2</i>	<i>25.0</i>	<i>83.3</i>	<i>95.8</i>
GRAND TOTAL⁴	7,068					
Unduplicated Headcount	6,972	13.2	8.9	27.3	65.3	83.4

¹ Beginning in 2009 and following U.S. federal guidelines, students may self-identify in more than one racial category. Students who selected more than one category (N=360) are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported prior to 2009.

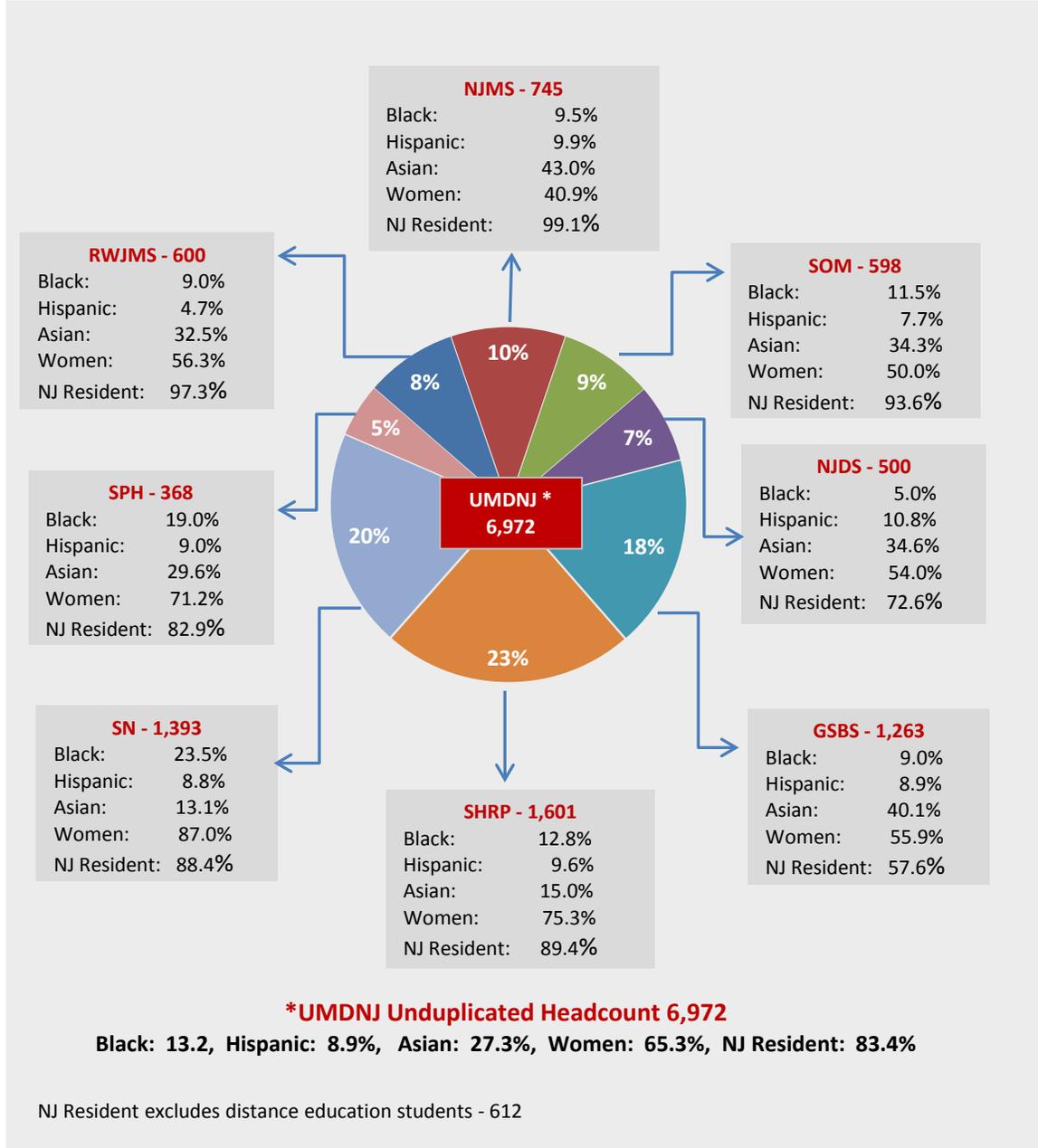
² Excludes Distance Education students (N=612)

³ Sixty students in the Newark Division are in the GSBS joint program with NJIT. All matriculated students in the Piscataway Division are in the GSBS joint program with Rutgers, except students in the master's level programs in Clinical and Translational Science and Biomedical Science.

⁴ Students with dual enrollment are counted in each School/program in which they are enrolled.

Source: Office of the University Registrar: Data as of October 1, 2012, revised March 2013.

UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY ENROLLMENT - FALL 2012



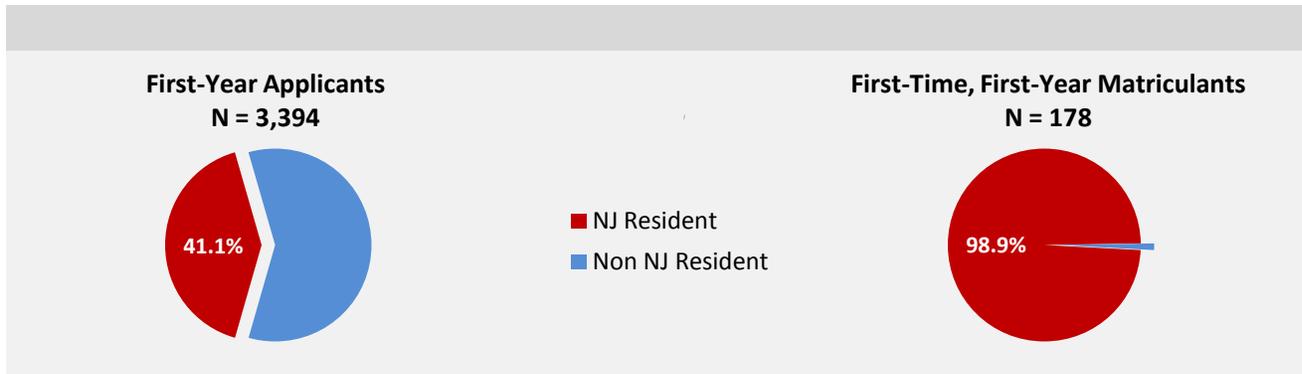
Source: Office of the University Registrar: Data as of October 1, 2012, revised March 2013.

ADMISSIONS DATA

The following figures provide data by School on the characteristics of entering classes in 2012-2013.

The Schools of UMDNJ do not use SAT scores in the admissions process. GPAs and graduate or professional school entrance exams are considered. Therefore, the following pages report average GPA for the entering graduate-level class within each School and the average entrance examination scores where such examinations are required.

NEW JERSEY MEDICAL SCHOOL ADMISSIONS FALL 2012



MATRICULANTS RACE/ETHNICITY AND GENDER

Ethnicity*	Matriculants 178	National Matriculants 19,251**
Hispanic	11.2%	9.0%
Black	10.1%	7.3%
Asian	44.4%	23.9%
White	36.5%	66.2%
Unknown	6.7%	5.0%
American Indian/ Alaska Native	1.1%	0.9%
Native Hawaiian/ Other Pacific Islander	0.0%	0.2%

Gender	Matriculants 178	National Matriculants 19,251**
Female	36.5%	46.4%
Male	63.5%	53.6%

MATRICULANTS MEDICAL COLLEGE ADMISSION TEST (MCAT) SCORES AND GRADE POINT AVERAGES (GPA)

	NJMS Class Average	National Average
Verbal Reasoning	9.8	9.8
Physical Sciences	11.1	10.5
Biological Sciences	11.1	10.9
Total MCAT***	32.1	31.2
Science GPA	3.60	3.63
Total GPA	3.65	3.68

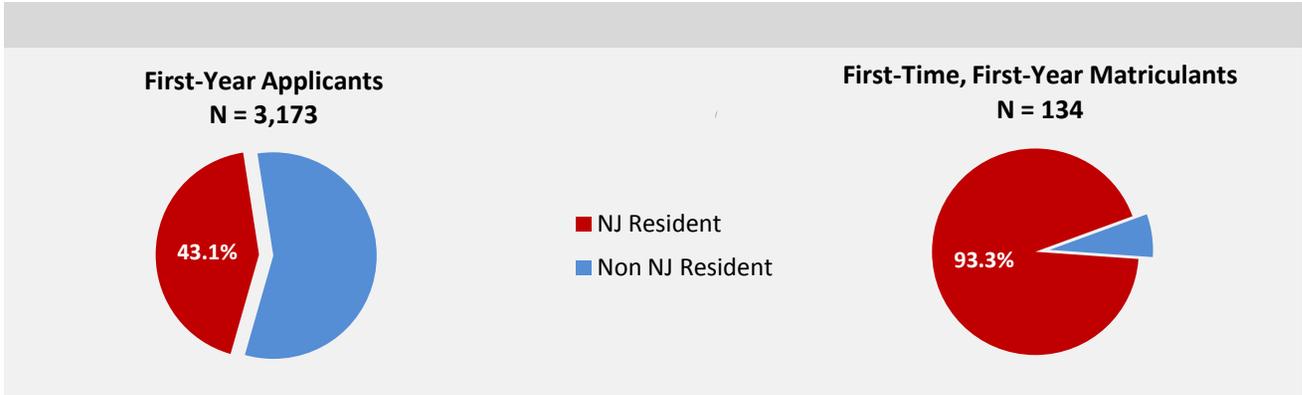
* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

** Does not include 266 Non-U.S. Citizens/Permanent Residents.

*** Average of Verbal Reasoning, Physical Sciences and Biological Sciences scores.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**ROBERT WOOD JOHNSON MEDICAL SCHOOL
ADMISSIONS
FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Ethnicity*	Matriculants	National Matriculants
	134	19,251**
Hispanic	7.5%	9.0%
Black	7.5%	7.3%
Asian	29.9%	23.9%
White	54.5%	66.2%
Unknown	5.2%	5.0%
American Indian/ Alaska Native	0.0%	0.9%
Native Hawaiian/ Other Pacific Islander	0.0%	0.2%

Gender		
Female	67.2%	46.4%
Male	32.8%	53.6%

**MATRICULANTS
MEDICAL COLLEGE ADMISSION TEST (MCAT) SCORES
AND GRADE POINT AVERAGES (GPA)**

	RWJMS Class Average	National Average
Verbal Reasoning	9.9	9.8
Physical Sciences	10.1	10.5
Biological Sciences	10.8	10.9
Total MCAT***	30.8	31.2
Science GPA	3.55	3.63
Total GPA	3.63	3.68

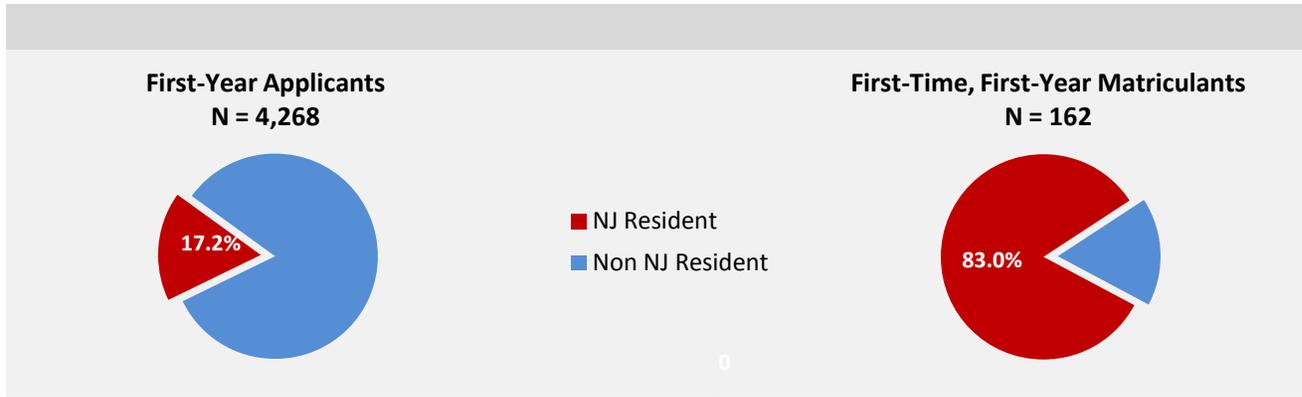
* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

** Does not include 266 Non-U.S. Citizens/Permanent Residents.

*** Average of Verbal Reasoning, Physical Sciences and Biological Sciences scores.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**SCHOOL OF OSTEOPATHIC MEDICINE
ADMISSIONS
FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Ethnicity*	Matriculants	National Matriculants
	162	5,464**
Hispanic	8.0%	4.0%
Black	11.7%	2.5%
Asian	40.7%	20.3%
White	48.1%	68.8%
Unknown	1.2%	0.0%
American Indian/ Alaska Native	0.0%	0.2%
Native Hawaiian/ Other Pacific Islander	0.0%	0.1%

Gender		
Female	47.5%	44.2%
Male	52.5%	55.8%

**MATRICULANTS
MEDICAL COLLEGE ADMISSION TEST (MCAT) SCORES
AND GRADE POINT AVERAGES (GPA)**

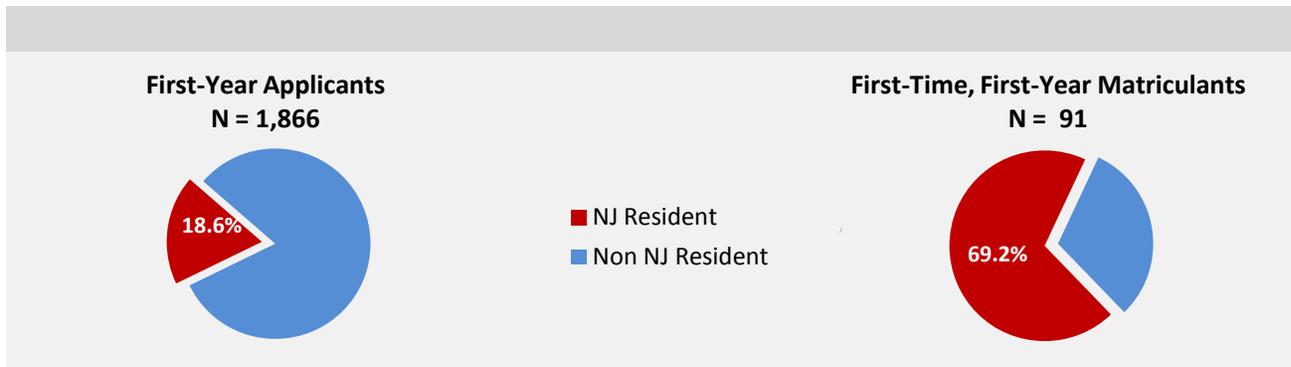
	SOM Class Average	National Average
Verbal Reasoning	8.5	8.6
Physical Sciences	9.3	8.7
Biological Sciences	9.9	9.5
Total MCAT**	27.7	26.9
Science GPA	3.51	3.4
Total GPA	3.61	3.5

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

*** Average of Verbal Reasoning, Physical Sciences and Biological Sciences scores.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**NEW JERSEY DENTAL SCHOOL
ADMISSIONS
FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Matriculants	
Ethnicity*	91
Hispanic	16.5%
Black	9.9%
Asian	20.9%
White	57.1%
Unknown	5.5%
American Indian/ Alaska Native	0.0%
Native Hawaiian/ Other Pacific Islander	0.0%

Gender	
Female	49.5%
Male	50.5%

**MATRICULANTS
DENTAL ADMISSION TEST (DAT) SCORES
AND GRADE POINT AVERAGES (GPA)**

	NJDS Class Average
Quantitative Reasoning	19.0
Reading Comprehension	20.6
Biology	20.2
Inorganic Chemistry	21.2
Organic Chemistry	21.5
Total Science**	20.5
Academic Average***	20.4
Perceptual Ability Test	19.9
Science GPA	3.54
Total GPA	3.59

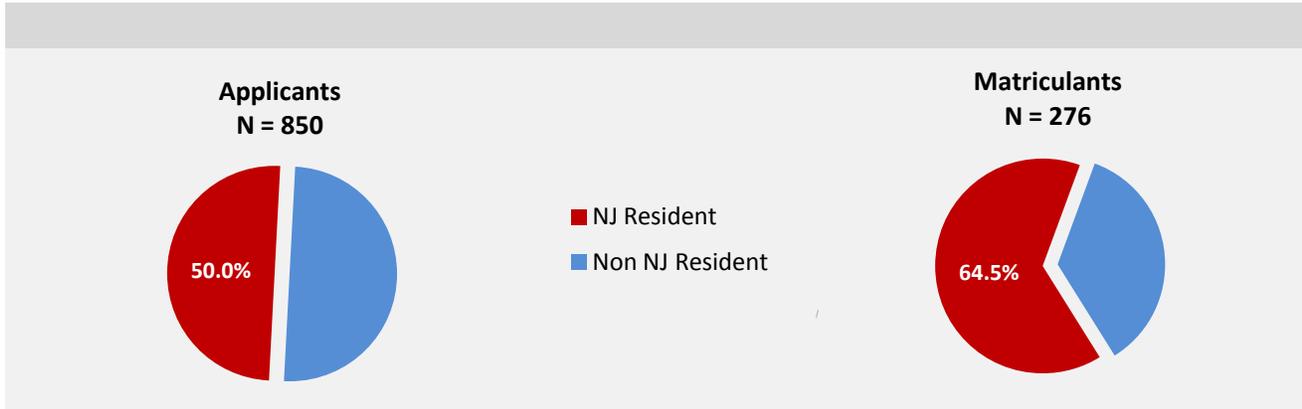
* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

** Total Science is the average score of its three subsections: Biology, General Chemistry and Organic Chemistry.

*** Academic Average is the average score of the Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry and Organic Chemistry test scores.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**GRADUATE SCHOOL OF BIOMEDICAL SCIENCES
NEWARK AND STRATFORD DIVISIONS
ADMISSIONS
FALL 2012 AND SPRING 2013**



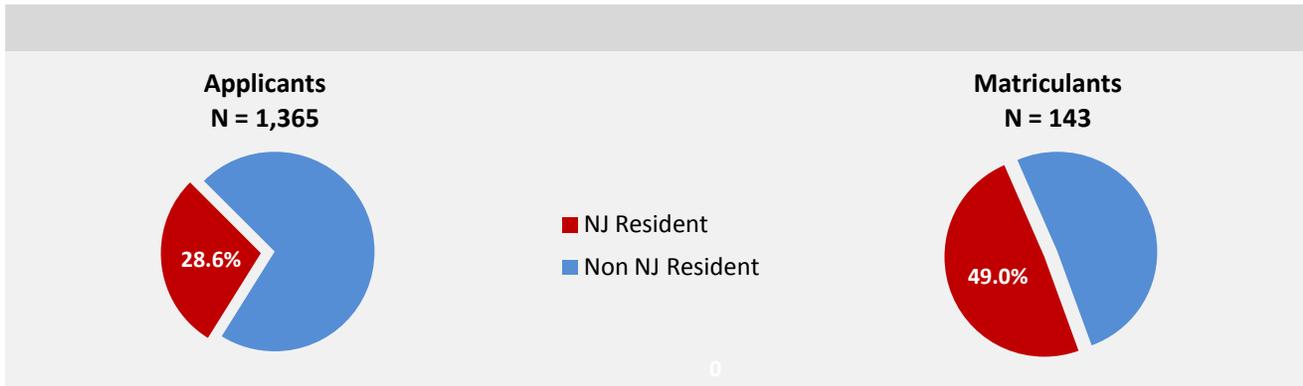
**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Matriculants	
Ethnicity*	276
Hispanic	9.8%
Black	11.6%
Asian	38.4%
White	33.7%
Unknown	11.6%
American Indian/ Alaska Native	0.7%
Native Hawaiian/ Other Pacific Islander	0.0%
Gender	
Female	51.1%
Male	48.9%

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**GRADUATE SCHOOL OF BIOMEDICAL SCIENCES
PISCATAWAY DIVISION
ADMISSIONS
FALL 2012 AND SPRING 2013**



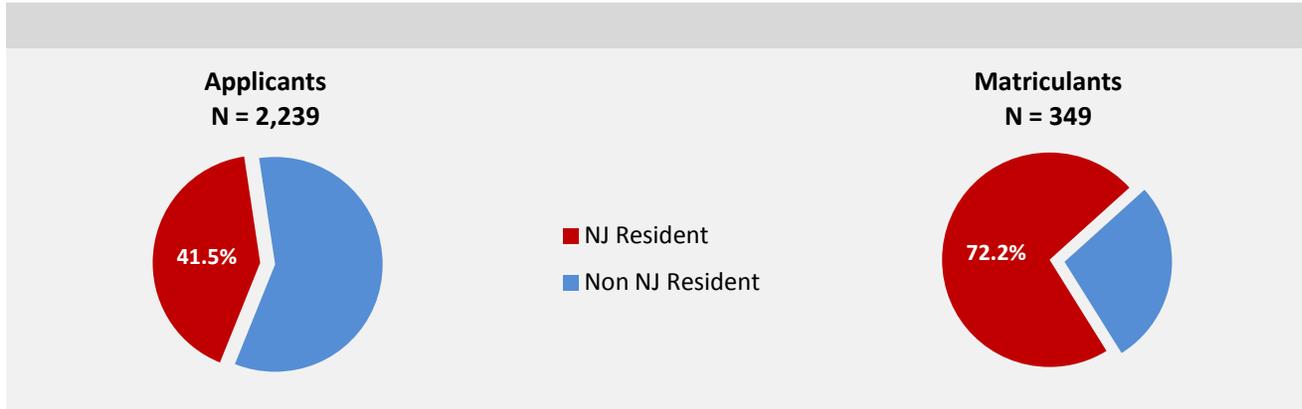
**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Matriculants	
Ethnicity*	143
Hispanic	5.6%
Black	2.8%
Asian	44.8%
White	44.1%
Unknown	7.0%
American Indian/ Alaska Native	0.7%
Native Hawaiian/ Other Pacific Islander	0.0%
Gender	
Female	48.3%
Male	51.7%

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**SCHOOL OF HEALTH RELATED PROFESSIONS
GRADUATE PROGRAMS
ADMISSIONS
SPRING, SUMMER AND FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Ethnicity*		Matriculants 349
Hispanic		4.6%
Black		14.6%
Asian		16.3%
White		55.0%
Unknown		11.7%
American Indian/ Alaska Native		0.3%
Native Hawaiian/ Other Pacific Islander		0.0%
Gender		
Female		69.9%
Male		29.5%
Not Reported		0.6%

**MATRICULANTS
GRADE POINT AVERAGES (GPA)**

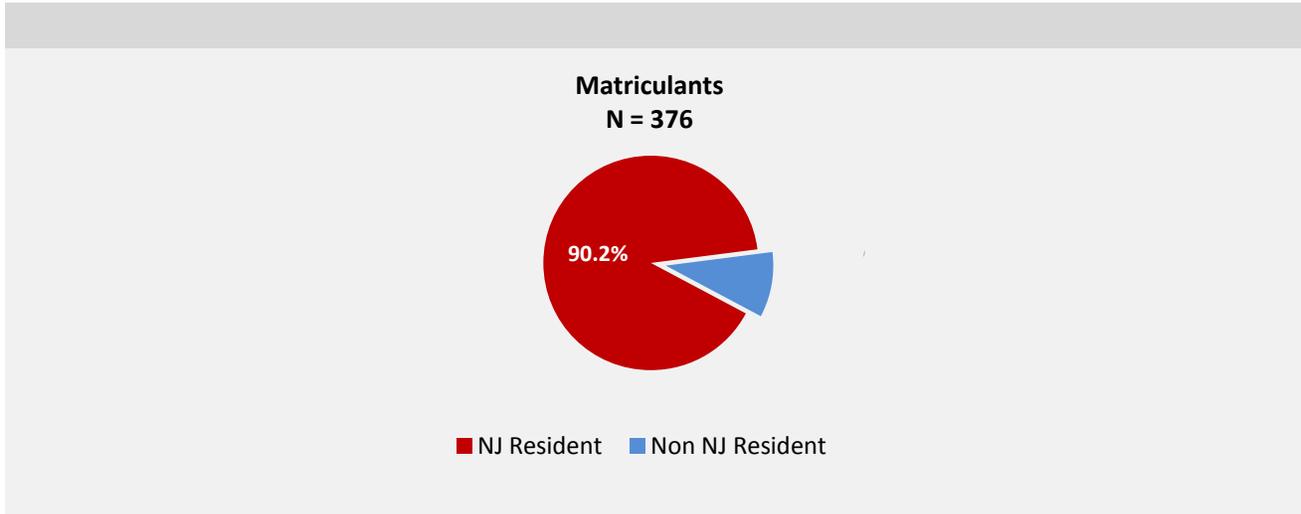
	Students Reporting	Class Average
GPA**	262	3.24

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

**Includes baccalaureate degree GPAs only.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**SCHOOL OF HEALTH RELATED PROFESSIONS
UNDERGRADUATE PROGRAMS
ADMISSIONS
SPRING, SUMMER AND FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Ethnicity*	Matriculants 376
Hispanic	15.2%
Black	19.4%
Asian	16.8%
White	43.9%
Unknown	8.5%
American Indian/ Alaska Native	0.8%
Native Hawaiian/ Other Pacific Islander	1.1%

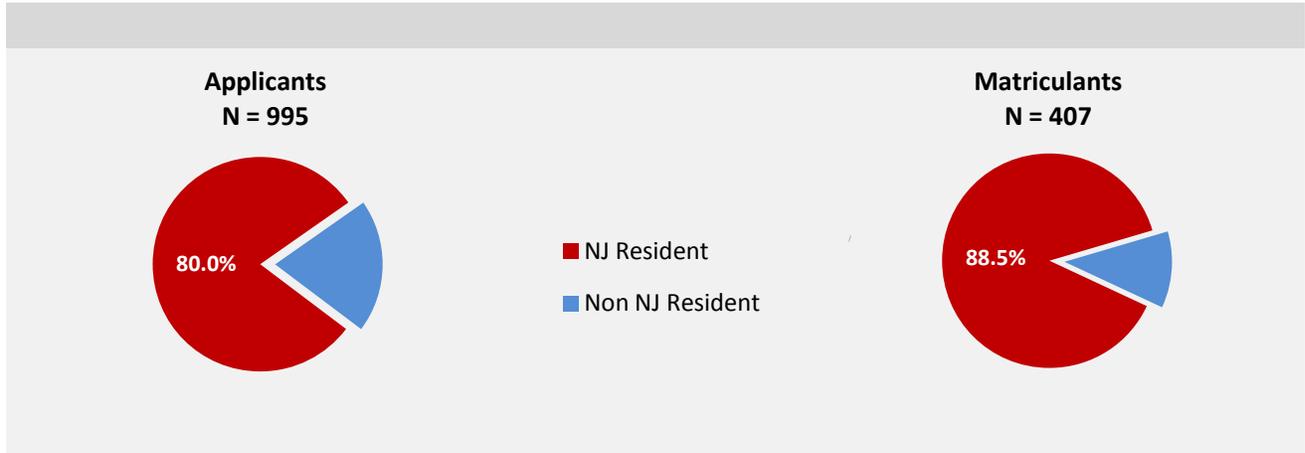
Gender	
Female	80.3%
Male	19.4%
Not Reported	0.3%

Many undergraduate programs at the School of Health Related Professions are joint-degree programs with other institutions. In some joint-degree programs, students apply initially through the partner institution, and UMDNJ receives information only for applicants who are accepted. Since information on all applicants is unavailable, undergraduate application information is not reported.

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**SCHOOL OF NURSING
GRADUATE PROGRAMS
ADMISSIONS
SPRING, SUMMER AND FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Ethnicity*	Matriculants
	407
Hispanic	14.7%
Black	22.9%
Asian	13.8%
White	48.6%
Unknown	7.1%
American Indian/ Alaska Native	0.5%
Native Hawaiian/ Other Pacific Islander	1.2%

Gender	
Female	89.9%
Male	10.1%

**MATRICULANTS
GRADE POINT AVERAGES (GPA)**

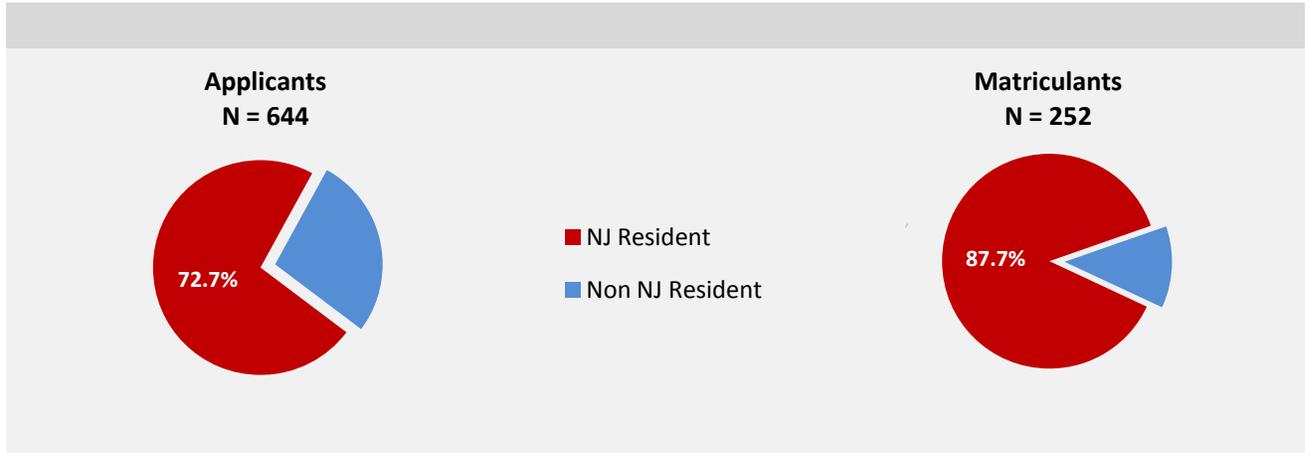
	Students Reporting	Class Average
GPA**	362	3.35

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

**Includes baccalaureate degree GPAs only.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**SCHOOL OF NURSING
SECOND BACHELOR'S DEGREE PROGRAM
ADMISSIONS
SPRING, SUMMER AND FALL 2012**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Ethnicity*		Matriculants 252
Hispanic		6.0%
Black		20.2%
Asian		11.5%
White		53.6%
Unknown		9.5%
American Indian/ Alaska Native		0.0%
Native Hawaiian/ Other Pacific Islander		--

Gender	
Female	87.3%
Male	12.7%

**MATRICULANTS
GRADE POINT AVERAGES (GPA)**

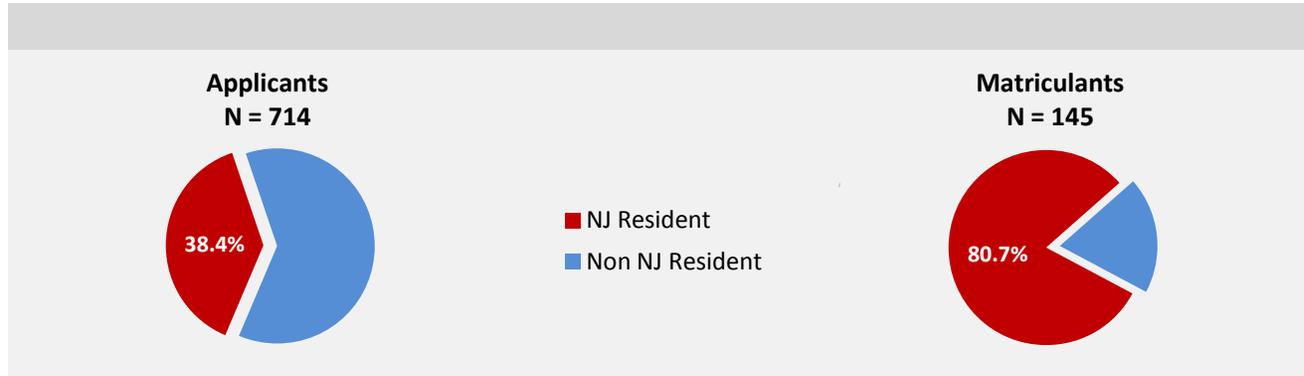
	Students Reporting	Class Average
GPA**	247	3.83

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

**Includes baccalaureate degree GPAs only.

Source: UMDNJ Report on Admissions, 2012-2013, UMDNJ-Office of Institutional Research

**SCHOOL OF PUBLIC HEALTH
ADMISSIONS
FALL 2012 AND SPRING 2013**



**MATRICULANTS
RACE/ETHNICITY AND GENDER**

Matriculants	
Ethnicity*	145
Hispanic	8.3%
Black	19.3%
Asian	26.2%
White	38.6%
Unknown	9.7%
American Indian/ Alaska Native	0.7%
Native Hawaiian/ Other Pacific Islander	0.0%
Gender	
Female	71.7%
Male	28.3%

**MATRICULANTS
GRADUATE RECORD EXAMINATION (GRE) SCORES
AND GRADE POINT AVERAGES (GPA)**

	Scale	Students Reporting	Class Average
Tests Taken Prior to August 1, 2011			
Verbal	200-800	43	473
Quantitative	200-800	43	602
Analytical Writing	0-6	41	3.95
Tests Taken On or After August 1, 2011			
Verbal	130-170	39	152
Quantitative	130-170	39	151
Analytical Writing	0-6	39	3.81
GPA**		103	3.21

* Beginning in 2009, students who selected more than one racial category are included in each category reported. Thus, percents reported do not add to 100 and are not directly comparable to percents reported in previous academic years.

**Includes baccalaureate degree GPAs only.

Source: UMDNJ Report on Admissions, 2012-2013 UMDNJ-Office of Institutional Research

FINANCIAL AID INFORMATION

STATE, FEDERAL, AND INSTITUTION FUNDED PROGRAMS

Academic Year 2012/2013

Programs	Number of Recipients	Total Disbursed Amount
STATE-FUNDED LOANS		
NJCLASS	45	\$705,176
STATE-FUNDED SCHOLARSHIPS/GRANTS		
Educational Opportunity Fund	99	\$313,675
Tuition Aid Grant	83	\$384,654
Martin Luther King Scholarship	9	\$152,000
Disadvantaged Student Fund	506	\$674,668
FEDERAL FUNDED LOANS¹		
Direct Loan-Unsubsidized	3,536	\$81,737,658
Direct Loan-Subsidized	912	\$7,601,245
Direct Loan Graduate PLUS	937	\$16,744,864
Direct Loan-Subsidized Undergraduate	706	\$2,875,278
Direct Loan Parent PLUS Undergraduate	13	\$202,199
Federal Perkins Loans	1002	\$3,292,794
Loans for Disadvantaged Students	26	\$81,568
Primary Care Loan	6	\$265,418
Health Professions Student Loans	105	\$483,527
FEDERAL FUNDED SCHOLARSHIP/GRANTS¹		
Federal Work Study	259	\$742,461
Federal Pell Grant	183	\$584,618
Federal Supplemental Educational Opportunity Grant	113	\$21,427
Scholarship for Disadvantaged Students	0	\$0
Scholarship for Disadvantaged Students-ARRA	0	\$0
Advance Education Nursing Award	0	\$0
AmeriCorp Program	7	\$38,185
Armed Services Grants	15	\$285,434
Nurse Anesthetist Traineeship	16	\$25,460
Robert C. Byrd Honor Scholarship	0	\$0
INSTITUTION FUNDED SCHOLARSHIP/GRANTS²		
Scholarships	139	\$1,620,979
Grants	40	\$146,500
Loans	268	\$4,923,615

1. The source of these funds is from both the Department of Education (Title IV Programs) and Department of Health and Human Services (Title VII programs)

2. These remaining funds are from sources other than Federal and State

Source: UMDNJ-Office of Financial Aid

DEGREES AND CERTIFICATES AWARDED ACADEMIC YEAR 2011-2012

Degree	Total	Black	Hispanic	Asian	White	AI/AN*	NH/OPI**	Unknown
Doctor of Medicine	333	25	24	125	160	3	0	17
Doctor of Osteopathic Medicine	109	18	4	30	60	0	0	0
Doctor of Dental Medicine	111	10	8	37	57	0	0	3
Doctor of Clinical Nutrition	5	0	0	1	3	0	0	1
Doctor of Nursing Practice	33	10	2	6	14	0	0	2
Doctor of Physical Therapy	88	4	4	20	54	0	0	6
Doctor of Philosophy	118	5	5	48	53	0	0	8
Doctor of Public Health	1	0	0	1	0	0	0	0
Master's Degrees ¹ /Post-Baccalaureate Certificates	686	143	54	169	264	2	3	73
Post-Master's / Post-Doctoral Certificates	27	0	1	6	20	0	0	1
Undergraduate Degrees ² / Certificates	548	70	46	53	219	0	4	159
TOTAL³	2,059	285	148	496	904	5	7	270

Degrees and Certificates Awarded By Gender⁴

Men	Women	Total ⁴
665	1,369	2,034

Note: Beginning in 2009 and following U.S. federal guidelines, students may self-identify in more than one racial category. Students who selected more than one category (N= 55) are included in each category reported. Thus, the numbers reported in each category are not directly comparable to the numbers reported prior to 2009.

- * American Indian/Alaska Native
- ** Native Hawaiian/Other Pacific Islander

¹ Includes MS, Master, MSN, and MPH

² Includes AAS, AS, BS and BSN

³ Duplicated Headcount. Twenty-five students received more than one degree or certificate.

⁴ Unduplicated Headcount

Source: University Graduation Statistics Report, AY 2011-2012 UMDNJ-Office of Institutional Research.

GRADUATION RATES

The following tables provide historical data on student graduation rates by School/Program. Please note that these tables track groups of students (cohorts) entering together in the same academic or calendar year.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**NEW JERSEY MEDICAL SCHOOL - MD PROGRAM
STUDENTS BEGINNING IN AY 2003-04 THROUGH AY 2007-08**

	Number in Beginning Cohort ²	Number/Percent Graduated ¹									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003-04	170	154	90.6	155	91.2	159	93.5	162	95.3	164	96.5
2004-05	170	150	88.2	154	90.6	158	92.9	160	94.1		
2005-06	170 ¹	155	91.7	156	92.3	158	93.5				
2006-07	170	157	92.4	159	93.5						
2007-08	178	160	89.9								

¹Percent graduated is an adjusted percent based on the number in the beginning cohort minus transfers to another medical program outside UMDNJ (one in 2005-06).

²The beginning cohort includes the following numbers of students in dual degree programs. These programs (MD/PhD, MD/MPH and MD/MBA) take longer to complete than the MD program:

<u>Year</u>	<u>Dual Degree Students</u>	<u>Percent of Cohort</u>
2003-04	8	4.7
2004-05	15	8.8
2005-06	13	7.6
2006-07	9	5.3
2007-08	10	5.6

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**ROBERT WOOD JOHNSON MEDICAL SCHOOL - MD PROGRAM
STUDENTS BEGINNING IN AY 2003-04 THROUGH AY 2007-08**

	Number in Beginning Cohort ^{2,3}	Number/Percent Graduated ¹									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003-04	151	138	91.4	143	94.7	146	96.7	148	98.0	149	98.7
2004-05	156 ¹	143	92.3	144	92.9	147	94.8	149	96.1		
2005-06	156 ¹	139	89.8	144	92.9	149	96.1				
2006-07	168	153	91.1	156	92.9						
2007-08	165	150	90.9								

¹Percent graduated is an adjusted percent based on the number in the beginning cohort minus transfers to another medical program outside UMDNJ (one in 2004-05 and one in 2005-06.)

²Numbers in beginning cohorts were revised in 2010 to include MD/MPH students previously reported separately (three in 2003-04 and three in 2004-05).

³The beginning cohorts include the following numbers of students in dual degree programs. These programs (MD/MPH, MD/MS, MD/PhD and MD/MBA) take longer to complete than the MD program:

<u>Year</u>	<u>Dual Degree Students</u>	<u>Percent of Cohort</u>
2003-04	10	6.6
2004-05	10	6.4
2005-06	15	9.6
2006-07	12	7.1
2007-08	12	7.4

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF OSTEOPATHIC MEDICINE - DO PROGRAM
STUDENTS BEGINNING IN AY 2003-04 THROUGH AY 2007-08**

	Number in Beginning Cohort ²	Number/Percent Graduated ¹									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003-04	95	91	95.8	92	96.8	93	97.9				
2004-05	96	88	91.7	92	95.8	93	96.9				
2005-06	99 ¹	87 ³	89.7	92	94.8	93	95.9				
2006-07	103 ¹	99	97.1	101	99.0						
2007-08	108 ¹	98	91.6								

¹Percent graduated is an adjusted percent based on the number beginning minus transfers to another medical program outside UMDNJ (two in 2005-06, one in 2006-07 and one in 2007-08).

²The beginning cohort includes the following numbers of students in dual degree programs. These programs (DO/MPS, DO/MS, DO/PhD, DO/MBS and DO/JD) take longer to complete than the DO program:

<u>Year</u>	<u>Dual Degree Students</u>	<u>Percent of Cohort</u>
2003-04	2	2.1
2004-05	6	6.3
2005-06	4	4.0
2006-07	1	1.0
2007-08	1	0.9

³Number corrected in 2012.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**NEW JERSEY DENTAL SCHOOL - DMD PROGRAM
STUDENTS BEGINNING IN AY 2003-04 THROUGH AY 2007-08**

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003-04	79	74	93.7								
2004-05	82	73	89.0	74	90.2						
2005-06	89	78	87.6								
2006-07	96	88	91.7	90	93.8						
2007-08	86 ¹	78	90.7								

1. Beginning cohort does not include one deceased student.

Note: The DMD program is normally four years in length but may be extended to five or six years depending on various circumstances (e.g., Five Year Program, repetition, etc.). Leaves of absence are not considered in the calculation of length of time.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**GRADUATE SCHOOL OF BIOMEDICAL SCIENCES - PHD PROGRAM
DURATION: 7 YEARS
STUDENTS BEGINNING IN AY 2001-02 THROUGH AY 2005-06**

	Number in Beginning Cohort ^{1,2}	Number/Percent Graduated ³									
		In Seven Years		In Eight Years		In Nine Years		In Ten Years		In Eleven Years	
2001-02	71	43	60.6	49	69.0	51	71.8	53	74.6		
2002-03	77	57	74.0	61	79.2	64	83.1				
2003-04	89	60	67.4	76	85.4	79	88.8				
2004-05	84	62	73.8	69	82.1						
2005-06	123	74	60.2								

¹Beginning cohorts were revised in 2012 to exclude students in the joint PhD program with Rutgers University whose advisor was a Rutgers faculty member.

²Number in beginning cohort includes students in dual-degree programs such as MD/PhD.

³Total number graduated includes six students with terminal master's degrees in 2001-02, four in 2002-03, three in 2003-04, seven in 2004-05 and thirteen in 2005-06.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**GRADUATE SCHOOL OF BIOMEDICAL SCIENCES – MS and MASTER PROGRAMS
MAXIMUM DURATION: 4 YEARS
STUDENTS BEGINNING IN AY 2004-05 THROUGH AY 2008-09**

	Number in Beginning Cohort ¹	Number/Percent Graduated									
		In Four Years		In Five Years		In Six Years		In Seven Years		In Eight Years	
2004-05	112	86	76.8	89	79.5	91	81.3	91	81.3	92	82.1
2005-06	107	81	75.7	82	76.6	84	78.5	85	79.4		
2006-07	147	120	81.6	124	84.4	125	85.0				
2007-08	170	133	78.2	142	83.5						
2008-09	205	164	80.0								

¹Beginning cohorts do not include students in the joint MS program with Rutgers University whose advisor was a Rutgers faculty member or students who transferred to an advanced degree program within UMDNJ (MD, DMD or PhD).

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF PUBLIC HEALTH – MPH PROGRAM
DURATION: 6 YEARS¹
STUDENTS BEGINNING IN AY 2002-03 THROUGH AY 2006-07**

	Number in Beginning Cohort ²	Number/Percent Graduated									
		In Six Years		In Seven Years		In Eight Years		In Nine Years		In Ten Years	
2002-03	95 ^{3,4}	70	73.7	73	76.8	73	76.8	73	76.8	73	76.8
2003-04	67	54	80.6	55	82.1	55	82.1	55	82.1		
2004-05	79	63	79.7	64	81.0	64	81.0				
2005-06	93	74	79.6	77	82.8						
2006-07	85	62	72.9								

¹The program duration was changed from five years to six years in 2007.

²Number in beginning cohort does not include:
Students who completed less than 15 credit hours during the program’s six-year usual duration
MD/MPH or DMD/MPH students

³Does not include one deceased student.

⁴Includes one student who graduated with an MS degree

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF PUBLIC HEALTH – PHD AND DrPH PROGRAMS
DURATION: 9 YEARS¹
STUDENTS BEGINNING IN AY 1999-2000 THROUGH 2003-04**

	Number in Beginning Cohort ²	Number/Percent Graduated									
		In Nine Years		In Ten Years		In Eleven Years		In Twelve Years		In Thirteen Years	
1999-00 ³	5	4	80.0	4	80.0	4	80.0	5	100.0		
2000-01	2	1	50.0	1	50.0	1	50.0	1	50.0	2	100.0
2001-02	5 ⁴	4	80.0								
2002-03	9	5	55.6	6	66.7						
2003-04	12	8	66.7								

¹The program duration was changed from eight years to nine years in 2008.

²Number in beginning cohort does not include students who completed less than 15 credit hours during the program's nine-year usual duration.

³Includes two students who completed the MPH degree while enrolled in the PhD or DrPH program.

⁴Number in beginning cohort was changed in 2012 to remove one student who completed less than 15 credit hours during the program's nine-year usual duration.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF NURSING – MSN PROGRAM
DURATION: 6 YEARS¹
STUDENTS BEGINNING IN CALENDAR YEARS 2002 THROUGH 2006**

	Number in Beginning Cohort ²	Number/Percent Graduated									
		In Six Years		In Seven Years		In Eight Years		In Nine Years		In Ten Years	
2002	62	38	61.3	38	61.3	38	61.3	38	61.3	38	61.3
2003	79	53	67.1	55	69.6						
2004	122	77	63.1	77	63.1	77	63.1				
2005	177	125	70.6	128	72.3						
2006	216	148	68.5								

**SCHOOL OF NURSING
SECOND BACHELOR’S DEGREE PROGRAM
DURATION: 3 YEARS
STUDENTS BEGINNING IN CALENDAR YEARS 2005 THROUGH 2009**

	Number in Beginning Cohort	Number/Percent Graduated									
		In Three Years		In Four Years		In Five Years		In Six Years		In Seven Years	
2005	135	116	85.9	116	85.9	117	86.7				
2006	224	192	85.7								
2007	218	187	85.5								
2008	203	176	86.7								
2009	240	209	87.1								

¹The program duration was changed from five years to six years in 2007.

² Beginning cohorts 2006 to 2008 were revised in 2012 to include the fall semester.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
BIOMEDICAL INFORMATICS – MS PROGRAM
DURATION FOR F/T STUDY 5 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2003 THROUGH 2007

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003	33	14	42.4	14	42.4	15	45.5	15	45.5	15	45.5
2004	13	7	53.8								
2005	4	3	75.0								
2006	13	11	84.6	11	84.6						
2007	12	5	41.7								

**SCHOOL OF HEALTH RELATED PROFESSIONS
CLINICAL NUTRITION – MS PROGRAM
DURATION FOR F/T STUDY 5 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2003 THROUGH 2007

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003	17	10	58.8								
2004	24	14	58.3	19	79.2	19	79.2	19	79.2		
2005	20	7	35.0	11	55.0	12	60.0				
2006	21	17	81.0	18	85.7						
2007	15	10	66.7								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
CYTOTECHNOLOGY – BS AND CERTIFICATE PROGRAMS
DURATION FOR F/T STUDY 3 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2005 THROUGH 2009

	Number in Beginning Cohort	Number/Percent Graduated									
		In Three Years		In Four Years		In Five Years		In Six Years		In Seven Years	
2005	10	10	100.0								
2006	10	10	100.0								
2007	10	8	80.0								
2008	7	7	100.0								
2009	12	12	100.0								

**SCHOOL OF HEALTH RELATED PROFESSIONS
DENTAL ASSISTANT - CERTIFICATE PROGRAM
DURATION FOR F/T STUDY 2 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2006 THROUGH 2010

	Number in Beginning Cohort	Number/Percent Graduated									
		In Two Years		In Three Years		In Four Years		In Five Years		In Six Years	
2006	19	13	68.4								
2007	12	6	50.0								
2008	14	12	85.7								
2009	11	8	72.7								
2010	8	7	87.5								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
DENTAL HYGIENE – AAS PROGRAM
DURATION FOR F/T STUDY 4 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2004 THROUGH 2008

	Number in Beginning Cohort	Number/Percent Graduated									
		In Four Years		In Five Years		In Six Years		In Seven Years		In Eight Years	
2004	30	23	76.7								
2005	38	31	81.6								
2006	43	32	74.4								
2007	47	38	80.9								
2008	40	39	97.5								

**SCHOOL OF HEALTH RELATED PROFESSIONS
DIAGNOSTIC IMAGING TECHNOLOGIES – CERTIFICATE PROGRAM
DURATION FOR F/T STUDY 3 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2005 THROUGH 2009

	Number in Beginning Cohort	Number/Percent Graduated									
		In Three Years		In Four Years		In Five Years		In Six Years		In Seven Years	
2005	3	0	0.0								
2006	7	0	0.0	0	0.0						
2007	11	0	0.0	0	0.0	1	9.1				
2008	12	2	16.7	3	25.0						
2009	7	3	42.9								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
DIAGNOSTIC MEDICAL SONOGRAPHY – BS AND CERTIFICATE PROGRAM
DURATION FOR F/T STUDY 3 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2005 THROUGH 2009

	Number in Beginning Cohort	Number/Percent Graduated									
		In Three Years		In Four Years		In Five Years		In Six Years		In Seven Years	
2005	15	14	98.3								
2006	14	9	64.3								
2007	16	14	87.5								
2008	15	13	86.7	13	86.7						
2009	13	10	76.9								

**SCHOOL OF HEALTH RELATED PROFESSIONS
DIETETIC INTERNSHIP - CERTIFICATE PROGRAM
DURATION FOR F/T STUDY 2 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2006 THROUGH 2010

	Number in Beginning Cohort	Number/Percent Graduated									
		In Two Years		In Three Years		In Four Years		In Five Years		In Six Years	
2006	14	14	100.0								
2007	15	15	100.0								
2008	16	15	93.8	16	100.0						
2009	17	17	100.0								
2010	16	16	100.0								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
HEALTH SCIENCES - BS PROGRAM
DURATION FOR F/T STUDY 8 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2000 THROUGH 2004

	Number in Beginning Cohort	Number/Percent Graduated									
		In Eight Years		In Nine Years		In Ten Years		In Eleven Years		In Twelve Years	
2000	24	15	62.5	15	62.5	15	62.5	15	62.5	15	62.5
2001	24	13	54.2	13	54.2	13	54.2	14	58.3		
2002	35	21	60.0	23	65.7	24	68.6				
2003	30	19	63.3								
2004	37	24	64.9								

**SCHOOL OF HEALTH RELATED PROFESSIONS
HEALTH CARE MANAGEMENT – MS PROGRAM
DURATION FOR F/T STUDY 5 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2003 THROUGH 2007

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003	10	5	50.0								
2004	20	14	70.0								
2005	9	5	55.6								
2006	9	7	77.8								
2007	8	5	62.5								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
MEDICAL LABORATORY SCIENCE – BS AND CERTIFICATE PROGRAMS
DURATION FOR F/T STUDY 3 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2005 THROUGH 2009

	Number in Beginning Cohort ¹	Number/Percent Graduated									
		In Three Years		In Four Years		In Five Years		In Six Years		In Seven Years	
2005	13	11	84.6								
2006	22	17	77.3								
2007	27	27	100.0								
2008	30	26	86.7								
2009	26	25	96.2								

**SCHOOL OF HEALTH RELATED PROFESSIONS
NUCLEAR MEDICINE TECHNOLOGY – BS AND CERTIFICATE PROGRAM
DURATION FOR F/T STUDY 2 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2006 THROUGH 2010

	Number in Beginning Cohort	Number/Percent Graduated									
		In Two Years		In Three Years		In Four Years		In Five Years		In Six Years	
2006	14	10	71.4	11	78.6						
2007	14	13	92.9								
2008	10	9	90.0								
2009	8	5	62.5								
2010	4	4	100.0								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
PHYSICAL THERAPY SOUTH
MASTER OF PHYSICAL THERAPY (MPT) PROGRAM¹
DOCTOR OF PHYSICAL THERAPY (DPT) PROGRAM²
DURATION FOR F/T STUDY 5 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2003 THROUGH 2007

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003 ¹	13	11	84.6								
2004 ¹	11	8	72.7								
2005 ¹	9	8	88.9								
2006 ²	19	15	79.0								
2007 ²	22	17	77.3								

**SCHOOL OF HEALTH RELATED PROFESSIONS
PHYSICAL THERAPY NORTH
DOCTOR OF PHYSICAL THERAPY (DPT) ENTRY-LEVEL PROGRAM
DURATION FOR F/T STUDY 5 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2003 THROUGH 2007

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003	37	35	94.6								
2004	38	29	76.3								
2005	46	40	87.0								
2006	47	44	93.6								
2007	45	43	95.6								

^{1,2}The last MPT cohort entered in the summer 2005 term.

² The program became a DPT program in June 2006.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
PHYSICAL THERAPY NORTH
DOCTOR OF PHYSICAL THERAPY (DPT) POST-PROFESSIONAL PROGRAM
DURATION FOR F/T STUDY 8 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2000 THROUGH 2004

	Number in Beginning Cohort	Number/Percent Graduated									
		In Eight Years		In Nine Years		In Ten Years		In Eleven Years		In Twelve Years	
2000	29	28	96.6								
2001	44	40	90.9	40	90.9	40	90.9	40	90.9		
2002	48	46	95.8	46	95.8	46	95.8				
2003	73	70	95.9								
2004	63	60	95.2								

**SCHOOL OF HEALTH RELATED PROFESSIONS
PHYSICIAN ASSISTANT – MS PROGRAM
DURATION FOR F/T STUDY 4 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2004 THROUGH 2008

	Number in Beginning Cohort	Number/Percent Graduated									
		In Four Years		In Five Years		In Six Years		In Seven Years		In Eight Years	
2004	54	44	81.5	44	81.5	45	83.3				
2005	44	39	88.6								
2006	35	28	80.0								
2007	42	37	88.1								
2008	39	37	94.9								

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
PSYCHIATRIC REHABILITATION - BS PROGRAM
DURATION FOR F/T STUDY 8 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2000 THROUGH 2004

	Number in Beginning Cohort	Number/Percent Graduated									
		In Eight Years		In Nine Years		In Ten Years		In Eleven Years		In Twelve Years	
2000	9	5	55.6	5	55.6	5	55.6	5	55.6	5	55.6
2001	13	11	84.6	11	84.6	11	84.6	11	84.6		
2002	22	14	63.6	14	63.6	14	63.6				
2003	17	13	76.5	13	76.5						
2004	11	10	90.9								

**SCHOOL OF HEALTH RELATED PROFESSIONS
PSYCHOSOCIAL REHABILITATION – AS PROGRAM
DURATION FOR F/T STUDY 4 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2004 THROUGH 2008

	Number in Beginning Cohort	Number/Percent Graduated									
		In Four Years		In Five Years		In Six Years		In Seven Years		In Eight Years	
2004	7	5	71.4								
2005	7	4	57.1								
2006	13 ¹	5	38.5								
2007	15	7	46.7								
2008	14 ¹	6	42.9								

¹One additional student transferred to the SHRP Psychiatric Rehabilitation and Psychology BS program.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
REHABILITATION COUNSELING - MS PROGRAM
DURATION FOR F/T STUDY 5 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2003 THROUGH 2007

	Number in Beginning Cohort	Number/Percent Graduated									
		In Five Years		In Six Years		In Seven Years		In Eight Years		In Nine Years	
2003	19	8	42.1	9	47.4	9	47.4	9	47.4	9	47.4
2004	21	16	76.2	16	76.2	17	81.0	17	81.0		
2005	37	23	62.2	23	62.2	23	62.2				
2006	23	17	73.9								
2007	25	15	60.0								

**SCHOOL OF HEALTH RELATED PROFESSIONS
RESPIRATORY THERAPIST – AAS PROGRAM – SOUTH
DURATION FOR F/T STUDY 4 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2004 THROUGH 2008

	Number in Beginning Cohort	Number/Percent Graduated									
		In Four Years		In Five Years		In Six Years		In Seven Years		In Eight Years	
2004	20 ¹	13	65.0								
2005	23	19	82.6								
2006	25	17	68.0								
2007	27	21	77.8								
2008	23	17	73.9								

¹ Does not include one student who transferred to the SHRP Allied Health Technologies BS Program.

**GRADUATION RATE BY ENTERING COHORT
AS OF JUNE 2012**

**SCHOOL OF HEALTH RELATED PROFESSIONS
RESPIRATORY THERAPIST – AS PROGRAM – NORTH
DURATION FOR F/T STUDY 4 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2004 THROUGH 2008

	Number in Beginning Cohort	Number/Percent Graduated									
		In Four Years		In Five Years		In Six Years		In Seven Years		In Eight Years	
2004	25	16	64.0								
2005	35	21	60.0								
2006	41	20	48.8								
2007	27	18	66.7								
2008	40	24	60.0								

**SCHOOL OF HEALTH RELATED PROFESSIONS
VASCULAR TECHNOLOGY – BS AND CERTIFICATE PROGRAMS
DURATION FOR F/T STUDY 2 YEARS**

STUDENTS BEGINNING IN CALENDAR YEARS 2006 THROUGH 2010

	Number in Beginning Cohort	Number/Percent Graduated									
		In Two Years		In Three Years		In Four Years		In Five Years		In Six Years	
2006	9	8	88.0	9	100.0						
2007	13	13	100.0								
2008	7	6	85.7								
2009	10	9	90.0	10	100.0						
2010	9	7	77.8								

POST-GRADUATE PLACEMENT OF MEDICAL AND DENTAL STUDENTS

**2013 UMDNJ MEDICAL GRADUATES PLACED IN FIRST-YEAR HOUSESTAFF PROGRAMS
As of April 24, 2013**

UMDNJ School	Number Seeking Placement	Percent Placed in the Match	Percent Placed Outside the Match	Number (Percent) Placed	Number Not Placed
NJMS	180 ¹	97.8	1.7	179 (99.4)	1
RWJMS-NB/P	112	96.4	3.6	112 (100.0)	0
RWJMS-C	63	98.4	1.6	63 (100.0)	0
SOM	124	83.9	15.3	123 (99.2)	1
TOTAL	479	93.9	5.6	477 (99.6)	2

UMDNJ School	Number (Percent) Placed in NJ Programs	Number (Percent) Placed in UMDNJ Programs	Percent Placed in Primary Care Programs †	Percent Placed in Specialty Programs	Percent Placed in Trans/Trad. Rotating Prog. ††
NJMS	42 (23.5)	33 (18.4)	39.1	58.1	2.8
RWJMS-NB/P	30 (26.8)	22 (19.6)	43.8	50.0	6.3
RWJMS-C	10 (15.9)	2 (3.2)	50.8	46.0	3.2
SOM	54 (43.9)	26 (21.1)	52.8	35.0	12.2
TOTAL	136 (28.5)	83 (17.4)			

Note: Numbers may not add due to rounding.

† Primary care includes internal medicine, family medicine, pediatrics and OB/GYN programs.

†† Osteopathic traditional (rotating) internships are considered primary care within the osteopathic profession. Some of the transitional placements hold a commitment for a second-year placement in a specialty.

1. One additional graduate did not participate in the match because he is entering a one-year general surgery residency as part of the NJMS oral and maxillofacial surgery program.

Source: 2013 Report on Medical/Dental Intern and Resident Placements of UMDNJ Graduates and Recruitment into UMDNJ-Sponsored Housestaff Programs, UMDNJ-Office of Institutional Research

**2013 UMDNJ DENTAL GRADUATES PLACED IN
GRADUATE DENTAL EDUCATION PROGRAMS
As of March 15, 2013**

UMDNJ School	Number Seeking Placement in a Graduate Dental Education Program	Number (Percent) Placed	Number Not Placed
NJDS	81 [†]	80 (98.8)	1

UMDNJ School	Number (Percent) Placed in NJ Programs	Number (Percent) Placed in UMDNJ-Sponsored Programs	% Placed in General Practice Programs	Percent Placed in Specialty Programs
NJDS	51 (63.8)	5 (6.3)	93.8	6.3

† Thirty-one additional graduates did not seek placement in a graduate dental education program. Twenty-eight plan to enter practice, one is entering the U.S. Army, one is entering the Air Force, and one is not seeking placement at this time.

Source: 2013 Report on Medical/Dental Intern and Resident Placements of UMDNJ Graduates and Recruitment into UMDNJ-Sponsored Housestaff Programs, UMDNJ-Office of Institutional Research.

POSTDOCTORAL APPOINTEES, 2012-2013*

School	Number
New Jersey Medical School	77
Robert Wood Johnson Medical School	62
School of Osteopathic Medicine	1
New Jersey Dental School	1
School of Health Related Professions	3
Total	144

* As of October 1, 2012

Source: Enrollment Statistics Report, Fall 2012 UMDNJ-Office of the University Registrar.



PROFILE OF FACULTY, STAFF, INTERNS & RESIDENTS

Faculty	
Paid Faculty, AY 2012-13	89
Master Educators.....	90
Endowed Chairs.....	94
Medical & Dental Interns, Residents and Fellows.....	97
Non-Faculty Employees.....	104

UMDNJ FACULTY Academic Year 2012 - 2013

SCHOOL	Paid Faculty*				Paid Faculty*			Volunteer Faculty
	Tenured	Tenure Track	Non-Tenured	Total	Male	Female	Total	Total**
New Jersey Medical School	129	47	583	759	467	292	759	1,565
Robert Wood Johnson Medical School	132	66	596	794	441	353	794	2,110
School of Osteopathic Medicine	19	11	198	228	119	109	228	439
New Jersey Dental School	24	6	175	205	150	55	205	150
School of Health Related Professions	11	11	409	431	133	298	431	341
School of Nursing	5	9	184	198	17	181	198	127
School of Public Health	13	10	53	76	33	43	76	142
UMDNJ Total	333	160	2,198	2,691	1,360	1,331	2,691	4,874 **

Note: Faculty of the Graduate School of Biomedical Sciences hold appointments in the medical or dental schools.

*Includes 100% coterminous faculty

**Duplicated Headcount (unduplicated headcount = 4,768)

Source: UMDNJ Annual Faculty Data Report, Academic Year 2012-2013
Data as of October 1, 2012

MASTER EDUCATORS' PROGRAM AT UMDNJ

BACKGROUND

Purpose: Educating future health care providers and researchers is a key mission of the University. However, faculty members more often garner greater recognition on a school-wide, national and international basis from their research and clinical accomplishments than from their excellence as educators. Although the importance of innovative, effective educators is being recognized by a broader audience today than in the recent past, the master educator's accomplishments are typically subordinated to research and clinical achievements in promotion and tenure decisions at this university as well as at others.

To emphasize the value placed upon faculty excellence in education, consistent with the University's strategic goals, Stuart D. Cook, MD formally proposed the UMDNJ Master Educators' Program at his inauguration as the second President of UMDNJ on April 9, 1999. Shortly thereafter, a University-wide committee chaired by the Dean of the UMDNJ-School of Health Related Professions (SHRP) was convened to outline the scope of the program and the general criteria to be employed in selecting Master Educators throughout the Schools of the University. The committee recommended the creation of a Master Educators' Guild (MEG), with the vision to enhance the University's goal of excellence in education throughout its Schools and to provide leadership in the continuous improvement of the teaching/learning continuum of the University's educational mission. In June 2004, the Guild was officially named the Stuart D. Cook, M.D. Master Educators' Guild, in honor of its founder. Periodically the President, the President's executive staff and the leadership of the Guild meet to discuss global issues of education and how the Guild can effectively contribute to the educational mission of all eight schools.

The Stuart D. Cook, M.D. Master Educators' Guild elects those faculty as members who have demonstrated a long history of commitment to excellence in education and who have a proven track record of recognition as skilled educators. Guild membership moves beyond the concept of excellence in teaching to the more global concept of education, which includes the considerations of learning and teaching styles, and of the broad range of settings (basic science lab, ambulatory clinic, in-patient unit, classroom, etc.) in which education occurs at UMDNJ. The members of the Guild collaborate with each other to continuously examine and improve the educational venues at UMDNJ, not only for the learners at each of the eight Schools, but also for junior faculty. Through a formal structure and bylaws that were first approved in September 2001 and revised in 2005, the Guild provides a stable foundation for the Master Educators to address educational needs throughout the Schools of UMDNJ and to share their expertise with educators in health sciences venues here as well as nationally and internationally.

Criteria: Faculty proposed for membership in the Stuart D. Cook, M.D. Master Educators' Guild must demonstrate:

- Exceptional teaching skills in either a traditional modality of education (lecture, laboratory or clinical teaching) or an alternative form of

teaching such as web-based education or another form of distance learning.

- Creativity in curricular design or innovation in the delivery of education to students.
- Currency in knowledge.
- The requisite level of scholarship.
- Efficiency and effectiveness in teaching.
- The ability to engender enthusiasm among students, such that they are motivated to master the relevant subject matter or clinical competency.
- High regard as an excellent educator by his/her peers.

At the beginning of academic year 2010-2011, the Guild membership process was finalized so it is now congruent across the Schools. Each School selects one candidate and the application portfolio is reviewed by the Guild's Executive Board and forwarded to the Administration for final approval.

In September 2000, the first class of twelve Master Educators were selected and inducted into the Stuart D. Cook, M.D. Master Educators' Guild. Additional classes have been inducted annually, with a current total of 88 members including Stuart D. Cook, MD who was inducted in 2012 as an honorary lifetime member of the Guild. The Guild members are a diverse group of educators in regard to their professional background and focus. Not only clinical and research faculty are inducted; in 2006 the first librarian was inducted into the Guild because of the unique teaching skills she contributed to the educational mission of the University. The Guild's leadership consists of five officers and eight members at large, with one member representing each school. The Guild leadership for 2012-2013 was:

President: Dr. Stephen J. Moorman (RWJMS)
VP for Finance: Dr. Debra Josko (SHRP)
Secretary: Dr. Mary Kamienski (SN)
Past President: Dr. Joseph Barone (RWJMS)
President Elect: Dr. Asha Samant (NJDS)

At-Large Members:

NJDS: Dr. Mahnaz Fatahzadeh
RWJMS: Dr. Kathleen K. Casey
SHRP: Dr. Nancy Kirsch
SN: Dr. Ginette Lange
SPH: Dr. Bernadette M. West
SOM: Dr. Pamela M. Bashore

ACCOMPLISHMENTS - UPDATE:

The Guild was actively engaged in several ongoing projects as well as new accomplishments during this past academic year. These projects are described below.

Educational research grants

Two new educational research grants were awarded this year. Dr. Nell Maloney-Patel at RWJMS was awarded \$11,500 for his study titled: Stoma site marking curriculum for surgical residents; Dr. Robert Monaco at RWJMS was awarded \$10,000 for his study titled: Introduction of ultrasound to the curriculum at RWJMS.

The Guild has developed criteria for an international visiting scholar's program. The aim of this program is to select through a competitive application process qualified educators from developing countries who will benefit from a 3-4 week fellowship at one or more of the UMDNJ campuses – Newark, New Brunswick and Stratford. The Guild believes that this program will promote effective teaching methodologies via a direct one-on-one mentorship program at UMDNJ campuses, which should ultimately increase the pool of effective teachers in the participants' respective country. Effective teaching in the classroom, by remote access, basic science lab and a group setting, are emphasized. Use of technology for effective teaching also will be introduced. The overall goal of this program continues to be to prepare the participant to become an education leader in their chosen field. The Guild expects that these leader-educators will return to their countries and continue the mission and goals of the Stuart D. Cook, M.D., Master Educators Guild.

Online Resource Center for Professionalism and Academic Integrity

The Guild continues to be involved in an Online Resource Center for Professionalism and Academic Integrity. The overall goal of the Resource Center is to promote academic integrity and professionalism both within and outside the UMDNJ community via the online provision of appropriate information resources and training. This is a work in progress and will be reviewed during the next academic year.

University life

The Guild is also involved in other aspects of University life in which professionalism and academic integrity issues are voiced. The Guild has met with the Student Senate to discuss their needs and suggestions for topics for future education sessions/symposiums. The Guild's membership is involved in reviewing each School's compliance in regard to teaching integrity, and several members have been working on reviving this initiative in each of the Schools.

Master Educators' Website (<http://meg.rbhs.rutgers.edu>)

The website provides Guild members online access to documents and minutes pertaining to the operation and structure of the Guild. It also serves as a forum for its members to share ideas related to promoting excellence in teaching. This site undergoes regular revisions.

Online Center for Excellence in Health Sciences Education and Teaching (<http://libraries.rbhs.rutgers.edu/rwjlweb/meg/cte/index.html>) This center was one of the formats the Guild used to promote educational excellence through the innovative use of information technologies. The Center was established and funded through the University's Educational Technology Mini-Grant Program. The Center is in the process

of revision and transfer to an updated user-friendly program. When the work on the site has been completed, it is hoped that the Center will continue to fulfill its three primary goals: to support, promote and enhance School and University-wide faculty development, furthering collaboration across the University by overcoming the barriers of time and place; to serve as a comprehensive resource center for the health sciences teaching community at large, projecting the University's educational expertise outward to the worldwide Internet community; and to provide a "virtual home" for the Master Educators' Guild. The Center was officially launched on University Day (2004). Once the Center's website has been totally revamped, its function and purpose will be clarified, and activities will be planned and made available.

Faculty Mentoring Initiative

Academic mentoring is an ongoing initiative of the Guild, since a fundamental principle of the Guild is that an organized system of mentoring promotes educational improvement of all faculty members, especially junior faculty. The Guild will provide information about and access to faculty mentorship through its Online Center once it has been updated and made accessible to all university faculty. Early in its history, the Guild developed basic guidelines that provided an overview of mentoring models, including the roles and responsibilities of both mentors and mentees.

Last year, focus groups were convened on each of the three campuses facilitated by then UMDNJ Provost and Executive Vice President, Denise Rodgers, MD. These meetings focused on identifying the educational needs and frustrations of junior faculty. Each campus had different issues, but a common theme was a discussion of technology and how the University can update its technological options to be more competitive. The Guild will work on developing and addressing ways to strengthen the mentoring process for young faculty at this institution.

ENDOWED CHAIRS

NEW JERSEY MEDICAL SCHOOL

Wesley J. Howe Chair in Trauma Surgery (1987)
 Department of Surgery
David Livingston, M.D.

Harris L. Willits Chair in Urology (1987)
 Department of Surgery
Mark L. Jordan, M.D.

Francois-Xavier Bagnoud Chair in Pediatric Allergy (1990)
 Department of Pediatrics
James M. Oleske, M.D.

Ledyard H. Pfund Chair in Medicine (1993)
Dorothy Vatner, M.D.

Ruth Dunietz Kushner and Michael Jay Serwitz Chair in Multiple Sclerosis (1999)
Stuart D. Cook, M.D.

Frederick F. Buechel, M.D. Chair for Joint Replacement (2003)
(Vacant)

Rena Warshow Chair in Multiple Sclerosis (2003)
Teresa L. Wood, Ph.D.

The Sharon L. and Joseph Muscarelle Endowed Dean (2005)
Robert L. Johnson, M.D.

The Thomas P. Infusino Endowed Chair (2005)
Andrew P. Thomas, Ph.D.

The Alphonse A. Cinotti, MD/Lions Eye Research Chair
Marco A. Zarbin, M.D., Ph.D.

The Fred F. Behrens Endowed Chair in Orthopaedic Trauma Education
Mark Reilly, M.D.

ROBERT WOOD JOHNSON MEDICAL SCHOOL

John G. Detwiler Professor of Cardiology (1985)
 Department of Medicine
John B. Kostis, M.D.

William H. Conzen Chair in Clinical Pharmacology (1987)
 CABM (Center for Advanced Biotechnology and Medicine)
(Vacant)

UMDNJ Endowed Professor of Public Health (1988)
George Rhoads, M.D., M.P.H.

William Dow Lovett Chair in Neurology (1990)
 Department of Neurology
Mary Maral Mouradian, M.D.

ROBERT WOOD JOHNSON MEDICAL SCHOOL (Continued)

Richard C. Reynolds Chair in General Internal Medicine (1996)

Department of Medicine

Jeffrey L. Carson, M.D.

Philip D. Gilbert Chair in Radiology (1997)

Department of Radiology-Camden

(Vacant)

The Laura Gallagher Chair in Developmental Biology at the Child Health Institute of New Jersey (2000)

Arnold B. Rabson, M.D.

The Unilever Chair for the Study of Diet and Nutrition in the Prevention of Chronic Diseases at the Cancer Institute of New Jersey (2000)

(Vacant)

The Harold L. Paz, M.D. Chair in Developmental Biology at the Child Health Institute of New Jersey (2000)

(Vacant)

Melvyn and Ab Motolinsky Chair in Medicine for Hematology (2000)

Department of Medicine

(vacant)

Takara Endowed Chair in Bioinformatics (2001)

Department of Biochemistry

Masayori Inouye, Ph.D.

The James W. Mackenzie, M.D. Chair in Surgery (2001)

Peter Scholz, M.D.

Norman and Ruth H. Rosenberg Chair in Vascular Surgery (2002)

Department of Surgery

Alan M. Graham, M.D.

Richard Harvey Professorship in Innovative Teaching (2002)

(Vacant)

Norman Edelman Professorship in Bioinformatics (2002)

Department of Pharmacology

William J. Welsh, Ph.D.

Thomas Strax, M.D./JFK Johnson Rehabilitation Institute Professorship (2004)

(Vacant)

Merck Research Laboratories Professorship in Clinical Pharmacology (2004)

(Vacant)

Endowed Professor of Community Health and Health Policy (2006)

Eric G. Jahn, M.D.

Janis and Gary Grover Endowed Professor in Physiology and Biophysics

(Vacant)

Hunterdon Endowed Chair in Interprofessional Education (2013)

Denise V. Rodgers, M.D.

NEW JERSEY DENTAL SCHOOL

Robert and Susan Carmel Chair in Algesiology (1995)
Eli Eliav, D.M.D, M.Sc., Ph.D.

Endowed Professor of Community Health (1993)
(Vacant)

Endowed Professor of Dental Public Health (2000) *(jointly with SPH)*
(Vacant)

Hunterdon Endowed Chair in Community Oral Health (2013)
Jill York, D.D.S.

SCHOOL OF HEALTH RELATED PROFESSIONS

Endowed Professor of Complementary and Alternative Medicine (2002)
(Vacant)

SCHOOL OF NURSING

Francois-Xavier Bagnoud Chair in Community Pediatric Nursing
(Vacant)

Endowed Professor of Oncology (2004)
(Vacant)

SCHOOL OF PUBLIC HEALTH

Endowed Professor of Dental Public Health (2000) *(jointly with NJDS)*
(Vacant)

MEDICAL AND DENTAL INTERNS, RESIDENTS AND FELLOWS

HOUSESTAFF TOTALS BY SCHOOL, 2012-2013

School	Number of Housestaff
New Jersey Medical School	583
Robert Wood Johnson Medical School	451
School of Osteopathic Medicine	243
New Jersey Dental School	23
Total	1,300

Source: Survey of UMDNJ GME and GDE Programs and Housestaff, UMDNJ-Office of Institutional Research. Data as of September 1, 2012

HOUSESTAFF TOTALS BY PROGRAM, 2012-2013

UMDNJ-NEW JERSEY MEDICAL SCHOOL

Program	Total Housestaff
Allergy/Immunology	3
Anesthesiology	27
Cardiology	10
Child Psychiatry	4
Dermatology	6
Diagnostic Radiology	18
Emergency Medicine	24
Endocrinology	2
Gastroenterology	9
Geriatrics	2
Hepatology	3
Infectious Diseases	6
Interventional Cardiology	2
Medicine	115
Medicine-Pediatrics	15
Nephrology	6
Neurology	16
Neurology-Multiple Sclerosis	1
Neurology-Pediatric	3
Neurology-Vascular	1
Neurosurgery	12
Neurosurgery-Endovascular Neuroradiology	3
OB/GYN	23
OB/GYN-Maternal Fetal Medicine	1
OB/GYN-Reproductive Endocrinology & Infertility	3
Ophthalmology	15
Orthopedics	31
Orthopedics-Hand Surgery	1
Orthopedics-Musculoskeletal	1
Orthopedics-Trauma & Reconstructive Surgery	1
Otolaryngology	10
Pathology	13
Pediatrics	41
Pediatrics-Infectious Diseases	1

UMDNJ-NEW JERSEY MEDICAL SCHOOL (Continued)

Program	Total Housestaff
Plastic Surgery	5
Plastic Surgery-Integrated	2
Physical Medicine & Rehabilitation (PM&R)	27
PM&R-Musculoskeletal Medicine	4
PM&R-Pediatric	1
PM&R-Spinal Cord Injury Medicine	1
PM&R-Traumatic Brain Injury	1
Podiatry	6
Preventive Medicine	4
Psychiatry	27
Pulmonary Critical Care	9
Surgery	56
Trauma	2
Urology	8
Vascular Urology	1
Total	583

Percent American Medical Graduates = 69.1%

Source: Survey of UMDNJ GME and GDE Programs and Housestaff, UMDNJ-Office of Institutional Research. Data as of September 1, 2012

HOUSESTAFF TOTALS BY PROGRAM, 2012-2013

UMDNJ-ROBERT WOOD JOHNSON MEDICAL SCHOOL

Program	Total Housestaff
Anesthesia	33
Anesthesia-Cardiac Anesthesia	2
Anesthesia-Pain Management	2
Dermatology	3
Emergency Medicine	16
Family Medicine–Geriatrics	1
Family Medicine (3 programs)	45
Family Medicine-Sports Medicine	2
Internal Medicine-Cardiology	9
Internal Medicine-Cardiology Interventional	1
Internal Medicine-Endocrinology	4
Internal Medicine-Gastroenterology	6
Internal Medicine-Hematology/Oncology	12
Internal Medicine-Infectious Diseases	4
Internal Medicine-Nephrology	4
Internal Medicine-Pulmonary/Critical Care	7
Internal Medicine-Rheumatology	2
Internal Medicine	69
Neurology	9
OB/GYN Reproductive Endocrinology & Infertility	3
OB-GYN Maternal Fetal Medicine	3
Obstetrics/Gynecology	19
Occupational Medicine	3
Orthopedic Surgery	20
Pathology	8
Pathology-Hematology	1
Pediatrics	35
Pediatrics-Developmental & Behavioral Pediatrics	2
Pediatrics-Neonatology	8
Psychiatry-Child And Adolescent	8
Psychiatry	21
Psychiatry-Forensic Psychiatry	2

ROBERT WOOD JOHNSON MEDICAL SCHOOL (Continued)

Program	Total Housestaff
Radiation-Oncology	8
Radiology Interventional	1
Radiology-Diagnostic	20
Surgery-Breast	1
Surgery-Colon/Rectal	3
Surgery-General	42
Surgery-Surgical Critical Care	2
Surgery-Vascular Surgery	2
Urology	8
Total	451

Percent American Medical Graduates = 78.5%

Source: Survey of UMDNJ GME and GDE Programs and Housestaff, UMDNJ-Office of Institutional Research. Data as of September 1, 2012

HOUSESTAFF TOTALS BY PROGRAM, 2012-2013

UMDNJ-SCHOOL OF OSTEOPATHIC MEDICINE

Program	Total Housestaff
Cardiology	10
Child/Adolescent Psychiatry	1
Emergency Medicine	27
Endocrinology	2
Family Medicine	25
Gastroenterology	3
Geriatrics (FM)	1
Geriatrics (IM)	1
Infectious Diseases	2
Internal Medicine/Emergency Medicine	9
Internal Medicine	45
Internship (Traditional Rotating)	9
Nephrology	4
Obstetrics/Gynecology	9
OMM/NMM (Osteopathic Manipulative Medicine/ Neuromusculoskeletal Medicine)	4
Orthopedics	23
Otolaryngology	7
Psychiatry	13
Pulmonary/Critical Care	7
Surgery	30
Urology	11
Total	243

Percent American Medical Graduates = 100.0%

Source: Survey of UMDNJ GME and GDE Programs and Housestaff, UMDNJ-Office of Institutional Research. Data as of September 1, 2012

RESIDENT TOTALS BY PROGRAM, 2012-2013**UMDNJ-NEW JERSEY DENTAL SCHOOL**

Program	Total Housestaff
Dentistry-General Practice	6
Dentistry-Oral/Maxillofacial Surgery	11
Dentistry-Pediatric	6
Total	23

Percent American Medical Graduates = 100.0%

Source: Survey of UMDNJ GME and GDE Programs and Housestaff, UMDNJ-Office of Institutional Research. Data as of September 1, 2012

NON-FACULTY FULL- AND PART-TIME EMPLOYEES
(As of June 30, 2013)

Job Category	Total	% AI/AN¹	% Asian	% Black	% Hisp.	% Other²	% White	% Women	% Men
Executive/Administrative/ Managerial	844	0.1	8.2	22.7	5.6	1.7	61.7	62.8	37.2
Professional Non-Faculty	6,193	0.1	25.6	21.2	6.8	1.9	44.3	69.5	30.5
Secretarial/Clerical	1,848	0.2	5.5	47.2	15.1	2.0	29.9	86.9	13.1
Technical/ Para-Professional	1,888	0.2	11.9	39.9	11.2	2.3	34.6	68.2	31.8
Skilled Crafts	204	0.0	5.9	38.2	15.3	0.0	40.7	2.9	97.1
Service/Maintenance	798	0.1	5.4	59.6	15.8	1.8	17.3	51.8	48.2
Non-Faculty Grand Total³	11,775	0.1	17.3	31.3	9.5	1.9	41.6	69.2	30.8

1. American Indian/Alaska Native

2. Other category includes Not Reported, Two or More Races & Native Hawaiian/Pacific Islander.

3. Non-faculty grand total does not include student assistants or graduate students (N=691).

Source: UMDNJ-Office of Workplace Diversity



MEETING THE STATE'S NEEDS

Public and Community Service105

PUBLIC AND COMMUNITY SERVICE AT UMDNJ

Community service is a distinct component of the University's four-part mission, and also plays an integral role in the educational, research and health care endeavors of UMDNJ. The University offers a myriad of programs and activities that serve our State and advance the health and quality of life of its residents.

By providing more than 200 community service programs throughout the State, UMDNJ extends prevention, health care and related services to all of New Jersey's communities. Many of these programs target medically needy populations or those at high risk of particular health problems. All of the Schools of UMDNJ provide students with opportunities for clinical education in community-based programs and settings, and foster cultural sensitivity and competence.

Many sponsored research programs at UMDNJ focus on New Jersey's most urgent health problems. University faculty and scientists are helping to advance prevention and treatment in such areas as cancer; the effects of environmental agents on human health; biodefense; HIV/AIDS; tuberculosis; heart disease; neurological diseases; women's health; child and adolescent health; mental health; oral health; health disparities; and aging.

UMDNJ faculty and staff also participate in numerous boards and organizations, volunteering many hours to address health, education and other issues affecting New Jersey.

UMDNJ's commitment to public service is further exemplified by our substantial employment of urban and minority residents, the purchase of goods and services from minority-owned and special vendors, and partnerships with community-based organizations. These activities contribute to the redevelopment and economic growth of the cities and regions that host the University's campuses.

Provided here are highlights of a few of the many University programs and services that continue to make a positive impact in New Jersey.

2012 VACCINE PREVENTABLE DISEASES: POLICY, PRACTICE, PREPAREDNESS (SPH)

The NY-NJ Preparedness and Emergency Response Learning Center (PERLC), in collaboration with its sponsors and supporters, hosted the seventh Vaccine Preventable Disease Conference (VPDC) entitled "Vaccine Preventable Diseases: Policy, Practice, Preparedness" on July 23, 2012. The NY-NJ PERLC has been a regional partnership of the New Jersey Center for Public Health Preparedness (NJCPHP) at UMDNJ-School of Public Health (SPH) and University at Albany School of Public Health, Center for Public Health Preparedness since 2010.

This year's conference was one in a series that emerged out of a collaborative partnership that was initiated by the NJCPHP at UMDNJ in late 2004. The conference was video-streamed across four different locations: The Enterprise Center at Burlington County College in Mt. Laurel, NJ; Kean University in Union, NJ; UAlbany School of Public Health in Rensselaer, NY; and Columbia University Mailman School of Public Health, New York, NY. There were a total of 437 conference attendees and 359 completed evaluations for a response rate of 82.2%. Of the conference attendees that responded; 62.3% were nurses (school nurses, public health nurses, nurse administrators, and other nurses), 2.6% were health educators, 2.0% were REHS/health officers, 4.3% were epidemiologists, 3.2% were infection control, 2.6% were physicians, and 22.9% were other health related professionals. Participants had been in their current position from less than a year to 43 years, with the mean being 9.68 years. In terms of responsibility for preparedness, 69.7% responded that they did have responsibility, while 30.3% did not. Of those participants with preparedness training in the past year, they averaged 6.50 hours of training; a decrease from last year (9.10 hours).

Though not exclusively a public health and school nurse partnership, the original partnership included representatives from related professional organizations; institutions of higher education; local health departments; schools, the NJ Department of Health and Senior Services; and the NJ Department of Education, among others. The initial training activities largely were intended to address the preparedness training needs of school nurse and public health nurse first responders. Based on conference evaluations and information coming in from the field, the content of the conferences has evolved to meet the needs of co-sponsors, supporters and a broader public health workforce audience.

The recently adopted Public Health Preparedness and Response Core Competencies and the 2011 Preparedness and Emergency Response Capability, "Community Resilience" (Community preparedness and community recovery) was featured in the 2012 conference. A major focus was on maintaining routine vigilance promoting vaccine coverage in communities to prevent widespread outbreaks that have been occurring in the US and worldwide due to vaccine exemptions and declining vaccination rates (e.g., polio, measles, and pertussis). Over the years, continuing education credits have been made available to public health and school nurses, health educators, health officers and registered environmental health specialists, physicians, and epidemiologists among other public health professionals.

ALLIED DENTAL EDUCATION (SHRP)

The Department of Allied Dental Education (ADE) provides preventive clinical dental services to veterans in New Jersey through affiliation with the Veteran's Administration Hospital in Orange, N.J. Through a variety of community services including their National Children's Health Month Program called "Give Kids a Smile" (GKAS), ADE provides dental services for children up to 12 years of age. In Scotch Plains, the "Jump Start" program gives health education video demonstrations, informative and coloring activities for over 100 children a year. The "Smile for Seniors" program provides complimentary services to senior citizens aged 55 years plus. Since the beginning of the 2011-2012 school year, ADE has participated in the following community events: Union County College Career Fair Cranford Campus, SHRP Health Fair Scotch Plains Campus, Hillside Health Fair, SERV Behavioral Health Fair Cranford, Rahway Health Fair, Runnells Specialized Hospital Group Oral Hygiene Information Sessions, Community Gardens Health Fair at Hillside, Health Sciences Career Fair at the Liberty Science Center, Oral Health Presentation at Union County Vocational Technical Schools Campus Fair, Scotch Plains-Fanwood Jumpstart Preschoolers closed clinic session for GKAS, GKAS National Event, Grover Cleveland School Rahway, Scotch Plains-Fanwood Jumpstart Preschoolers closed clinic session for GKAS, Delta Dental Day at Liberty Science Center, Raritan Valley Community College Information Sessions, Vibrant Kids Preschool Event, and the Farleigh Dickinson University Campus Health Fair.

ASIAN RISK ASSESSMENT COURSE AND ENOH TRAINING (SPH)

Since 2001 the School of Public Health (SPH), in collaboration with Rutgers University, has offered a month-long environmental risk assessment course. The course was originally funded by the Asian Development Bank and is now self sustaining. The course is taught in alternate years in Bangkok, Thailand at Chulalongkorn University. The School also continues to assist the faculty at Prince of Songkla University in Hat Yai, Thailand in furthering development of the Center for Toxicology and Risk Management, which was established in 2001.

Through collaborative funding from the Environmental Health Sciences Center at UMDNJ and working with the Prince of Songkla University faculty, two studies have been initiated in Southern Thailand looking at lead and arsenic contamination in children in two villages. This collaboration continues and additional support is being sought via NIH and the Thai government.

In 2007, the SPH with Rutgers and Chulalongkorn University was awarded an NIH Fogarty ITREOH grant (International Training and Research Program in Environmental and Occupational Health). This provided funding for the Thai Fogarty Center. The center, located at Chulalongkorn University, provides training and research opportunities relating to environmental and occupational health and exposure to pesticides. The ITREOH site is at <http://thaiitreoh.rutgers.edu/>. We have supported 26 students for MPH and PhD degrees from seven countries and have trained a total of over 700 students in the risk class. A new \$1 million USAID grant will start in September 2013 for five years to further this work in the Philippines. For more information on these projects contact Mark Robson at robson@aesop.rutgers.edu.

BARBERSHOP EVALUATION (SPH)

Comparing the NJ prostate cancer incidence data for the period 2001-2005 for white and black males (171.50 and 269.5 per 100,000 adjusted to the 2000 US Standard Million population respectively), the ratio for black males (largely an uninsured or under-insured population) was 157.14 % greater. The Barbershop Initiative™ is a national program created by The Prostate Net (TPN), a national patient education and advocacy organization founded by Virgil H. Simons. Funded by the CDC, implementation of an enhanced version of The Prostate Net's Barbershop Initiative™ model in NJ began in September 2007 and continued with additional funding through June 30, 2012.

The intent of the program has been to access medically underserved minority men in NJ through barbershops to increase their awareness and knowledge about prostate cancer and its detection. Barbers who over time have served as respected emissaries in their communities were to be trained to serve as lay health educators to then train their patrons. This five-year venture was to be done through New Jersey Cancer Education and Early Detection (NJCEED) lead agencies in conjunction with the county cancer coalitions and two designated outreach coordinators (one based at the Atlantic County Healthy Living Coalition (ACHLC) for the 11 southern counties and the other based at the Essex County Cancer Coalition (ECCC) for the 10 northern counties in the state.)

Because the ECCC decided not to continue with the initiative beyond the fourth year and useable data for the northern region was not available, data on barbershops/haircutters in the southern region was obtained from the ACHLC outreach coordinator and used as a starting point to gather information from participating shop owners. A brief 5-10 minute survey with eight items was developed to address aspects of the initiative such as materials distribution, types of educational sessions that might have been held, training the shop owners themselves might have done, among others. The Excel spreadsheet contained 119 shops of which five had either closed or were unavailable for contact for other reasons. An introductory letter was developed and mailed to 114 shops that remained on the list. Telephone interviews were then undertaken by two trained black male health professionals.

Of the 114 shops that covered 12 counties, there were many issues with the phone numbers (i.e., those out-of-service, those that would just ring with no answer, others that would go directly to voice mail, others that were not barbershops, etc.). Of shops that answered, there were 34 owners who stated that they had never heard of the initiative, another 12 who were uncertain whether they had heard about it, 15 who were not interested in it, among other issues. There were six shop owners who had not participated previously who were very interested in participating in the future as were the 20 who stated that they had participated and who were interviewed. All 20 spoke positively about the program and its value to their patrons as well as themselves. Of the shop owners interviewed, 18 (94.7%) had sought screening and/or other healthcare as a result of participating in the initiative. More shop owners in Atlantic and Burlington counties, 10 out of the 26 or 23.08%, expressed their willingness to participate in the future. Shop owners in Cumberland, Mercer, and Union counties were equally likely to be interested (3 or 11.54% each). These counties were followed by two shop owners each in Camden, Gloucester, and Monmouth and one in Somerset.

Clearly, some but not all barbers/haircutters see this type of initiative as a valuable program. With improved database tracking and some minor modifications that would reduce driving and improve scheduling and reliability of visits to the shops by the health educators/outreach workers, this program could be very successful if continued in the future. For more information, contact Dr. Marcia Sass at sassmm@sph.rutgers.edu.

BRIDGING THE GAPS (SPH)

In the summer of 2012, the School of Public Health again participated in Bridging the Gaps. This consortium of universities from around Pennsylvania was established in 1988 to encourage service learning. SPH had eight community sites with interdisciplinary teams of students from public health (SPH), medicine (SOM/RWJMS), SHRP and GSBS in three cities. A total of 20 students participated and received summer stipends.

In Camden, students were placed at Camden Coalition of Healthcare Providers, Project HOPE, UrbanPromise, and the IDEA Performing Arts Center. In New Brunswick, students were placed at Elijah's Promise and the Francis Parker Memorial Home and in Newark students were placed at the Greater Newark Conservancy and YouthBuild. The students worked for seven weeks on service projects of benefit to the community. In addition to working four days a week at their site, students participated in workshops once a week in Philadelphia and/or New Jersey on various community issues ranging from violence to oral health to approaches to working with youth. At their sites, students worked with youth, adult and senior populations, providing health education, and assisted with summer camp programs and youth training initiatives, local farmer's markets, and outreach to homeless populations. For more information on Bridging the Gaps, contact Dr. Bernadette West at westbm@umdnj.edu.

CAMDEN COMMUNITY HEALTH CENTER (SN)

The city of Camden, NJ truly represents an underserved population. Almost 33% of *families* in Camden live below the poverty level (compared to 9.2% nationwide) and 35.5% of *individuals* live below the poverty line compared to 12.4% nationwide. With one percent of the city's population accounting for 30 percent of its health costs, programs such as the CCHC have the ability to make a major impact on the health of an underserved community. When health care is neglected, it is reported that children in America miss more than 51 million hours in school each year; many eventually require treatment in emergency departments. Childhood obesity is considered an epidemic in the United States; as children age, their future risk of heart disease and stroke increases. Obesity, which impacts more than 15% of American children, is a leading cause of fatty liver disease that can progress to liver failure. According to the New Jersey Childhood Obesity Study funded under New Jersey Partnership for Healthy Kids Study, children in Camden are more likely to be overweight or obese compared to their counterparts around the country. The rates are highest among Hispanic children and among the youngest (3–5 years) and the oldest (12–18 years) age groups. The majority of children in Camden do not meet recommendations for vegetable consumption and frequently consume energy-dense foods (fast food, sugar-sweetened beverages, and sweet and salty snacks)—non-Hispanic Black children tend to consume these energy-dense foods most frequently.

The Camden Community Health Center is an active partner with organizations such as Head Start and the County Department of Health. In addition, child safety presentations, immunizations, and nutritional programs were provided by prelicensure nursing students and Rutgers-SN faculty. Funding from the Hearst endowment was used to support these efforts. A new initiative is the establishment of a presence in the Ablett Village Community Center located in the Cramer Hill section of Camden. Ablett Village is managed by the Housing Authority of the City of Camden and has 306 housing units. A wide variety of programs and workshops are held in the Community Center. Faculty have been meeting regularly with the residents to identify their opinions in regard to: 1) What residents do to stay healthy; 2) What is important for the health of their family; and 3) What services in the community they currently utilize. Additionally, they have asked residents to identify their concerns for their health, their family's health and the health of the community. The results from these meetings are being used to develop programs that are organized around the needs and expectations of the residents.

The CANCER INSTITUTE OF NEW JERSEY (RWJMS)

The Cancer Institute of New Jersey (CINJ) is committed to expanding its capacity to provide exceptional and innovative outreach to New Jersey's medically underserved populations. The Rutgers Cancer Institute of New Jersey's Office of Community Outreach works in conjunction with Partnership for Healthy Kids – New Brunswick, the Alliance for a Healthier New Brunswick, the New Jersey Comprehensive Cancer Control Plan members and the New Jersey Cancer Education and Early Detection (NJCEED) program to meet the education and outreach needs of its community constituents.

Community Activities

The **Office of Community Outreach** (OCO) designs and implements cancer prevention and screening educational programs as well as informative treatment-related lectures to community organizations throughout New Jersey. In 2012, OCO educated more than 1,000 community members about CINJ and a variety of other health issues including cancer, its early detection, prevention (including prevention trials) and clinical trials.

OCO is committed to supporting the objectives contained within the New Jersey Comprehensive Cancer Plan. Moreover, the work of New Jersey's Cancer Education and Early Detection Program (NJCEED) is aligned with OCO's charge to ensure education and screening is provided to all New Jerseyans. Members of OCO serve on several statewide committees sponsored by the NJ Department of Health, such as the New Jersey Cancer Education and Early Detection (NJCEED) – Public and Professional Education Subcommittee, State Communications Committee, Statewide Melanoma Workgroup, Statewide Evaluation Workgroup, and various Regional Chronic Disease Coalitions. Samples of statewide projects include:

- **Choose Your Cover:** Sponsored by the Statewide Melanoma Workgroup, a multi-site melanoma screening held over two days at the Jersey Shore. Since 2010, this program was expanded as a statewide initiative for all outdoor areas (parks, pools, and beaches) throughout all 21 counties in New Jersey.

- HPV Educational Seminars (October and November 2012): In partnership with the NJCEED Public and Professional Education Committee and Horizon NJ Health, CINJ faculty provided a keynote address to school nurses regarding issues related to cervical cancer, HPV, and the HPV vaccine. Sessions were held at Monmouth University and on the Rutgers University Stratford Campus.
- Prostate Cancer Education (2011): CINJ Faculty published an article regarding current prostate cancer screening guidelines in *Perspectives*, the peer-reviewed CME publication for the New Jersey Academy of Family Physicians.

OCO has also received philanthropic support to provide community education programs, including:

- A multi-year grant from Johnson & Johnson Pharmaceuticals, Inc. to develop a program to increase nutrition education, physical activity, and increase access to healthy produce within houses of worship in the Greater New Brunswick area. Approximately 20 houses of worship have been selected to participate in this multi-phase program.
- A multi-year grant from Johnson & Johnson Pharmaceuticals, Inc. to develop and implement a sun safety and tobacco prevention curriculum for middle school students in the Greater New Brunswick area.

Health Educational Materials Archive

The Office of Community Outreach established a health education materials archive for clinically accurate and culturally appropriate materials from sources across the United States. As a joint initiative between OCO and CINJ's Bioinformatics team, this interactive portal will allow for searching via keyword, population, and cancer site, as well as submission of materials for inclusion and ordering of materials. Information is provided in multiple languages, and the portal is the first search engine known to offer comprehensive cancer educational materials in multiple languages.

The Dean and Betty Gallo Prostate Cancer Center

The Center has developed many strong community ties that have been instrumental in increasing prostate cancer screening and education programs throughout the State, including screenings held at churches, clinics, and village gatherings and advertised through local papers, radio stations, bulletins, food stores, and community centers.

Continuing Umbrella for Research Education

The Continuing Umbrella for Research Education (CURE), originally established in 2003 with a grant from the National Cancer Institute, is now funded by Johnson & Johnson. The program enrolls eight students each year – four from Rutgers and four from the New Brunswick Health Science Technology High School – to conduct research at CINJ. Running for two summers and the academic year in between, the program provides students with an excellent opportunity to experience the research environment and develop and pursue opportunities for careers in science.

Other CINJ Activities

- A patient-relief fund was established with patient donations to assist with transportation, parking, etc., for indigent individuals.

CENTER FOR BIODEFENSE (NJMS)

UMDNJ established the Center for BioDefense in 1999 in anticipation of bioterrorism attacks taking place in the United States. Since its founding, the Center has grown into a leading entity in the area of counter-terrorism, biodefense and emergency management. In light of the terrorist attacks in 2001, and of the President's commitment to protect America against future attacks, we are proud that New Jersey is able to join national efforts through the Center for BioDefense at UMDNJ. The breadth of the projects that the Center is supporting demonstrates the Center's close relationship with State efforts to increase New Jersey's state of preparedness. The Center has gained a state and national reputation for its leadership and rapid response to the new age of bioterrorism. Since October 2001, members of the Center have embarked on an ambitious schedule of seminars, conferences, and other training sessions to educate scientists, clinicians, first responders, public health professionals, and the general public on terrorism and biodefense. The Center's educational programs include a graduate level certificate in BioDefense, in the curriculum since 2004, comprising a set of three courses on biological weapons issues in basic and clinical science, policy, ethics and public health. In 2010, the Center expanded its reach to include a Program on Terror Medicine, which provides as part of the Department of Emergency Medicine an elective in terror medicine for third and fourth year medical students. Members of the Center for BioDefense testify in Congress, deliver briefings, and serve on committees of the National Academies of Science and the American Association for the Advancement of Science.

CENTER FOR SCHOOL AND COMMUNITY-BASED RESEARCH AND EDUCATION (SPH)

The Center for School and Community-Based Research and Education (CSCBRE), headquartered in New Brunswick, follows a mission to empower diverse populations to make informed decisions about their health and the environment through applied field research, creative partnerships and innovative outreach like trainings, risk communication and educational interventions. Collaborations through CSCBRE include innovative programs that translate leading scientific research into educational materials for schools, industry, professionals, and the general public.

Professional Development

Training workshops support the use of CSCBRE materials and the integration of health-based topics into school curricula. Through hands-on workshops, participants experience the curricular materials as both students and teachers, promoting teachers as learners. Participants familiarize themselves with the activities, discovering how the lessons and activities are interrelated and build upon one another, ultimately preparing them for the classroom. CSCBRE workshops are designed to meet the specific needs of each target audience. To achieve this goal, CSCBRE employs several teacher training models, including national train-the-trainer programs; regional teacher workshops held primarily during the summer; and both short- and long-term district collaborations to train

all teachers at a specific grade level(s). To date, CSCBRE's programs and services have impacted more than 7,400 teachers and 141,000 students in 29 states, the District of Columbia, Guam, Puerto Rico and overseas.

Train-the-Trainer Programs: Using a train-the-trainer approach to increase the number of people who have the capacity to train teachers on select curricula is the most efficient method for ensuring nationwide curriculum dissemination through professional development. This mechanism greatly increases the number of teachers/students impacted when compared to one organization acting alone. These programs may involve the collaboration of several school districts, educational/environmental organizations and universities' education and outreach programs. Trainers are trained to facilitate workshops for teachers in their area focusing on safety and health-related curricula.

Teacher Workshops: The Center offers regional and district-specific workshops facilitated by CSCBRE staff and health educators, scientists and classroom teachers. Workshop topics include breast cancer, toxicology, risk assessment, epidemiology, infectious diseases, real-life science and safe work practices for teenagers. Since inception, over 2300 teachers have been trained to use health sciences as a theme for learning.

Curriculum Development

Lesson plans containing current and impartial information increase public health literacy, with an emphasis on environmental health, while enhancing educational resources in elementary, secondary and vocational school classrooms (grades K-12). Teaching techniques include problem-based learning, games, graphing, hands-on experiments and case studies. Age-appropriate investigative science, math, health and language arts activities present students with real-life scenarios through which they learn problem-solving, decision-making and critical-thinking skills. These tools for learning are readily transferable to other areas of students' lives. Select modules are also available in Spanish-bilingual and all-Spanish versions. Materials, where applicable, are indexed to state and national education standards.

BioCONNECT (Biology of Cancer, Online Education Connecting Teens)

The Cancer Institute of New Jersey and CSCBRE developed BioCONNECT, a high school science curriculum supplement that uses breast cancer as the context. The module enables high school students, through the process of scientific inquiry, to identify risk factors for breast cancer; learn how cancer develops; and make life-style changes to reduce the risk of cancer. The module targets science classrooms. The lessons follow fictional 14-year old twins, Steve and Nikki, as they discover their mother has been diagnosed with breast cancer. Via the twins' website, the students help the twins work through the associated scientific and psychological issues over time, as the twins' family moves through diagnosis and treatment. At critical decision points, students use their knowledge to share information using the twins' online forum.

The BOLD (BioCONNECT Oncology Leadership Development) Initiative

CSCBRE and the LIFE Center at the Cancer Institute of New Jersey developed the BOLD Initiative, based on the BioCONNECT curriculum. The BOLD Initiative is a unique learning opportunity for high school students who have an interest in learning more about cellular biology and genetics of cancers, as well as careers connected to the field. During this weeklong interactive experience, students increase their understanding of

cancer related causes, diagnostic tools, treatment options and current research through the context of breast cancer. They identify risk reduction strategies and learn first-hand about careers related to the field as they live the experience among the professionals at the Cancer Institute.

NJ Safe Schools Program

The NJ Safe Schools Program (NJ SS) is a multi-faceted program supported predominantly by the New Jersey Department of Education (NJDOE), Office of Career and Technical Education and the U.S. Department of Education (through NJDOE).

NJ SS assists schools in reducing risk due to occupational safety and health hazards in secondary schools and work microenvironments in which adolescents spend time. NJ SS involves a number of outreach and applied research and surveillance components designed to support teachers, administrators, safety and health designees, structured learning experience/career orientation coordinators, county apprenticeship coordinators, cooperative education coordinators and those involved in school-to-careers. In addition, NJ SS includes multiple communications during the school year to keep stakeholders informed of relevant science, engineering, policy, regulatory, and injury epidemiology developments at local, state and national levels. Finally, NJ SS is in charge of the State of NJ law-based incident (injury, illness) surveillance system for youth workers involved in school-sponsored structured learning experiences on and off-campus. As of spring 2012, there are print and on-line versions of the incident reporting form used statewide. We have produced annual summary reports for state agencies, and between 1/2008-7/2013 multiple state and national conference presentations and six (6) peer-reviewed publications (with two others in review at different journals as of July, 2013).

As another one of its components, project staff developed recommendations regarding prohibited and restricted hazardous work activities for minors (youth under the age of 18) involved in school-sponsored structured learning experiences in multiple topic areas, including construction; food service (e.g., preparation and storage); health care and allied health fields; automotive and diesel engine repair; retail/business and marketing (e.g., food vendors); and agricultural education. The 2004-09 report recommendations, developed through NJ SS Task Forces for the New Jersey Department of Education and the New Jersey Department of Labor and Workforce Development, will be guiding revisions to New Jersey child labor laws. A focus on cosmetology began in 2010 and continues in 2011-13 (hair styling, nail salons, skin care, barbering). Three activities/projects are being conducted with stakeholders throughout NJ and in metropolitan Atlanta, GA—namely teachers and students in participating career and vocational-technical school districts-- and the resulting posters and pamphlets will be piloted then disseminated throughout NJ, GA and the U.S. via partners and our website in the 2011-14 school years.

Overall, several thousand teachers and administrators in NJ have been trained during multiple courses focusing on occupational safety and health and wage and hour/child labor issues through NJ SS. Much of the training focused on preparing participants to meet the new teacher licensing requirements related to ensuring students associated with school-sponsored structured learning experiences are placed at safe work sites. In addition, teachers have attended free/in-service trainings on using the “Youth@Work: Talking Safety” curricula, violence in the workplace, cosmetology (new training created with partners for teachers and students) and safety and health for special needs students (new training created with partners).

Community Outreach

CSCBRE conducts community outreach to raise public awareness of how public health research is leading towards the prevention, detection and/or treatment of diseases/illnesses. Programs are designed to translate research information into tools and resources for community stakeholders.

Community Outreach and Engagement Core (COEC)

COEC translates research information of the Center for Environmental Exposure and Disease (CEED), a National Institute of Environmental Health Sciences Center of Excellence administratively housed at the Environmental Occupational Health Sciences Institute, into tools and resources for community stakeholders. The overall goals of COEC are to (1) develop partnerships with community stakeholders to translate and disseminate Center research information; (2) enhance the dialogue between community stakeholders and Center researchers regarding environmental health issues; (3) increase awareness and understanding of environmental health research; and (4) promote environmental health research as a science career option.

For more information on CSCBRE programs and services, contact Ms. Laura Liang at: laura.liang@sph.rutgers.edu or Dr. Derek Shendell at shendedg@sph.rutgers.edu.

CENTER FOR TOBACCO SURVEILLANCE AND EVALUATION RESEARCH (SPH)

The Center for Tobacco Surveillance and Evaluation Research (CTSER), formerly known as the Tobacco Surveillance and Evaluation Research Program (TSERP), was first established in 2000 to evaluate New Jersey's Comprehensive Tobacco Control Program (CTCP) and is responsible for monitoring tobacco use trends in response to the State's tobacco control activities. The Center now includes multiple research projects supported by state, federal, and private foundation funding. Its overall mission is to enhance the evaluation and surveillance of tobacco control as well as industry initiatives and strategies.

A key priority of CTSER is the dissemination of its findings. Since 2000, CTSER has produced over 30 reports and briefs for state and federal agencies, delivered over 100 conference presentations, and published over 50 journal articles. In addition, CTSER faculty have provided expert consultation to state and federal governments to inform tobacco regulation. For more information on this project, contact Dr. Cristine Delnevo at delnevo@sph.rutgers.edu.

CHOOSE YOUR COVER—GOING OUTDOORS IN NJ TO FIGHT MELANOMA/SKIN CANCER (SPH)

Though most cancers have started to decline, skin cancer and, more specifically, melanoma, has continued to rise in both males and females as have associated death rates. Death rates for males have been higher because of later detection. This has been true in New Jersey as well as the United States as a whole. **Choose Your Cover** is a statewide collaborative initiative to promote risk education, early detection and skin cancer screenings at outdoor venues and increase awareness about the need

for protection from UV rays, the easiest way to eliminate the most common risk factor for melanoma.

Screenings were first initiated at three beaches in 2008. Faculty developed a pilot evaluation of the initiative in 2009 which screened 1,917 beach-goers. Of these, 555 (29%) were referred for a variety of skin lesions including presumptive basal cell carcinomas (4%), squamous cell carcinomas (2%), and melanomas (3%). The initiative was expanded statewide in 2010 and annually since then with expanded venues around NJ, including individuals who were engaging in outdoor activities at beaches, lakes, pools, parks and other outdoor recreational sites around NJ. Individuals have been offered free skin cancer screenings and education on a first-come, first-served basis. It is again planned at sites in May through August 2013. Faculty members have been working with the State on a large-scale evaluation to analyze pre- and post-measures provided by screened participants to assess whether there are changes in knowledge, attitudes, and perceived willingness to adopt sun safety behaviors as a result of participating in the events. During Chose Your Cover events between 2008 and 2012, 6,604 individuals were screened.

Quite important to the CYC initiative has been the health education component that has accompanied the screening. Of the 1,452 adults 18 years and older who participated and consented to have their de-identified data used for the purposes of research, findings from the combined 2010-2011 events are quite significant. To assess its benefit, five Likert items with choices ranging from 1 (Not at all Likely/Never) to 5 (Definitely/Always) were asked pre-screening and post-screening before the participant exited. These included: (1) How likely do you think it is that you will develop skin cancer from exposure to the sun in the future? And (2) When in the sun, how likely will you: (a) Use sunscreen? (b) Seek shade? (c) Wear a hat? (d) Wear clothing that covers the shoulders? All pre-/post-items were highly statistically significant ranging from a negative 4.9757 (less afraid of getting skin cancer after the screening) to a positive 19.9644 for use of skin protection. For more information, contact Dr. Marcia Sass at sassmm@sph.rutgers.edu.

CIRCLE OF LIFE CHILDREN'S CENTER (NJMS)

The mission of the Circle of Life Children's Center (COLCC) is to provide a comprehensive program of palliative (comfort) care and end-of-life services for children with chronic, life-limiting illnesses and their families. James Oleske, Director of the Division of Pulmonary, Allergy, Immunology, and Infectious Diseases in the Department of Pediatrics, was instrumental in establishing the Center and is currently its director.

The COLCC Pediatric Palliative Care program provides state-of-the-art expertise in problematic pain and symptom management and family-centered end-of-life care, along with the necessary skills to assess physical condition and family needs in order to develop a plan of care.

The COLCC serves children from infancy through age 21 who are dealing with life-threatening illnesses such as AIDS, cancer and a wide variety of progressive medical conditions, many of which are congenital. This groundbreaking program concentrates on serving seriously and terminally ill children residing in the greater Newark, NJ (Essex

County) area and in neighboring counties. While the focus has been in this urban area, the program has cared for children in 13 of New Jersey's 21 counties.

The goal of COLCC is to provide a wide range of services and programs to serve the ill child and his/her family on a local/regional level to include: COLCC Pediatric Palliative Care Consultation Service; In-patient Pediatric Palliative Care; Home Care; Pediatric End-of-Life Care; Respite Care; Child and Family Support Services; Quality-of-Life Programs; Bereavement Counseling; Community and Family Educational Programs; Professional Education; and Volunteer Program.

CLINICAL LABORATORY SCIENCES (SHRP)

The Cytotechnology and Medical Laboratory Science (MLS) faculty and students participated in the SHRP Health Sciences Career Fair at Liberty Science Center which was attended by over 700 high school students, and MLS faculty and students participated with SHRP in health education and screenings at the New Jersey Special Olympics. Cytotechnology faculty and students promoted cancer screening awareness on the Scotch Plains campus on National Cytotechnology Day, and MLS faculty and students promoted awareness of the contribution of laboratory professionals by visiting the TODAY show in New York City during National Medical Laboratory Professionals week. Medical Laboratory Science faculty organized a Red Cross Blood Drive on the Scotch Plains campus and MLS students donated blood and brought in family and friends as additional blood donors. MLS students also volunteered at a Food Drive for Victims of Hurricane Sandy, delivered food to families in need during Thanksgiving, and participated in a Cancer Awareness Walk.

COMMITMENT TO DIVERSITY (RWJMS)

The UMDNJ-Robert Wood Johnson Medical School (RWJMS) has collaborated with Rutgers University and Seton Hall University in developing a number of programs aimed at increasing the enrollment of underrepresented minority students in medical school and the sciences. ACCESS-MED is a consortium program for undergraduates offered by Rutgers, Seton Hall, and RWJMS to provide academic enrichment, support and counseling for educationally and financially disadvantaged students pursuing health science careers.

The Office of Special Academic Programs administers two summer programs that it is hoped will increase the diversity of biomedical researchers, physicians and other health care professionals:

- The Biomedical Careers Program is a six-week program for educationally and financially disadvantaged undergraduate students interested in careers in medicine or other health professions
- The Pre-matriculation Summer Program allows educationally or financially disadvantaged incoming medical students to preview selected topics in anatomy, biochemistry, and physiology

All of these programs have contributed to the School's successful diversity efforts. RWJMS has maintained a commitment to increasing diversity within the medical school

class by recruiting students from groups underrepresented in medicine. The School is also collecting data about faculty diversity and is actively seeking to increase the recruitment, retention and promotion of underrepresented minority and women faculty.

COMMUNITY-ORIENTED DENTAL EDUCATION PROGRAM (NJDS)

The Community-Oriented Dental Education Program (CODE) is in its eighteenth year of having fourth-year pre-doctoral dental students deliver care under faculty supervision in NJDS' extramural dental centers in southern New Jersey. Students, who move into the area near one of the community-based facilities, participate in organized community projects throughout the year and come to Newark for didactic instruction one day each week.

COMMUNITY-ORIENTED DENTAL EDUCATION-II (NJDS)

The CODE II Program, established four years ago by grants, allows all pre-doctoral senior students an opportunity to rotate through New Jersey Dental School's extramural dental centers in Atlantic and Camden counties for a two-week experience. These students, like the CODE students selected for the original program, participate in organized community projects.

COMMUNITY SERVICE REQUIREMENTS FOR UNDERGRADUATE STUDENTS (NJDS)

All undergraduate students are required to perform four prior approved community service activities per year for each of their four years at New Jersey Dental School. Many NJDS students elect more than the sixteen required activities prior to graduation. Each student performs clinical oral health education and acquires cultural competency as well as the ability to work with variable age groups in our population. Students write a reflection paper about their experience, which is reviewed with them by a member of the faculty.

COMPREHENSIVE SICKLE CELL CENTER (RWJMS)

The Comprehensive Sickle Cell Center at Robert Wood Johnson Medical School, a program of the Division of Pediatric Hematology/Oncology (Department of Pediatrics) provides clinical services to patients with Sickle Cell Disease in three centrally located centers (The Cancer Institute of New Jersey in New Brunswick, Jersey Shore University Hospital in Neptune and a once-a-month clinic on the Mercer Campus of Capital Health System in Trenton.) The program works through a team approach model and is made up of a physician, a pediatric advanced nurse practitioner and a counselor. The team not only treats patients and conducts research, but it also provides educational seminars to help patients and their families cope with the complexities and complications of living with Sickle Cell Disease.

This past academic year, the team hosted an Education Night which focused on learning more about Sickle Cell Disease and how to prevent complications of the disease. The

attendees were able to learn about how blood flows through blood vessels, saw red blood cells under the microscope, had the opportunity to ask questions from experts and listened to a talk about research and treatment options for those living with Sickle Cell Disease.

The program is partially funded by the State of NJ's Department of Health and Senior Services, Newborn Screening and Genetic Services, Special Child Health and Early Intervention Services. This funding allows outreach to indigent populations in underserved communities such as Trenton.

DEPARTMENT OF COMMUNITY HEALTH (NJDS)

The NJDS Department of Community Health provided oral health education programs, screening and/or treatment at many sites throughout New Jersey and the nation. Here are examples of events and places visited:

Indian Health Service - Arizona
Health Fair at Divine Konettion Community Development Corporation - NJ
BAPS Charities: Children's Health and Safety Day (In North Bergen)
Mind and Meditation workshop - UMDNJ
Boys & Girls Club of Newark - the Day for Kids 5K Run/Walk
Health Fair at University of Behavioral Health, Newark
Young Fathers Program DAYAM,UMDNJ Bergen Building, Newark, NJ
Rutgers Pre-Dental Society, New Brunswick, NJ
World Aids Day
Give Kids A Smile - UMDNJ Newark, NJ
Fishing Derby for special needs
Boys and Girls Club - Newark, NJ
Liberty Science Center, Jersey City, NJ
Rotary Club - Plainsboro, NJ
Little Crane Montessori School
Oral Cancer Walk - NYC
Oral Cancer Screening - UMDNJ Newark, NJ
Rutgers Day - Piscataway, NJ
Care One - Teaneck, NJ
New Brunswick Senior Center - New Brunswick, NJ
SFHCC at DOC - Family Health Center, Newark, NJ
Hoboken Zog Sports Intramural - Hoboken, NJ
New Jersey Institute for Successful Aging- Stratford, N.J.
University Hospital family Practice (SFHCC)
University Heights Charter School – Newark, N.J.
Comfort Dental Care Day
Covenant United Methodist Church
La Casa De Don Pedro - Newark - NJ
Newark Elementary School, Family Health Festival - NJ
Chinatown YMCA - NYC

Swami Narayan Temple - Secaucus, NJ
Back to School B'nai Shalom - West Orange, NJ
Elementary School Bronx P.S. 109 - NYC
University Heights Charter School Health Fair - Newark, NJ
St. Leo's School in Elmwood Park -NJ
Special Olympics - Ewing, NJ

DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL MEDICINE (RWJMS)

Community service is at the core of many of the research and clinical activities of the Department of Environmental and Occupational Medicine and the Environmental and Occupational Health Sciences Institute (EOHSI). The **World Trade Center Medical Monitoring Program** provides outreach, diagnosis, support, and state-of-the-art-treatment to the virtual community of approximately 2000 New Jersey responders who are still suffering after their work at this disaster site. On a smaller scale, much of the clinical work performed at the Clinical Center of EOHSI interfaces with neighborhoods, schools, and workplaces affected by exposures to toxic or hazardous pollutants, including some communities that receive ongoing medical surveillance for their prior exposures. Communities or groups included are residents of a town with radioactively contaminated well water, the community near the Paulsboro train derailment, children exposed to truck traffic exhaust, firefighters with asbestos exposure, bricklayers, and various fire companies and police departments. In addition, research occurs in venues such as the New Jersey Turnpike and union halls across the region, as the Department and the EOHSI strive to understand the health hazards that affect our communities and workplaces.

Researchers in the Department advise and perform research for the New Jersey Department of Environmental Protection (DEP). A prime example is the longstanding Ozone Research Center as well faculty member service on its Public Health Committee.

DEPARTMENT OF EPIDEMIOLOGY COMMUNITY-BASED PROJECTS (SPH)

In 2012, Dr. Echeverria of the Department of Epidemiology continued to develop and implement academic-community research initiatives. Results from the Newark community survey were published in the Journal of Physical Activity and Health, and a follow-up manuscript incorporating quantitative and qualitative findings is being developed for publication. Results from this new manuscript will be presented at the upcoming 2013 American Association of Public Health conference.

Preliminary results from a project titled 'A pilot intervention to improve diabetes control in Latino populations' were presented at the 2012 American Public Health Association conference and a manuscript was submitted for publication. This pilot community intervention has served as the basis for additional funding received from the Community-Research Partnership Grants for New Brunswick, Rutgers University. The goal of this subsequent phase of the project, to be implemented in the 2013-2014 academic year, will be to encourage participants to make use of a newly developed wellness center in the city of New Brunswick, develop tailored physical activity programs targeting those

with diabetes and create a 'buddy' system to support the adoption and maintenance of physical activity in this hard-to-reach population.

Lastly, Dr. Echeverria provided the research and evaluation support for a community project implemented by the Community Outreach Department of RWJ Hospital titled 'Fun in the Park'. The aim of this project was to provide culturally-relevant programs to increase physical activity among youth through the use of local parks. The project received the 2012 NJ Hospital Association Award for Community Outreach and results will be presented at the upcoming 2013 American Association of Public Health conference. A summary of the project and program faculty and staff involved are available at

http://www.rwjh.edu/news/RWJ_Fun_in_the_Park_Earns_NJHA_HRET_Award_2013.html. For more information contact Dr. Sandra Echeverria at echevese@sph.rutgers.edu.

DEPARTMENT OF FAMILY MEDICINE AND COMMUNITY HEALTH (RWJMS)

In conjunction with medical student training, faculty volunteers at The Promise Clinic in New Brunswick perform medical examinations for urban minorities. Faculty have developed a **Healthy Homes Demonstration Project** with Isles, Inc, of Trenton. Building on the previously successful efforts of *Dust Does Not Discriminate*, *Healthy Homes Mold Project* and *Arrest the Pests in Your Nest*, faculty developed a VHS and an English and Spanish language DVD training module on mold and other environmental contaminants in the home. Entitled "the Healthy Homes Video," the target audience is urban minority residents. Another ongoing Department project is the work being done in the Camden community through many churches and community groups, including Heart of Camden, to address methods of reducing community exposure and risk to toxins in the South Camden area.

The Department is also developing a pilot community assessment course for Trenton community members to learn how to recognize, assess, evaluate and remediate community hazards. In addition, a course in Community Based Sampling is being developed for students in the graduate programs in Public Health, Toxicology, and Environmental Science to learn how to assess, sample and analyze an urban site and to deliver the information to the community.

Faculty are again actively screening homes and residents for Chromium contamination in Jersey City and other Hudson County locations, a residue of past waste dumping practices.

The Department of Family Medicine and Community Health's Institutional Profile involves students in community-based activities from the first year of medical school through the residency program in family medicine. The goals of the Department of Family Medicine and Community Health's community-based initiatives are:

1. To encourage an ethic of community service and social responsibility in medical students and residents. This involves training them in the context of community service.
2. To equip the next generation of health professionals with the community oriented and culturally sensitive competencies needed to

make a difference in the lives of their patients and clients and the communities they serve.

3. To foster partnerships between community organizations and UMDNJ-RWJMS to promote the health of underserved/vulnerable populations.

The Department of Family Medicine and Community Health developed a number of community-based initiatives to help meet these goals.

In addition, students may elect to participate in a six-week interdisciplinary **Community-Oriented Primary Care (COPC) Assistantship** between the first and second year of medical school. Students in COPC, who must complete independent projects, are assigned to a community-based health care or social service organization and learn through special didactic field trips to Newark, Trenton and New Brunswick. During the program, students in this interdisciplinary cohort participate in interactive seminars covering topics aimed at increasing student awareness about the principles and practice of COPC, health disparities, population assessments, and culturally competent clinical care. Students also participate in a tour of local botanicas and bodegas.

At the undergraduate level, during the third-year Family Medicine clerkship, all medical students participate in community-based service learning that has been incorporated into the curriculum. Examples of service learning opportunities clerkship students can participate in include group health discussions with the Adult Substance Abuse Program in the Middlesex County Jail; observation and participation in group work at Damon House Drug Rehabilitation; health discussions in local high schools; nutrition teaching sessions in conjunction with the SNAP-Ed and Head Start; co-facilitation of partial hospitalization Wellness Group at UBHC; a wellness presence at Elijah's Promise Soup Kitchen and many others. These activities are complemented by didactic sessions on community-oriented primary care and principles of population-based health care.

The **New Brunswick RWJUH Family Medicine Residents** provide quality primary care services to many of greater New Brunswick's uninsured and underinsured citizens, many of whom are not documented. Patients are seen in the Family Medicine Service within RWJUH and at clinics and other outpatient sites: Family Medicine at Monument Square; St. John's Clinic; soup kitchens; homeless shelters; senior citizen apartments; long-term care facilities and in patients' own homes.

Additionally, the New Brunswick RWJUH Family Medicine Residents provide primary care services to the greater New Brunswick community. As part of their training, all second-year residents participate in a cross-cultural community medicine rotation at St. John's Health Center in New Brunswick. The goal of the rotation is to encourage residents to practice in medically underserved urban areas by offering a rewarding learning experience that enhances their skills in providing culturally sensitive, community-oriented primary care to a diverse and indigent population. Residents learn about different multicultural populations and became familiar with managing clinical issues prevalent in the community (e.g. lead poisoning, immunizations, TB exposure, HIV, substance use, health problems exacerbated by poverty and homelessness). They participate in community-based health care activities including seeing patients at a child health conference, a pap/mammogram screening, and volunteering at a local soup kitchen. Community site visits included the Middlesex County Board of Social Services, a homeless shelter, a botanica and bodega, and home visits accompanied by St. John's

prenatal and immunization outreach workers. In addition, residents conduct community presentations at the Edison Job Corps Academy, Ozanam Men's Homeless Shelter, and Naomi's Way, a transitional housing facility for women and their children. Presentation topics include personal hygiene, nutrition, and respiratory illnesses. As part of their longitudinal community medicine experience, residents also participate in community-based activities such as school physicals, health fairs, pap and mammogram screenings, prostate cancer screenings, and community presentations.

All residents, first year through the third year, and many faculty members provide other educational and clinical care services to local communities. The following services were provided by residents and residency faculty:

Community Affiliation

Services

St. John's Health Center, New Brunswick	Clinical care for indigent populations
American Academy of Family Physicians	Tar Wars - Anti-smoking presentations for local 4th and 5th graders
Women's Health Center, Somerville	Women's clinical health services
Geriatric home visits	Medical care for home-bound patients in the local New Brunswick area
Naomi's Way, Catholic Charities, New Brunswick	Presentations on preventive health care
Old Bridge Township Elementary, Middle, and High Schools	School physicals and pre-participation examinations
Ozanam Family Shelter, Edison	Presentations on preventive health care
Ozanam Men's Homeless Shelter, Catholic Charities, New Brunswick	Presentations on preventive health care
New Jersey State Division of Developmental Disabilities	Medical care for over 250 patients and their caregivers
New Brunswick High School Parent/Infant Care Center (PIC-C)	Medical care for teenage moms and their children
Parker Nursing Home, Piscataway and New Brunswick	Continuing education on medically related topics for nurses and staff
Center for Healthy Aging – Stonegate	Patient care for the elderly and employees at Parker Stonegate
Puerto Rican Action Board (PRAB) and Robert Wood Johnson University Hospital	Presentations for parents of children in PRAB's Day Care Centers about childhood health

Read Across America	Read books to local elementary and middle school students
Robert Wood Johnson University Hospital, Community Health Fairs	Health screenings, particularly for cancer
Special Olympics	Team doctors
Woodbridge Township Health Department	Screenings for breast, uterine and prostate cancer
Edison Job Corps Academy	Screening students by providing physicals and medical clearance
Martin and Edith Stein Hospice	Clinical care for the elderly
Matheny Center of Medicine and Dentistry	Patient care
Womanspace Inc.	Individualized support and care for women and their children who have been victims of domestic abuse.

The **Center for Healthy Families and Cultural Diversity**, within the Department of Family Medicine, was created in 1988 to improve the delivery of culturally responsive, family centered health care to diverse populations. Programmatic activities of the Center include technical assistance and consultation, education and training, and research and evaluation. Each year, faculty give invited lectures, seminars, and workshops on culturally and linguistically competent care to a wide variety of health care professionals and organizations, including academic medical centers, hospitals, ambulatory care facilities, community organizations, managed care plans, and governmental agencies in the United States and abroad.

DEPARTMENT OF HEALTH SYSTEMS & POLICY **DOMINICAN REPUBLIC HEALTH OUTREACH PROJECT (SPH)**

The Dominican Republic Health Project began in 2003 when nine students and two faculty members undertook public health projects in the Haitian bateyes of the Dominican Republic (DR) to meet the field requirement of the three-credit course, "Public Health Applications in Developing Countries." Bateyes are former sugar cane cutter camps that lack sanitary facilities, schools, and access to health and social services. The majority of Haitian women and children, although born in the Dominican Republic, are refused birth certificates so that they live like a stateless people.

Since the Project's inception, over 170 students and faculty members have worked in the bateyes providing health education and promotion programs as well as primary care. In 2012-2013, 19 students, faculty, alumni and staff participated in the Project in October and April trips.

In preparation for the trip, students and faculty plan specific public health interventions and obtain the resources necessary to implement them prior to their visit to the Dominican Republic. The project works closely with Blanco, a local community leader, and provides health prevention and promotion projects in communities of former Haitian sugar cane cutters. The heart of the project is "Blanco's Kids," 40 orphaned or single parent children who previously had little food and no access to education or health care. As a result of contributions from students and others, housing, feeding and education programs have been put in place. Two small homes and a school have been constructed and funds are being raised to purchase a farm so the children can live and attend school in safety.

For more information on this project contact Dr. Lois Grau at graulo@sph.rutgers.edu and Dr. Bernadette West at westbbm@sph.rutgers.edu.

DEPARTMENT OF OBSTETRICS, GYNECOLOGY AND REPRODUCTIVE SCIENCES (RWJMS)

The Department of Obstetrics, Gynecology and Reproductive Sciences and the Women's Health Institute continue to interact locally, nationally and internationally with several groups to provide education and mentoring. Faculty in the department volunteer in several community based programs, such as one at the New Brunswick Public Library, and internationally, such as the one that provides education and clinical care to the people of Ghana. In fact, our keynote resident day speaker this year was selected because of his expertise in global health, which fit with our faculty and learners wanting more education on how to enhance our outreach efforts.

A significant program that the Department is extremely proud of is the one provided by our Reproductive Endocrinology and Infertility Division-The Reproductive Medicine Associates of NJ (RMANJ). RMANJ provides a free IVF cycle to any military family who has an infertility issue. One of the longest running programs of the department, which has been in operation for over 10 years, involves our participating in the educational offerings of the New Brunswick Free Public Library. Each year our department presents a health program at that institution aimed at giving young library attendees the tools they can use to both stay healthy and to encourage them to think about a health professions career.

Our faculty, staff, residents and students also participant in many of the outreach programs sponsored by our academic health center and by non-profit organizations whose purpose is to support or promote health for certain subsets of the population dealing with chronic or life-threatening illnesses. We also work closely with the Institute for Women's Leadership at Rutgers in supporting outreach programs aimed at providing women with leadership skills and at making available to them seasoned mentors. This year, we were involved in the support of a program that invited Dr. Lisa Masterson here to talk to our learners about the steps she took on a difficult path in becoming an esteemed and internationally celebrated Ob/Gyn physician. One area that we also have a significant impact on is with the Girl Scouts. There are members in the Ob/Gyn Department who are overseeing many programs for this excellent program aimed at developing leadership skills for young girls and women. We also mentor medical students who are involved in community education programs, such as those who are providing regular educational sessions to women at The Center for Great Expectations.

This Center helps young women and their children through homelessness, pregnancy and addiction issues.

As obstetricians and gynecologists, we also are involved in many healthy mother/healthy baby initiatives. One that stands out is the Department's collaboration with the Tara Hansen Foundation. Through this liaison, we are educating physicians, nurses, learners and staff on ways to decrease maternal mortality. Our OB/GYN residents are also very involved in giving back and find at least one project annually to support women and children.

Our department faculty and staff are frequently called on to take leadership roles in New Jersey Government Health initiatives. We sit on committees that address genetic screening in newborns, ambulatory surgery centers and family planning.

DEPARTMENT OF PEDIATRICS (RWJMS)

The **Division of Allergy, Immunology, and Infectious Disease** within the Department of Pediatrics at RWJMS provides inpatient and outpatient clinical care, trains residents and medical students, and participates in numerous public and community events. Physicians give Grand Rounds at community hospitals and provide formal lectures to medical students, serve as faculty advisors, and supervise resident rotations. Throughout the year faculty members co-host a bi-weekly radio show, "Your Child and You", and participate in various community health fairs.

Within the Division, the **Robert Wood Johnson AIDS Program (RWJAP)**, a site of the New Jersey Family Centered HIV Care Network, provides HIV/AIDS education and training to professionals in health care, education, social services, and other disciplines. RWJAP enjoys a host of linkages with HIV and non-HIV agencies such as community-based organizations, local and regional planning boards including the NJ HIV Community Prevention Planning Group (CPG), and social service agencies. RWJAP currently provides on-site HIV counseling and testing and provides outreach prevention services to the local schools and community-based organizations. Ongoing community activities include Case Study Days, Family Day, Vision Day, weekly testing at the Middlesex County STD Clinic, DYFS Nurses Trainings, National Women HIV/AIDS Awareness Day, National Latino AIDS Awareness Day, and World AIDS Day.

Pediatric Genetics, a division of the Department of Pediatrics at RWJMS, is part of a comprehensive program providing a full range of clinical genetic services. The Division provides internships for genetic counseling students and electives for third- and fourth-year medical students and pediatric residents. The Division participates in the Department of Health and Human Services Metabolic Genetic Task Force and Metabolic Advisory Committee and the Human Genetics Association of New Jersey. The Division also participates in the New York Mid-Atlantic Consortium for Genetics and Newborn Screening Services and provides community education on genetic topics through CME programs and lectures.

The **Division of Child Neurology & Neurodevelopmental Disabilities** within the Department of Pediatrics at RWJMS provides a full range of clinical services for children with all types of neurological disorders. The large patient population serves as a basis for an active teaching service for medical students, pediatric residents, neurology

residents, psychiatry fellows, and child neurology fellows as well as a population base for clinical research. The Division is a site for the training of neurology residents in conjunction with the New Jersey Neuroscience Institute at JFK Medical Center, Edison, and Child Neurology fellows in conjunction with the Child Neurology Division of the New Jersey Medical School, Newark. Ongoing research projects in the section of Child Neurology include folate transport into the brain, cognitive effects of anticonvulsants, genetics of idiopathic generalized epilepsy, and new medications for migraines in children. The section of Neurodevelopmental Disabilities is actively involved in autism research, including studies of the role of environmental toxins, and the genetic similarities between language disorders and autistic disorders. Faculty from the division of neurology are serving on the following committees: Jan B. Wollack, MD, PhD, Associate Professor of Pediatrics, was elected to the Medical Staff of Matheny Medical and Educational Center. Emanuel DiCicco-Bloom, MD, Professor of Pediatrics was appointed as a member of the Society for Neuroscience, Government and Public Affairs Committee, 2011-14.

The Elizabeth M. Boggs Center on Developmental Disabilities

The Elizabeth M. Boggs Center on Developmental Disabilities, within the Department of Pediatrics at RJWMS, is part of a national network of University Centers for Excellence in Developmental Disabilities Education, Research, and Service. The Boggs Center is sponsored by the Administration on Developmental Disabilities, Administration for Children and Families, U.S. Department of Health and Human Services. The Center is contracted by the NJ Department of Human Services, Division of Developmental Disabilities; the NJ Department of Education, Office of Special Education Programs; and other state and local funders. The Center provides community and student training and technical assistance, conducts research, disseminates educational materials, and responds to requests for information. The Boggs Center promotes a community-based, life span approach to the delivery of community supports for people with developmental disabilities. While it does not provide clinical services directly, it helps to increase the capacity of service providers and systems of care in New Jersey. Boggs Center personnel serve on State and national boards and committees including:

- Governor's Council on the Prevention of Mental Retardation and Developmental Disabilities (Gubernatorial Appointment)
- NJ Advisory Council on Traumatic Brain Injury (Gubernatorial Appointment)
- NJ Council on Developmental Disabilities (Gubernatorial Appointment)
- NJ Division of Medical Assistance, Medical Assistance Advisory Council (Chair)
- Rutgers University School of Social Work, Continuing Education & Professional Development Program, Certificate Program in Developmental Disabilities (Chair)
- Human Services Management Advisory Council (Member)
- Rutgers University School of Social Work Field Education Committee; Council on Quality & Leadership (Board Member)
- TASH (Board Member)

Boggs Center faculty serve as editors of the *Journal of Religion, Disability, and Health* and the *National Association for the Dually Diagnosed Bulletin* and serve on the editorial boards for the *Journal of Positive Behavior Interventions and Research and Practice for*

Persons with Severe Disabilities. Ongoing projects include the Developmental Disabilities Lecture Series, Clinical Pastoral Education, Faith-Based Supports, Self-Directed Supports, Direct Support Workforce Development, Inclusive Education, Interdisciplinary Traineeship Program, Positive Behavior Supports, Transition from School to Adult Life, and Supported Employment. Participants in Boggs Center training programs include individuals with disabilities and their families, students, and professionals in health care, education, social services, and other disciplines.

Deborah M. Spitalnik, PhD, Professor of Pediatrics and Executive Director of The Boggs Center accepted the Arc Angel Award for the Elizabeth M. Boggs Center at the Arc Angel Gala in Bedminster, New Jersey, on November 18, 2011. The Elizabeth M. Boggs Center was honored by The Arc of Somerset for its partnership and inspiration in enhancing the lives of individuals with intellectual and developmental disabilities and their families.

Bill Gaventa, MDiv, Associate Professor of Pediatrics, was honored with the Special Recognition Award by the [Association of University Centers on Disabilities \(AUCD\)](#) at the AUCD 40th Annual Conference in Arlington, VA, on November 8, 2011. The honor is awarded in recognition of outstanding contributions toward creating more inclusive communities for people with developmental disabilities and their families.

The Boggs Center, in collaboration with the NJ Division of Developmental Disabilities, the Council on Developmental Disabilities, Disability Rights New Jersey, the Statewide Parent Advocacy Network, and NJ Arab American organizations, coordinated the "Arab American Communities and Disabilities Conference: Getting to Know You, Getting to Know Us" on December 10, 2011, in Somerset, NJ.

Additional RWJMS Pediatrics Department Activities

Pediatric Mobile Medical Project

This project provides healthcare screenings and education services for children and their families in the New Brunswick and Middlesex County areas to help with disease prevention in the short-term and long-term in three major areas:

- **Obesity Screening and Prevention** promotes healthy eating and physical activity through culturally sensitive nutrition education classes and developmentally appropriate activities according to the age of the child. Classes are coordinated with the school/community organization at times convenient for parents.
- **Asthma Prevention and Education** - Asthma Screenings and education are provided to help prevent and manage asthma attacks. Education provided will increase the awareness of asthma triggers and the importance of having an asthma plan.
- **Developmental Screenings** - UMDNJ-RWJMS along with the Early Intervention Program and the New Brunswick School system will do screenings for development delays that may have been missed.

The Mobile Van does not provide direct healthcare for ill patients. UMDNJ-Robert Wood Johnson Medical School, Department of Pediatrics, is able to provide this mobile healthcare service through the generous support of Johnson & Johnson. The mobile unit is provided by UMDNJ-School of Nursing in Newark through a grant award from the Children's Health Fund.

Educational activities for patients and families

Faculty from Infectious Diseases, Pulmonary and Endocrinology conduct educational activities for their patients and their families to enhance disease education and to promote wellness.

Preceptors - Pediatric faculty serve as preceptors and/or mentors for high school students at the Health Sciences Technology High School in New Brunswick. Our faculty provide shadowing experience in the clinic environment for these students.

Edison Family Day - Several department faculty and staff participate in the Annual Health Fair at the Edison Family Day held in Raritan Center, Raritan, NJ. Participating divisions include Emergency Medicine, Gastroenterology, General Pediatrics, Genetics, Neonatology Pulmonary and the Pediatric Mobile Van. The purpose of the fair is to bring the township together in a united effort against substance abuse and violence, to provide health and safety information and disease and immunization information.

SATHI - The South Asian Total Health Initiative (SATHI) is a comprehensive multifaceted initiative to:

- Improve the delivery of culturally competent care and address disparities in health and health care of South Asians.
- Develop an accurate and updated research-based data resource regarding South Asian health.
- Educate, engage and empower the South Asian community to promote wellness and improve health outcomes.

Sunanda Gaur, MD, Professor of Pediatrics, highlighted the recent accomplishments of South Asian Total Health Initiative (SATHI) at the official release of the "Addressing Health Disparities in the South Asian Community Conference Summary Report and Recommendations." The event was hosted by Assemblyman Upendra Chivikula at the Arlene and Henry Schwartzman Courtyard in Robert Wood Johnson University Hospital, November 9, 2011. Invited guests included Dean Peter S. Amenta and RWJUH President Stephen K. Jones.

DEPARTMENT OF PEDIATRICS (NJMS)

Division of Adolescent and Young Adult Medicine

The Division of Adolescent and Young Adult Medicine (DAYAM) is a center of excellence in all aspects of the health, development and behavior of adolescents and young adults. Since its inception in 1976, DAYAM has achieved its teaching, health care

and research missions through a broad array of institutional, community-involved and community-based clinical services and psychosocial interventions. The scope of programs and services extends beyond direct clinical care to include prevention, education, advocacy and specific intervention and research in HIV and STDs, rape, sexual abuse, substance use and abuse, truancy, school failure, violence and delinquency, adolescent mental health evaluation and counseling, adolescent gynecology and family planning. Currently, the Division maintains a national reputation for its expertise in adolescent and young adult health care, and is the only inner city based comprehensive Adolescent Medicine Program in the State of New Jersey. DAYAM promotes the availability of efficacious responses to issues that adversely affect the quality of life of adolescents and young adults. DAYAM's Clinical, Community and Male Resource Programs are listed below.

Clinical Services

- **START (Screening, Treatment and Risk Reduction for Teens)** evaluates adolescents and young adults through an integrated intake process that includes medical, nutritional, substance use/abuse, mental health, and social services assessments. Each of these evaluations results in a coordinated series of services that are designed and delivered using methods that eliminate the barriers that defeat effective care.
- **MYLESTONE** provides individual level prevention services using the Center for Disease Control's Interventions CLEAR and ARTAS. Sessions focus on empowering the clients to improve their health around HIV and STI prevention. Clients served are from the Greater Newark area.

Community Interventions

- **STOP (Spend Time On Prevention)** is a mobile testing unit where clients receive HIV information, counseling and serologic testing. After HIV testing, youth who require clinical services because of a positive serologic test (or other issues) are directly linked to the START Clinic. As needed, clients who require additional services are referred to the appropriate provider.

Male Resource Development Programs

- **AYD (Adolescent Youth Development)** program is an intervention designed to prevent or decrease violence, risky behaviors and promote improved social and/or academic performance among young male adolescents through individual and group mentoring. Topics include: anger management, conflict resolution, college preparation, personal finance, effective communication, and career planning.

Waiting Room Parents is a subsidiary service of the AYD program and is an effort designed to prevent or decrease violence and risky behaviors among young male adolescents through a two pronged approach: Strengthening families by improving the childrearing skills and capacities of parents (or parent surrogates) through a 6-week parenting training program and interventions designed to promote the social development of at-risk adolescent males.

- **YFP (Young Fathers Program)** provides counseling, parenting skills and referral services for young fathers and their partners.
- **MSSP (Male Student Support Program)** offers support and counseling to enhance academic skills and success of adolescent males attending Orange Elementary and Middle Schools.

The Division of Developmental Pediatrics

The New Jersey Medical School Autism Center

The Autism Center uses best practice guidelines for screening, diagnosis and comprehensive developmental assessment for children suspected of having an Autism Spectrum Disorder (ASD). The Center also provides diagnostic clarification for children previously diagnosed whose families are seeking guidance regarding their child's diagnosis and developmental progress.

The Child Evaluation Center (CEC)

The CEC is one of eleven centers in the State of New Jersey that provide a comprehensive interdisciplinary team evaluation of children with congenital or acquired neuro-developmental and behavioral disorders. The CEC provides evidence-based recommendations for medical, behavioral and educational interventions.

Fetal Alcohol Syndrome Diagnostic Center

The Northern Regional FAS Diagnostic Center uses the diagnostic system developed at the University of Washington Fetal Alcohol Syndrome Prevention and Diagnostic Network (FASPDN) to identify, diagnose and provide case management and family support to individuals who were exposed to alcohol during the mother's pregnancy.

Social Work Services are offered to address the needs of children and their families. An initial bio-psychosocial assessment reviews six areas of family functioning: living conditions, financial conditions, support to caregivers, caregiver/child interactions, and developmental stimulation and caregiver interactions. This assessment assists in generating individualized goals that are designed to enhance areas of family strength and underline areas that need support.

Support services offered include:

- Family support groups (focused on understanding, accepting, and living with the diagnosis).
- Educational workshops (topics include "Overview of Autism Spectrum Disorders and ABA" and "Managing Challenging Behavior for children with neurodevelopmental disabilities").
- Education and support for siblings of children with neurodevelopmental disabilities.

Social workers also assist families in coordinating the myriad of services that may be required in providing the necessary supports for each family and child. Systems advocacy and coaching in techniques of self-advocacy are also a part of the service delivery system.

ABA Parent Training Program

This program provides hands-on training to teach parents to implement Applied Behavior Analysis (ABA) with their children. ABA has been shown to be successful for treatment of autism spectrum disorders and other neurodevelopmental disabilities -- and is effective for teaching new skills (including social interactions, language, and play skills) and reducing challenging behaviors. ABA works by breaking down into small steps things that children need to learn--and teaching one step at a time, using lots of practice and positive reinforcement.

Participation in the NJMS Autism Center program includes:

- An assessment attended by parent(s) and child to identify relevant goals to address during the course of the program.
- A didactic training workshop.
- Daily hands-on parent training sessions (Mon-Fri, for 1 hour each day) for a period of up to 6 months. Sessions are attended by at least one parent and the child. During each session, the trainer works hands-on with the parent to teach the child the skills identified during the initial assessment.
- Follow-up visits (one month and three months after sessions have been completed).

This program is currently open only to children with an ASD who have been evaluated at UMDNJ. For parents who are concerned about missing work to participate in the program with their child, information can be provided that may help them to work with employers to obtain temporary leave hours.

Outreach & Educational Services

The outreach and educational services developed by the Division provide systems of support for individuals with neurodevelopmental disabilities, their families, community healthcare and education professionals in the Newark, greater Newark Region and surrounding counties. The structure of the outreach and education programs provided by the division is comprised of: 1) Family and Patient Centered Approaches, 2) School Centered Approaches and 3) Community Centered Approaches. We are currently:

- Working collaboratively with Family Support Organization of Essex County, Autism New Jersey, Statewide Parent Advocacy Network, Urban Voices for Children with Autism Special Needs and other local advocacy groups to provide information to families and professionals about the services and programs available within our division.
- Offering professional presentations and workshops to families, professionals, schools and community groups.
- Providing a forum to Newark and Greater Newark Regions School Districts for interdisciplinary discussion of current theory and evidence-based research literature concerning the evaluation of educational needs, methods used to identify effective interventions and educational programs for children with a NDD.

- Collaborating with Newark Early Intervention Programs, Preschool and School-age Child Study Teams to provide assessment, consultation and the development of evidenced-based educational intervention strategies for Children with NDDs.
- Training highly skilled allied health professionals to become culturally competent, collaborative partners with parents, other professionals, agencies, faith-based organizations, and community-based service providers in support of individuals with NDDs. The Center's unique combination of Medical, Allied Health and Behavioral training programs uses state-of-the-art training technology to both train and disseminate evidenced-based information and intervention guidance to community professionals, and to the families of children with NDDs. Participants will experience a program consisting of combined didactic, case-based teaching modules and clinical observation/training, and involvement in community-based leadership projects and transdisciplinary collaborations in NDD. These experiences will further the mission to "improve the health of infants, children, and adolescents who have, or are at risk for developing, neuro-developmental and other related disabilities by preparing individuals from a wide variety of professional disciplines to assume leadership roles and to ensure high levels of transdisciplinary clinical competence and a culturally diverse workforce."

Family Resource Center (FRC)

The aim of the FRC, which is under development, is to support the efforts of the health care team, family and schools by providing a comfortable place where families can find healthcare, learn about autism and other neurodevelopmental disabilities, access information about services, obtain parenting and recreational information in a variety of formats including educational videos, printed materials and computer-assisted learning tools. This will also be a place where families can gather and meet other families to support one another. The Center will be located in The Division of Developmental-Behavioral Pediatrics on the F-level of the University Behavioral Healthcare Building 183 South Orange Avenue, Newark, NJ 07305. The Center will be designed by families and professionals to provide a venue for support groups, workshops etc. for children, parents, caretakers, siblings and other relatives of patients with NDDs. Inside, families will find a family and children's library, a learning center with computers with internet and email access and a fax and a comfortable hospitality area. The Center will have a patient representative on staff during midday and evening hours.

DEPARTMENT OF PREVENTIVE MEDICINE AND COMMUNITY HEALTH (NJMS)

Asthma

Dr. Weiss is co-chair of the Evaluation Task Force and serves on the Coordinating Committee of the Pediatric/Adult Asthma Coalition of New Jersey (PACNJ). The PACNJ acts as a statewide clearinghouse for asthma programs and services, working with schools, child care providers, health care providers, health insurers, community groups, and environmental agencies. The PACNJ reaches out to individuals and caregivers in New Jersey to help promote the most effective methods for managing asthma. Dr. Weiss helps design and analyze surveys for the PACNJ, evaluating the implementation of PACNJ's Asthma Action Plan in New Jersey Schools and the development and revision of educational documents and resources. He helps determine if outreach and education

efforts by the PACNJ have improved compliance with state guidelines for treating asthma in schools.

On April 27, 2011 Dr. Weiss testified at an Environmental Protection Agency (EPA) hearing in Oxford New Jersey, to address dangerous pollution from the GenOn coal plant in Portland, PA. Toxic emissions from this plant are making residents of both Pennsylvania and New Jersey sick, and preventing New Jersey from meeting federal air quality standards.

Comprehensive Cancer Control

Dr. Stanley H. Weiss is the principal investigator and director of the Essex County Cancer Coalition (ECCC), and has been since its inception in 2004 (see further details below). Funded in part by the NJ Department of Health and Senior Services (NJDHSS), the ECCC provides community cancer education and outreach services and serves as the official omnibus organization to help coordinate and promote activities throughout the county.

The ECCC's Leadership Council includes Dr. Michael Festa, Essex County Health Officer. This partnership has been instrumental in promoting cancer prevention and control throughout the county, especially to public employees. The ECCC's mission statement and other details can be found at <http://www.umdni.edu/esscaweb/>. On this web site, the ECCC provides an innovative web-based calendar of cancer-related educational events and screening opportunities. The ECCC, with input from the American Cancer Society and representatives from other hospitals and medical centers, developed an "Essex County Cancer Resource Flyer" in both English and Spanish, which is being widely disseminated throughout the county. Among ECCC partners in this project are all of the local health officers in conjunction with the Essex County Health Officers Association, who are distributing the flyer to restaurants that they inspect and license. This flyer is also being given to barbershops in conjunction with ECCC's Prostate Cancer Initiative (see below), as well as to other institutions and businesses that tend to have uninsured workers.

The ECCC released a major revision of its "Cancer Burden in Essex County" brochure in February 2011. This features updated incidence and mortality statistics from the NJ Cancer Registry — including key comparisons between Essex County and New Jersey overall — as well as estimates of Essex County cancer prevalence by cancer site newly updated by the ECCC leadership team based on the latest available data. The prevalence estimates were derived using a novel and simple method developed by Dr. Weiss. We also revised the ECCC introductory brochure to incorporate the revised mission and goal statement and to improve its visual clarity. Both brochures are available on the ECCC website. To better meet the needs of Essex County's diverse population, these brochures have also been translated into Spanish, Portuguese and Haitian Creole (the major other languages in our community) through the Cancer Institute of New Jersey's translation program.

The ECCC links many entities together in an effort to fight cancer in Essex County. Among its constituent members are individuals from the community, as well as representatives from:

- AARP West Essex Chapter
- American Cancer Society

- Bloomfield Health Department
- Cancer Care Inc.
- Cancer Institute of New Jersey
- East Orange Health Department
- Essex County Communities Against Tobacco (CAT) Coalition
- Essex County Division on Aging
- Essex County Health Department
- Essex County Hospital Center - Institute for Mental Health Policy, Research & Treatment
- Hoboken Family Planning in Hudson County
- Hudson County Cancer Coalition
- Igreja Luterana & St. Stephen's Church – UCC
- Irvington Health Department
- Livingston Health Department
- Merck Vaccines & Infectious Diseases
- Lung Cancer Circle of Hope
- METS Community Center
- Montclair Health Department
- Morris County Cancer Coalition
- Mountainside Hospital
- New Community Corporation, Newark, NJ
- New Hope Baptist Church, Newark, NJ
- New Jersey Cancer Education and Early Detection (NJCEED) Programs:
 - University Hospital's S.A.V.E. Women and Men
 - St. Michael's Medical Center's "In the Pink"
- Newark Beth Israel Medical Center
- Newark Cancer Initiative
- Newark Community Health Centers
- Newark Department for Child and Family Well Being
- Newark NOW
- Newark Police Clergy Affairs Unit
- Passaic County Cancer Coalition
- Planned Parenthood of Metropolitan NJ - Ironbound Center
- The Prostate Net
- Prudential Financial, Inc.
- St. Barnabas Hospital and Medical Center, Livingston, NJ
- Saint Michael's Medical Center's Regional Cancer Center
- Sisters Network
- South Orange Health Dept
- Susan G. Komen For the Cure North Jersey
- Union County Cancer Coalition
- UMDNJ - New Jersey Medical School, University Hospital, UH/NJMS Cancer Center, New Jersey Dental School, & New Jersey School of Public Health
- VA Hospital - East Orange

Oral Cancer Screening at UMDNJ and Essex County Cancer Health Fair

For the fifth year in a row, in May 2011 the ECCC held its annual Health Fair, organized through the NJMS Department of Preventive Medicine & Community Health in combination with free oral cancer examinations provided by New Jersey Dental School (NJDS). Volunteer NJDS faculty and community dentists performed oral cancer examinations on all interested attendees, with appropriate follow-up (an event now in its eleventh year). The ECCC distributed educational materials about prevention and early detection of various cancers, as well as instructions on lifestyle and habit changes geared towards reducing the likelihood of developing oral and other cancers. Additionally, there were information booths from over a dozen major cancer prevention and advocacy organizations as well as other health projects. Additional free screenings were available at the Health Fair through the UH/S.A.V.E. program — breast and cervical cancer screenings for the third year in a row, and prostate cancer screenings for the fourth year.

New Jersey Prostate Cancer Initiative

Dr. Weiss is Principal Investigator for the New Jersey Prostate Cancer Initiative (PCI) in the northern part of the state, a CDC-funded grant to the NJDHSS supplemental to the funding of comprehensive cancer control in NJ. The PCI is now completing its fourth year. This program, designed for the whole state, extends The Prostate Net's national Barbershop Initiative™ to enlisting barbers in NJ. The PCI has so far partnered with over 300 barbershops and unisex salons in northern and central New Jersey to educate their customers about prostate cancer in collaboration with NJ Cancer Education and Early Detection (CEED) lead agencies, to which they can refer their customers for further education and screening. The PCI provides resources on prostate cancer prevention to cosmetologists and their patrons in barbershops and unisex salons. The PCI works with NJCEED lead agencies in 11 counties to identify sites in the community, such as barbershops and faith- and community-based organizations that can host and facilitate prostate cancer screenings. The PCI also works with the National Beauty Culturists' League, Inc and its New Jersey affiliate, the Modern Beauticians Association, and promoted the use of a cosmetologists' forum for discussing industry issues and health matters. Guest speakers at the forum have included members of the Board of Cosmetology, a former city councilman, and other barbers.

Transportation

The ECCC is actively promoting its updated *Transportation Resource Guide* developed by the Leadership Council's Transportation Committee. Versions of this brochure are available on the ECCC web site in black and white and in color, including versions that can be customized by hospitals and other organizations by adding their own logos. The ECCC worked with the Cancer Institute of New Jersey (CINJ) to have the brochure translated into Spanish, Portuguese and French Creole. It has been distributed to all ECCC members in all four languages, and each can be downloaded from our website. These transportation brochures are also distributed at events we attend.

Radon

The ECCC and New Jersey Medical School continue to implement the Radon Awareness Program (RAP) that began in 2009 with grant support from the NJ Department of Environmental Protection (NJDEP). The NJDEP reimburses for purchase of radon kits and provides brochures about radon. The kits can go to any homeowner in Essex County. Kits have been distributed to six health officers in Essex County covering 17 municipalities. We continue to follow up on their progress and to replenish supplies if

needed. To promote Radon Awareness Month in January 2011, the ECCC worked with the NJDEP to provide municipalities with news releases and radon awareness proclamations specific to their communities. In addition, as long as funding for radon kits remains available, we are continuing to distribute them at local health fairs.

Dr. Weiss constructed a survey instrument, with the assistance of UMDNJ staff, to measure the knowledge level of the community about radon. The survey was designed to be self-administered and to be given to persons interested in radon, but before they received education about radon or were given free radon detection kits.

The survey results suggest that more radon education is indeed needed in Essex County and that public health programs should focus on increasing general radon knowledge, including stressing the association between lung cancer and radon exposure. They strongly support the decision of the ECCC to implement radon education and radon testing programs in our region.

Tobacco

Under the direction of Dr. Stanley H. Weiss, the Essex County Cancer Coalition (ECCC) formed a Tobacco Sub-Committee in August 2009 to identify needs and implement activities to address tobacco-related issues in Essex County. This sub-committee has met several times since and, as one of its initial projects, has created a tobacco resource directory focused on those resources that are available in Essex County. This guide contains a directory of services available to Essex County residents including *both* those focused on smoking cessation *and* those focused on smoking prevention. The directory is available at the ECCC's website: www.umdj.edu/esscaweb.

Dr. Weiss and Dr. Daniel M. Rosenblum served on the American Cancer Society's New Jersey Tobacco-Free Hospital Campus Collaborative (NJTFHCC), which encourages and provides resources for hospitals to implement complete tobacco-free campus policies.

Heart Attack and Stroke Risk

The ECCC and the University Hospital S.A.V.E. Program, supported by the New Jersey Department of Health and Senior Services, are launching a pilot program in New Jersey in FY 2011 designed to reduce participants' risk of heart attack and stroke. Outpatients at University Hospital who are at elevated risk of heart attack or stroke are eligible to participate in a series of six free 2.5-hour workshops, called Take Control of Your Health, which implements the Chronic Disease Self-Management Program developed at Stanford University. The workshops are being led by trained facilitators associated with the SAVE and ECCC Programs.

Service on State Health Department Advisory Groups

Drs. Weiss and Rosenblum both serve on the statewide Prostate Cancer Workgroup that reports to the gubernatorially appointed Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey. In addition, Dr. Rosenblum serves on the Oral & Oropharyngeal Cancer Workgroup. For five years, Dr. Weiss chaired the Evaluation Committee for the Task Force. Dr. Weiss helped write much of the first and second New Jersey Comprehensive Cancer Control Plans and the first two biennial status reports on the first plan. He also conceived and oversaw the development of cancer capacity and needs assessments for each of New Jersey's 21 counties, and developed the first

comprehensive cancer resource database for New Jersey. Additional information can be found at www.umdnj.edu/EvalCweb.

National and Statewide Organization Leadership

Dr. Weiss works with many national and state-level organizations in leadership roles. Dr. Weiss is the founding and current chair of the Epidemiology section of the NJ Public Health Association and is the longest continually serving member of its Executive Board. Dr. Weiss served on the American Public Health Association's Science Board as its vice-chair and is a past chair of the Epidemiology Section of the American Public Health Association. In 2010 he became chair of the Joint Policy Committee of the Societies of Epidemiology. He was a member of the Steering Committee, the Symposia Committee and the Awards Committee for the planning of the 2011 Congress of Epidemiology that was held in June 2011 in Montreal, Canada, as well as the organizer of a symposium on the part of the Joint Policy Committee of the Societies of Epidemiology. Dr. Weiss served on planning committees for the 2001 and 2006 Congresses of Epidemiology, including chairmanship of the Infectious Diseases track and the Awards Committee for the 2006 Congress, and one of the four members of the Executive Committee overseeing the 2006 Congress of Epidemiology.

DEVELOPMENTAL DISABILITIES COMMUNITY LIVING EDUCATION PROJECT (CLEP) Educating Families and Staff about the Possibilities in Community Living (SPH)

The Developmental Disabilities **Community Living Education Project (CLEP)** provides information to individuals with developmental disabilities and their families about how people with disabilities are successfully living and being supported in community settings. The information and support that CLEP provides assists individuals and their families as they explore community living, learn about available resources, and participate in the planning and transition processes.

The project's activities are especially important for the families and staff of people in developmental centers who are considering transitioning from institutional to community settings. The NJ Olmstead Plan calls for families to have more factual knowledge on which to base their decisions, opportunities to become familiar with community programs, and the chance to meet and discuss transition to community living with individuals who have moved and their families. CLEP utilizes a multifaceted approach to provide information and offers a variety of learning opportunities to expose families, both in-state and out-of-state, to available options and resources. In addition, CLEP provides training to developmental center staff about the community transition process.

Support for this Project is provided by the New Jersey Department of Human Services (DHS), Division of Developmental Disabilities (DDD).

For more information on the Community Living Education Project, please visit the CLEP website: <http://web.sph.rutgers.edu/linkweb/index.html>
Or contact:

Dr. Bernadette West, Principal Investigator at westbm@sph.rutgers.edu
 Dr. David Wright, Project Director at wrightd1@sph.rutgers.edu.
 CLEP Main Office – 732 235 3277

ERIC B. CHANDLER HEALTH CENTER (RWJMS)

The Eric B. Chandler Health Center (EBCHC) is the cornerstone of RWJMS community-based programs. Founded in 1987 in memory of Eric B. Chandler, Ed.D, it is a comprehensive, family oriented community health center that opened in 1988. The Health Center is operated jointly by RWJMS and the EBCHC Community Board, which together form the Health Center (co-applicant relationship). EBCHC was designated as a Federally Qualified Health Center (FQHC) in January 1991 and received CHC Section 330 funding in October 1993. The Center is dedicated to providing high quality ambulatory health care services to low-income, uninsured and under-insured residents of the Greater New Brunswick community. The Center is also a training facility for residents and medical students at RWJMS.

The primary care services provided at EBCHC include:

- pediatrics & adolescent services-inclusive of EPSDT (early and periodic screening, diagnostic and treatment) services-and immunizations;
- obstetrics & gynecology-inclusive of family planning & colposcopy;
- internal medicine-inclusive of preventative health services;
- diagnostic laboratory;
- urgent medical care;
- follow up of hospitalized patients;
- geriatrics; and
- preventative, restorative, and emergency dentistry.

Other services include

- podiatry,
- HIV counseling and testing,
- early intervention and treatment,
- addiction services,
- clinical social services,
- translation services,
- community outreach,
- case coordination,
- health education and
- emergency transportation.

Services provided by contract include diagnostic radiology and pharmacy services needed for quality continuity of clinical care. Referral services provided include emergency care, mental health counseling and treatment, physical and occupational therapy, substance abuse and other medical specialties not provided on-site. Services provided on-site are offered 50 hours per week. Twenty-four hour coverage seven days per week is provided through a physician call schedule. The mission of the center is:

- To provide high quality ambulatory health care services that are culturally effective, accessible and affordable

- To promote a healthy lifestyle and educate patients to take responsibility for and participate in their health care decisions
- To serve as a community resource for health and social services
- To provide high quality educational opportunities for health professionals who train at the Center.

With the support of a federal grant, in March 2006 the Chandler Health Center opened a satellite location in New Brunswick to expand its services. The new facility, five blocks from the main building, responds to the need for more medical and dental services and health education for the under-insured and uninsured population of central New Jersey. With two medical and two dental examination rooms, a patient education room, and offices for support staff, the services at the satellite location have eased the backlogs for appointments at the main Chandler Center.

In November 2012, Chandler once again responded to the need for more primary care and dental services when a satellite health center was opened within New Brunswick High School. The center has two exam rooms and two dental operatories. This project was a collaborative effort between Johnson & Johnson, Robert Wood Johnson Medical School, Eric B. Chandler Health Center Community Board, Inc., New Brunswick Board of Education, Office of the Mayor of New Brunswick, New Brunswick Development Corporation and the Foundation of UMDNJ.

As part of an academic health center, Chandler actively participates in training medical students, residents, nursing students, and social work students. Emphasis is placed on the use of a bio-psychosocial approach to patient care, with special attention given to helping learners understand the influences of poverty, poor education, cultural diversity and family structure on the delivery of effective patient care services. One of the primary goals of the Center is to teach learners about the unique issues that confront patients in an underserved urban setting. Each year over seventy residents and medical students rotate at Chandler. Internal medicine residents and pediatric residents are assigned to Chandler for their three years of continuity care experience. OB/GYN residents provide obstetrical care as well as continuity in gynecologic care.

As part of its commitment to eliminating health disparities and improving clinical outcomes, the Center participates in the National Health Disparities Collaborative. Activities are designed to improve the overall care that each patient receives and to establish a process of improvement based on the Care Model. The Care Model fosters productive interactions between patients and a prepared practice team within a health care setting. The model is designed to maximize resources, use them effectively, and look towards the community for resources to help deliver evidence-based care.

The Center is also committed to the PDSA (Plan, Do, Study, Act) method for accelerating the change process and improving work flow, patient care, and other activities at Chandler.

As a community-based health center, Chandler also collaborates with local agencies to address both health and social needs. For example, Chandler regularly participates in community health fairs and projects sponsored by the Alliance for a Healthier New Brunswick. In addition to its core clinical services, Chandler has developed the following community-based programs:

Family Education Program: This outreach project features a series of health education seminars on topics such as domestic violence, family, immigration, managed care, and home safety and health maintenance.

Prenatal Classes: A series of classes for pregnant women is offered in English and Spanish three times a year to provide information about normal pregnancy, what to expect during labor, and normal child development. A separate series of prenatal classes is offered for expectant adolescent mothers with additional topics such as continuing education after the baby's birth and preventing unplanned pregnancies.

Reach Out and Read Program: To encourage reading to children from an early age, the Chandler Center participates with the National Reach Out and Read Program cooperatively with Rutgers University. At every well child visit, children are given books that are appropriate for their developmental level.

FRANÇOIS-XAVIER BAGNOUD (FXB) CENTER (SN)

The François-Xavier Bagnoud (FXB) Center, School of Nursing, receives public and private funding of approximately \$40 million annually. Public funding sources are diverse and include the New Jersey Department of Health and Senior Services (NJDHSS), the New Jersey Department of Human Services, Health Resources and Services Administration (HRSA) HIV/AIDS Bureau, the National Institutes of Health (NIH), the US Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO). Beginning early in the HIV/AIDS epidemic, FXB Center's interdisciplinary clinical leadership developed a model approach to family-centered HIV care. The Center offers training and technical assistance to share this expertise with other programs in New Jersey, the US and throughout the world (www.fxbcenr.org).

FXB Ambulatory Care Center

Housed at University Hospital in Newark, the Center meets the healthcare and social service needs of families living with HIV infection through the provision of multidisciplinary, culturally competent and comprehensive HIV services. The Ambulatory Care Center provides HIV primary medical care, intensive targeted interventions to support adherence to care and treatment and improve client outcomes to the more than 400 families currently served by the program. The Center offers clinical and social services to infants and children who are HIV-exposed and adults with HIV infection. Two clinical and social services programs of the Center, The Family Place and Health Care Connections, reach out to the community to identify, engage and facilitate comprehensive care of HIV-infected and affected persons. Care is coordinated and continuous among the hospital, ambulatory care, home, and community settings.

FXB Child Health Program

In collaboration with the New Jersey State Division of Youth and Family Services (DYFS), the CHP ensures that the healthcare needs of vulnerable, at-risk children are met by providing a range of community based pediatric nursing services to DYFS district and regional offices. The Program also works closely with DYFS to develop a coordinated response to specific regional and statewide health needs. Child Health Program nurses, highly experienced in pediatric care, evaluate the health needs of medically fragile children under DYFS. These nurses, with special expertise in child health and safety issues and case management, are linked to medical and community

health agencies. They assess children suspected of being abused and neglected, advocate for the quality of health care for children in the child welfare system and assist DYFS staff in meeting children's health needs.

FXB HIV/AIDS National Resource Center (NRC)

The NRC provides technical assistance, training and materials development to healthcare providers across the U.S. Funded by HRSA since 2002 as the AIDS Education and Training Centers (AETC) National Resource Center, NRC works closely with the eleven regional AETCs and more than 130 local performance sites. The NRC supports national working groups on timely topics and maintains a library of AETC resources through their website at www.aidsetc.org. FXB NRC is also funded by HRSA as a National Resource Center for the Ryan White CARE Act Part D (Title IV) projects. It supports implementation of surveys, focus groups, and evaluations to improve clinical practice and provides staff support for the working groups that maintain national guidelines for treatment of pediatric HIV infection and care of pregnant women with HIV and prevention of perinatal HIV transmission. Since 1999, the NRC at FXB Center has been funded by the CDC as a national organization working to eliminate perinatal HIV transmission. NRC has developed train-the-trainer curricula used nationally to reduce perinatal HIV transmission and innovative approaches to support the implementation of rapid HIV testing in labor and delivery for women with undocumented HIV status and routine HIV testing in medical settings.

FXB New York/New Jersey AIDS Education and Training Center for the Northern New Jersey Region (AETC)

As part of a national network of 11 regional and 4 national centers (and more than 130 associated sites) the NY/NJ AETC conducts targeted, multi-disciplinary education and training programs for healthcare providers treating persons living with HIV/AIDS. The NY/NJ AETC's mission is to assist health care professionals, through education and training, to provide optimum quality services and sensitive care to HIV positive persons, and to provide access to current research and treatment of HIV/AIDS. It serves the New York and New Jersey healthcare community by providing AIDS and HIV education and training to treat, manage, diagnose and counsel individuals with HIV infection or to help prevent high risk behaviors that lead to HIV transmission. [Funding is provided by Health Resources Services Administration HIV/AIDS Bureau.](#)

FXB Global Programs

The FXB Center's Global HIV Program offers a multidisciplinary team of experts focused on building healthcare worker capacity and strengthening healthcare infrastructure to support the development and scale-up of sustainable HIV prevention, care and treatment services. The Center provides technical and operational support to strengthen existing local capacity and to foster new skills development that extend the ability of governmental and non-governmental organizations to carry initiatives forward with enhanced local ownership. The Global HIV Program has led projects supported in more than a dozen countries in Africa, Asia and the Caribbean.

The Center plays a lead role in global initiatives to support scale-up of PMTCT (preventing mother-to-child transmission) and pediatric HIV care and treatment, including partnering in the development update of the World Health Organization/CDC PMTCT Generic Training Package. Under the guidance of the CDC, the FXB Center also led the development of the Testing and Counseling for PMTCT Support Tools, and developed a set of generic evaluation tools for use by countries that have implemented

the Support Tools and want to evaluate their impact. As CDC-Guyana's primary implementing partner for HIV care and treatment, the FXB Center has been working in Guyana to strengthen systems and capacity for HIV care, treatment and support for people living with HIV. In Tanzania and Botswana, ongoing technical assistance is provided to the governments to support scale-up of PMTCT services and improved quality and efficacy of PMTCT and pediatric HIV service delivery. The Botswana projects have also included capacity building for healthcare faculty for development and delivery of pre-service HIV curricula and the development of Wellness for Healthcare Workers.

Since 2003, the FXB Center has provided training for new international research sites in resource-limited settings to support a safe, quality foundation of research skills and expert clinical care for the conduct of clinical trials with funding from the International Maternal Pediatric Adolescent AIDS Clinical Trials Group (IMPAACT) Global Training.

FREE ORAL CANCER SCREENING AT UMDNJ (NJDS)

For the fifteenth year, volunteer faculty and postgraduate students performed free oral cancer examinations on New Jersey citizens with appropriate follow-up. Trained volunteer staff provided educational materials and instructions on lifestyle and habit changes to reduce the likelihood of developing oral cancer. The screenings were held on May 9th in two locations: the University Dental Center at Somerdale and the Oral Health Pavilion at the Dental School in Newark. The Newark screenings were performed in partnership with Essex/Passaic Wellness coalition's Cancer Health Fair, where all major cancer prevention advocacy organizations had information booths. The Essex/Passaic Wellness coalition, the dental school being a member, provided a mammography van and a physician to perform prostate screening as well.

"GIVE KIDS A SMILE" DAY AT THE NEW JERSEY DENTAL SCHOOL (NJDS)

The New Jersey Dental School, in conjunction with the New Jersey Dental Association and the American Dental Association, hosts "Give Kids a Smile Day." This special one-day annual event began in 2003 and is part of a national month-long Children's Dental Health Month. Offered at no cost to New Jersey youngsters ages 12 and under, the event allows the dental community to treat thousands of underserved children. NJDS volunteers - including students, dentists, hygienists, dental assistants and non-clinical support staff - as well as community dentists performed a wide range of dental services. Throughout the day, a circus clown entertained the children while they awaited treatment. Tables were filled with educational activities, and face painting, balloon art, and other games were enjoyed.

The total number of children treated throughout the State has greatly increased since 2003. On February 1st more than 400 children were seen by UMDNJ- New Jersey Dental School alone. Many NJDS alumni opened their offices throughout the state to treat the children.

GLOBAL TUBERCULOSIS INSTITUTE (NJMS)

The New Jersey Medical School Global Tuberculosis Institute at Rutgers is a force in the effort to conquer and cure tuberculosis worldwide. The Institute plays a leading role in the international arena, providing expertise in program development, education and training, and research to ministers of health, national TB programs and healthcare providers around the globe.

A History of Excellence

TB infections in the U.S. soared to unprecedented levels in the early 1990s. The New Jersey Medical School National Tuberculosis Center was established in 1993 in response to this resurgence. Under the direction of Lee B. Reichman, MD, MPH, it achieved federal designation as a national Model Tuberculosis Prevention and Control Center in 1994, indicating its success in delivering state-of-the-art treatment, conducting cutting-edge research, and providing education and training to all levels of health care providers as well as those afflicted with this deadly, yet curable, disease. To reflect this ever-expanding commitment to stamping out the disease even in the most remote locales, the Center changed its name to the Global Tuberculosis Institute in early 2006.

Mission and Goals

The mission of the Global Tuberculosis Institute is to advance state-of-the-art tuberculosis care through excellence in research, practice and teaching. The goals of the Institute are to decrease tuberculosis morbidity through state-of-the-art diagnostic, treatment and prevention programs; to create a cadre of interacting clinical and research scientists with a prime interest in the intersection of basic science, clinical and epidemiological aspects of tuberculosis; to develop and apply innovative diagnostic, therapeutic, behavioral, preventive and educational modalities for tuberculosis; and to provide an internationally recognized training center for courses and affiliations at all levels to increase the skills related to tuberculosis for physicians, nurses, epidemiologists and all other health-related professions. The Global Tuberculosis Institute's success has been achieved through the realization of these goals. The Institute has developed proven effective practices, which are shared with others involved in the fight against tuberculosis.

State-of-the-Art Care

The Institute provides outpatient services at its state-of-the-art clinical facility designed from the ground up specifically for safe and effective treatment of tuberculosis. Renowned pulmonary and infectious disease specialists treat patients in the Waymon C. Lattimore Practice. Patient-centered care is provided through a multi-disciplinary team approach to address the complex clinical, social and cultural issues that impact the prevention control and elimination of tuberculosis. Specialized care is given to children with tuberculosis, patients with multi-drug resistant tuberculosis, and those co-infected with HIV/AIDS.

Demonstrated Effectiveness

Since the Institute's creation, there has been a dramatic decrease in the number of tuberculosis cases within the population it serves. The Institute has an unprecedented record in patients' adherence in taking medication. Nearly all the patients--98 percent--adhere to their medication regimen. Many people in the population that the Institute serves are coping with a variety of life's challenges, and taking medicine is not a priority. To ensure that patients take their medications on time each day, the Institute

implemented a widely used strategy called directly observed therapy, or DOT. As its name indicates, as part of the support system, this therapy involves public health workers visiting tuberculosis patients to watch them take their medication. It is these dedicated professionals who have been instrumental in the Institute's unprecedented success.

Providing Worldwide Education and Training

The Institute's Education and Training staff uses its wealth of knowledge and experience to develop educational resources, training programs, and distance learning opportunities. Training courses and individualized programs on specific tuberculosis-related topics are presented to physicians, nurses, healthcare workers, and government leaders across the country and around the world. New, web-based educational programs are available for those who may not be able to travel, yet desire the latest tuberculosis information.

The Institute's website houses an extensive collection of downloadable and adaptable resources at <http://globaltb.njms.rutgers.edu/educationalmaterials/productlist.html>. The staff provides technical assistance to a variety of providers to develop and integrate training into their own unique circumstances.

Regional Training and Medical Consultation Services

As a federally designated Regional Training and Medical Consultation Center, the Institute is required to provide training, technical assistance and medical consultation to healthcare professionals throughout the Northeastern U.S. The Institute's region includes Connecticut, District of Columbia, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, and Rhode Island and the cities of Baltimore, District of Columbia, New York City and Philadelphia. The Institute is funded by the Centers for Disease Control and Prevention, Division of Tuberculosis Elimination, with additional funds from U.S. Agency for International Development, NJ Department of Health and a number of non-governmental and private organizations and foundations.

Medical Consultation

Individualized information is provided by senior medical staff to healthcare professionals and the public via a toll-free number, 1-800-4 TB DOCS (1-800-482-3627). This approach is well needed in the U.S. where rates of tuberculosis are declining along with the expertise and experience to deal with the disease and in high burden countries where resources may be less than adequate. When needed, the Institute provides supplementary advice to existing consultants for difficult cases of multi-drug resistant and pediatric tuberculosis, as well as for tuberculosis and HIV/AIDS co-infection and others with complex medical management issues.

Opening the Door to New Treatments and Practices

The Institute is at the forefront of finding more effective ways to prevent and treat tuberculosis through groundbreaking research. As early as 1970, its staff was conducting clinical trials and doing studies in tuberculosis surveillance, patient behavior, and epidemiology. The Institute also collaborates closely with several of RBHS's centers and departments, including the Center for Emerging Pathogens and the Public Health Research Institute.

An International Connection

The Institute participates in program reviews and provides policy guidance and technical assistance on a variety of topics including tuberculosis at the primary healthcare level, co-infections of tuberculosis and HIV/AIDS, multi-drug resistant tuberculosis, and patient care in the private sector. Physicians and educators from the Institute have participated in training, presentations and symposia around the world, including the regions of Eastern Europe, Central and Eastern Asia, Sub-Saharan Africa and Central and South America. The staff is also involved in international research.

The Institute also offers individualized training programs in specific aspects of tuberculosis control for physicians, nurses, educators, government officials and others working in the field of tuberculosis. Specialized trainings can be tailored to meet the interests and needs of international participants. Training is geared towards participants from countries with a high burden of tuberculosis and aims to build the knowledge and skills of participants in these settings. The Institute has hosted trainees from more than 25 countries all over the world. Priority is given to healthcare providers from countries with a high burden of tuberculosis that are mobilized to respond to the problem.

HEALTH INFORMATION MANAGEMENT (SHRP)

The Health Information Management Program provides support to other community activities offered through SHRP departments. The program participates in the health science fair held annually at the Liberty Science Center as well as other career fairs to bring awareness to careers on the business side of healthcare. The program also participated in the Special Olympics Summer Games providing information to participants at the Healthy Athletes event. The program has also been involved in the re-education of medical coders for the upcoming implementation of ICD-10-CM and ICD-10-PCS both within the university and outside the university. Educational programs in this area will be more in demand as the October 2014 implementation date approaches.

HEALTH SCIENCES CAREERS PIPELINE (SHRP)

The Health Sciences Careers Program, formerly Tech Prep, began in the 1993-94 academic year with three high schools and 12 students. In academic year 2012-2013, the program had 2,714 students. The program allows students early access to a career in the health sciences and exposes them to health care settings where they learn patient care techniques. The Health Sciences Careers Program also has a website to educate students about various health careers. Approximately one-half of the students receive college credit ranging from two to a maximum of 31 credits. These credits are accepted by most colleges in New Jersey and by a number of out-of-state colleges and universities.

HEALTHIER NEW BRUNSWICK INITIATIVE (RWJMS)

Established in 2001 as a community based, community owned health initiative, the mission of Healthier New Brunswick is to improve the health and healthcare of New Brunswick residents through community-based partnerships. Healthier New Brunswick

is a collaborative effort between Rutgers Robert Wood Johnson Medical School, New Brunswick Tomorrow, Johnson and Johnson, and the City of New Brunswick.

Healthier New Brunswick is a collective effort comprised of many individuals and organizations within the city of New Brunswick: including, city residents, community-based organizations, local hospital systems, businesses, academic and educational organizations, local and regional governments, service organizations, faith based networks, and health organizations.

These partners work together to:

- 1) Build on the diverse partnerships that promote health and wellness in the greater New Brunswick community;
- 2) Improve communication to create awareness of community health improvement efforts, priorities and available resources;
- 3) Minimize the duplication of efforts around community health services; and
- 4) Provide a forum for the exchange and coordination to address community health needs; including funding, educational workshops, training and other health services.

INSTITUTE FOR THE STUDY OF CHILD DEVELOPMENT (RWJMS)

The Institute for the Study of Child Development is a research center comprised of psychologists, educators, and other professionals interested in understanding and facilitating the development of children and their families. Current work includes behavioral teratology through studies of the long term effects of prenatal drug and other toxic exposures and conditions; identifying factors that affect behavioral and physiological reactions to stress and the capacity to cope with stress; the impact of deviant caregiving and traumatic events in the child's life on the development of self-worth and other self-evaluative emotions; the study of normal cognitive, social, and emotional development, and the study of brain-behavior relations in the developing child.

One of the Institute's functions related to public/community service includes giving colloquium and grand rounds presentations at various universities and medical schools across the country. In addition, faculty serve on state, county and international committees, including the Board of the Eastern Psychological Association of the American Psychological Association as well as the International Society of Early Intervention and the school board of Montgomery Township, New Jersey. Our faculty also serve as editors on various journals which include *Current Psychiatry Reviews*, *Current Pediatric Reviews*, *Infants and Young Children*, *Open Pediatric Medicine* and *the Roeper Review*. They have served as reviewers for the following journals in the past year: *Archives of Pediatric and Adolescent Medicine*, *Child Development*, *Child Maltreatment*, *Cognition and Emotion*, *Cognitive Development*, *Developmental and Behavioral Psychology*, *Developmental Psychology*, *Developmental Psychopathology*, *Emotion*, *Infant Behavior and Pediatrics*, *Journal of Reproductive and Infant Psychology*, *NeuroImage*, *Psychoneuro-endocrinology*, and *Social Development*. The Institute also provides clinical services through the Gifted Child Clinic and Neuropsychological Clinic.

INTERDISCIPLINARY STUDIES (SHRP)

The B.S. in Health Sciences, M.S. in Health Sciences, and the Ph.D. in Health Sciences programs provide community education services through the Health Sciences Careers presentations, the Newark Leadership Alumni Program, Church Services in Elizabeth, and the Francois-Xavier Bagnoud Center HIV Aids Health Service. Programs such as these served more than 1,000 members of the community overall this school year. The Masters of Science in Health Care Management program with the Respiratory Care program offers an Asthma Management Program for over 250 Newark Inner City Children. This service educates parents and children on the best practices and methods to manage their asthma.

THE JORDAN AND HARRIS COMMUNITY HEALTH CENTER (SN)

The Jordan and Harris Community Health Center is a nurse managed clinical site that serves three public housing communities in the city of Newark. Dr. Cindy Sickora has been working with the community since 2007 providing health screening, health education and health promotion services. With \$857,000 in HRSA (Health Resources and Services Administration) funding, the center officially opened its doors on September 27, 2011. The center is a community participatory approach to healthcare services. Directed by a community advisory board, community residents have direct input regarding programming and service delivery. Staffed by a registered nurse, the center has made case managed healthcare services available to nearly 3,000 Newark residents. The project has demonstrated success in managing previously uncontrolled hypertension, diabetes, and asthma.

The J&H Community Health Center staff provides community based education to the residents by promoting community participation in all programs developed for the population. Most recently, the tenant association of one housing development identified the need to reach out to teens regarding safe sex. With full participation from members of the community including a group of teenagers, a program has been developed to meet the need. Residents work along with program staff to make the program culturally relevant to the audience.

In February 2012, ten Community Health Workers joined the J&H team through a collaborative project with the New Jersey Medical School. With funding from the Healthcare Foundation of New Jersey, Drs. H. Shahidi and C. Sickora worked directly with the community to identify candidates for training. The trainees attended 12 full-day education sessions and receive on-going education regarding health promotion and disease prevention. Currently, the workers have reached out to 100% of the households in the three public housing developments served by the J&H Community Health Center. The CHWs have become the eyes and ears of the professional staff and have allowed for outreach that may have otherwise been difficult, if not impossible. They have implemented exercise programs, performed blood pressure screenings, assisted with HIV screening, and have identified "difficult to reach" residents.

Primary healthcare services are provided to the community served by the J&H Community Health Center through the School of Nursing's Mobile Health Project. Joining forces with the Mobile Health Project has allowed for closely managed healthcare services for the residents of three public housing communities.

LINKING THE CLASSROOM TO THE COMMUNITY (SPH)

As an integral part of the MPH degree program goals and objectives, all MPH students at SPH connect with the real world environment in which public health practice and/or public health research is conducted. Fieldwork sites are selected by students with their faculty advisors among local, state and national agencies and organizations, governmental and voluntary health agencies, professional associations, hospitals and medical care services as well as international locations. The fieldwork experience is based on the student's concentration in partnership with the agency. The following examples illustrate fieldwork projects completed, and their locations, during Academic Year 2012-2013:

Piscataway/New Brunswick Campus

- Can Newborn T4 Levels Help Predict Future Autism Diagnosis? New Jersey Department of Health, Trenton, NJ
- Critical Analysis of Existing Research and Identification of Research Gaps in Occupational Safety and Health-related Studies for Wildland Firefighters, USPHS, NIOSH – Emergency Preparedness and Response Office, Atlanta, GA
- Transitions of Care: Evaluating Effectiveness of Set Policies and Procedures in a Nursing Home Setting, The Francis E. Parker Memorial Home, Piscataway, NJ
- Assessing Knowledge and Policies Among Edison, NJ, Childcare Centers Regarding Children with Food Allergies, Edison Department of Health, Edison, NJ
- Universal Transfer Form Policy and Quality Assurance Project, VNA Health Group, Red Bank, NJ
- A Content Analysis of Tobacco Use Imagery in Rolling Stone Magazine from 1967-2007, Center for Tobacco Surveillance and Evaluation Research, New Brunswick, NJ
- The Importance of Public Participation in the Open Public Session Portion of FDA Advisory Committee Meetings: Can Public Participants Influence the Outcome? 3D Communications, Hoboken, NJ
- Factors Influencing Treatment of Acute Gouty Arthritis in a University Hospital Emergency Department, Robert Wood Johnson Medical School, New Brunswick, NJ
- Study of the Association between Diabetes Control and Housing Stability, Social Support and Insurance Status in a Clinic Population of the Homeless, Project H.O.P.E., Camden, NJ
- World Trade Center dust exposure and longitudinal changes in lung function: Twelve year assessment of a medical monitoring program, Environmental and Occupational Health Sciences Institute, Piscataway, NJ

- Pilot of The Cancer Institute of New Jersey Cancer Awareness Youth Educator Badge Program, The Cancer Institute of New Jersey, New Brunswick, NJ
- The Impact of a Text Messaging Campaign on the Dietary and Physical Activity Levels of Newark Mothers, Greater Newark Conservancy, Newark, NJ
- Residential Green Building Design and Implications for Environmental Health, The Center for Green Building at The Edward J. Bloustein School of Planning and Public Policy, Rutgers University, New Brunswick, NJ
- Epidemiology of Peripartum Cardiomyopathy: A population based study in Nation-wide Inpatient Sample database (2003-2009), Saint Barnabas Medical Center, Livingston, NJ
- Measuring the Impact of the Risk Mitigation Decision for Rodenticides: Acute Rodenticide Exposure in NYC, Environmental Protection Agency (EPA) Region 2, Edison, NJ
- Application of a Mixed Cure Rate Model in the Analysis of Survival from Sepsis in the Intensive Care Unit: Glucose Related Values as Predictors of Survival and Cure, Robert Wood Johnson Medical School, New Brunswick, NJ
- Determining the Association between Mental Health Measures, Smoking and Effect Modification by Sex among US Adults- BRFSS, 2009, Center for Tobacco Surveillance and Evaluation Research, New Brunswick, NJ
- Quality Assurance and Improvement Analysis of Answer's Online Professional Development Workshop STD Basics Test, Answer, Piscataway, NJ
- Illegal Pesticides: Cataloging unregistered products and development of recommendations to enhance regulations to restrict the sale and distribution of unregistered products, Environmental Protection Agency (EPA) Region 2, Edison, NJ
- An Examination of the Links Between Behavioral Risk Factors, Injuries, Chemical Irritants, and Respiratory Irritation Among a Sample of Chemistry Students from a Northeastern University, Rutgers University, Department of Chemistry, Piscataway, NJ
- Examination of Tanning Prevalence, Practices and Risk Perceptions of Ultraviolet Radiation (UVR) Exposure among Sorority and Fraternity Students, Rowan University, Department of Health and Exercise Science, Glassboro, NJ and Center of School and Community-Based Research and Education, New Brunswick NJ
- Strengthening the Health and Nutrition Education of the Family Development Session Guidelines of the Pantawid Pamilyang Pilipino Program, United Nations-World Food Programme, Philippines

- Contextualizing Reproductive Life Stories: The Development and Use of a Novel, Semi-structured Life History Calendar, Robert Wood Johnson University Hospital, Reproductive Health Education in Family Medicine Program, New Brunswick, NJ
- Pharmaceuticals in the Environment: Levels of Acetaminophen and Ibuprofen in Drinking Water Sources, Johnson & Johnson, Department of Worldwide Environmental Health & Safety, New Brunswick, NJ
- The Effect of Language Congruency on the Out-Of-Hospital Management of Chest Pain: Language Barriers Between Patients and Paramedics Decrease Advanced Life Support (ALS) On-Scene-Time (OST), MONOC, the Monmouth-Ocean Hospital Services Corporation, Neptune, NJ and Rutgers School of Public Health, New Brunswick, NJ
- Participation in a Public Health and Health Education Project in Costa Rica, CEN Santa Clara, Ciudad Quesada, Costa Rica
- Examining Market Trends in Cigar/Cigarillo Sales, Center for Tobacco Surveillance and Evaluation Research, New Brunswick, NJ

Stratford/Camden Campus

- Fall Prevention and Risk Reduction Program Evaluation, Cooper University Hospital, Camden, NJ
- Vacant Properties and Abandoned Structures as a Public Health Issue in the City of Camden, New Jersey, CamConnect, Camden, NJ
- Salem County Feasibility of Consolidation Study, Salem County Health Department, Salem, NJ
- Study of the Nutrition Service and Education in WIC agencies concerning Food Allergies, Kids with Food Allergies Foundation, Fountainville, PA
- Assessing Economic Evaluation Models of Medical-Legal Partnerships, Health, Education and Legal Assistance Partnership: Medical Legal Partnership, Chester, PA
- The State of Birth Certificate Documentation in the United States: A National Review, Cooper University Hospital, Camden, NJ
- The Camden Healthy Corner Store Project: Analyzing the Accessibility and Prospective Purchasing Trends of Healthy Food Options for Residents of Camden, NJ, New Jersey Partnership for Healthy Kids, Camden, NJ
- New Jersey Children's Oral Health Program: School Nurse Needs Assessment, New Jersey Department of Health & Senior Services, Trenton, NJ

Newark Campus

- Food Insecurity and Immigrant Children in the United States, Rutgers School of Public Affairs and Administration, Newark, NJ
- Evaluation of a Smoking Cessation Program for HIV-Infected Patients in an Urban Clinic, UMDNJ–University Hospital Infectious Disease Practice, Newark NJ
- Comparison of the Tuberculin Skin Test and QuantiFERON-TB Gold In-Tube for the Diagnosis of Latent Tuberculosis Infection among Contacts of Foreign Born Tuberculosis Patients, UMDNJ-Waymon C. Lattimore Practice, Newark, NJ
- New Jersey Answers for Autism Survey: Psychiatric Comorbidities in Children with Autism Spectrum Disorders, UMDNJ-New Jersey Medical School, Newark, NJ
- Analysis of New Jersey Annual School Reports to Identify Immunization Exemption Trends and Geographic Distribution, UMDNJ-New Jersey Medical School, Newark, NJ
- Budget impact of introducing three HIV prevention strategies from the State of New Jersey Health Department and regional Ryan White perspective, UMDNJ – New Jersey Medical School, Newark, NJ
- Association of Depression and Obesity among Adolescents in New Jersey, UMDNJ-School of Nursing and School of Public Health, Newark, NJ
- Cost analysis of fluoridation to water purveyors and consumers in fluoridated and non-fluoridated communities in central New Jersey, UMDNJ-New Jersey Dental School, Newark, NJ; New Jersey Dental Association, New Brunswick, NJ
- Is Preterm Birth Associated with High Crime Level in New Jersey Neighborhoods? UMDNJ-New Jersey Medical School, Newark, NJ
- Dental Caries Experience in New Jersey's Fluoridated versus Non- Fluoridated Communities, UMDNJ-New Jersey Dental School, Newark, NJ; Rutgers School of Public Affairs and Administration, Newark, NJ; New Jersey Dental Association, New Brunswick, NJ
- A Pilot Study of Utilization of a University Hospital Crisis Response Team, UMDNJ-New Jersey Medical School, Newark, NJ
- Association between Marijuana Use and Risky Sexual Behavior among Adolescents in New Jersey, UMDNJ-New Jersey Medical School, Newark, NJ
- Increasing HIV Testing and Linkage to Care in Communities Served by Family Medicine Residency Program Center for Family Health of Hoboken University Medical Center, Hoboken, NJ

- Analysis of Providers Perceived Attitudes and Behaviors toward Pregnant Women and Dental Care in New Jersey, UMDNJ-School of Public Health, Piscataway, NJ
- Association of Dental Caries and Body Mass Index among Pediatric Patients aged 2-6 years at New Jersey Dental School, Newark, UMDNJ-New Jersey Dental School, Newark, NJ
- Analysis and Comparison of Smoking Habits in Adolescent Males and Females aged 13-17 years using Youth Risk Behavior Surveillance System Data. UMDNJ-New Jersey Dental School, Newark, NJ
- MITOSATH Onchocerciasis: From Elimination to Control: A Logical Framework for Onchocerciasis Control Program implemented by Mission to Save the Helpless (MITOSATH) in Yorro Local Government Area of Taraba State: Prospects and Challenges Jos, Nigeria
- Trends in Local Health Department Funding by Population and Socio-Economic Status Characteristics of Municipality, in Essex County, New Jersey Between Fiscal Years 2009 and 2011, UMDNJ-New Jersey Medical School, Newark, NJ
- Evaluation Plan for the Care Transitions Education Project, ASG Advisors, Newark, NJ
- Assessing the Association of Drug and Alcohol Usage and Involvement in Violent Behaviors among United States Youth: Youth Risk Behavior Survey Secondary Data Analysis, UMDNJ-New Jersey Medical School, Newark, NJ
- Racial/ethnic Differences by Obesity Levels in the Prevalence of Type 2 Diabetes in US Adults UMDNJ – New Jersey Medical School, Newark, NJ
- An Evaluation of Complications in Adult Deceased Donor Liver Transplantation (DDLTL) at University Hospital Newark, NJ, UMDNJ-New Jersey Medical School, Newark, NJ
- Issues in Cancer Screening: Barriers for Screening and Role of Education in Changing Perception and Practice of Cancer Screening, UMDNJ-New Jersey Medical School, Newark, NJ
- The Children's RESPIRA Educational Program Phase II C: Asthma Home Environment Checklist (EPA), UMDNJ-New Jersey Medical School, Newark, NJ
- Identifying Adulthood Trajectories of the ASD Population in NJ, UMDNJ- New Jersey Medical School, Newark, NJ
- Efficacy of Mesenteric Nerve Block for the Treatment of Myogenous Orofacial Pain, UMDNJ-New Jersey Dental School, Newark, NJ

For more information on fieldwork projects contact Ms. Terri Lassiter (Newark) at lassiter@sph.rutgers.edu or Ms. Bianca Freda (Piscataway/New Brunswick and Stratford/Camden) at fredabm@sph.rutgers.edu

M.D. WITH DISTINCTION IN SERVICE TO THE COMMUNITY (DISC) (RWJMS)

UMDNJ-RWJMS has established the DISC program, providing students with the opportunity to earn the M.D. with Distinction in Service to the Community. Directed by the Office of Community Health and the Department of Family Medicine and Community Health, a select group of students plan, carry out and write up collaborative population health-based scholarly projects under the guidance of faculty and community mentors. The program involves students over the full four years of medical school. It includes service and didactic components, journaling, the preparation of a thesis, and a presentation of the completed project to the sponsoring community organization and the RWJMS community.

The DISC program adds a rigorous, scholarly component to existing community service projects, generates experience in population health scholarship, responds to health needs as defined by the community, generates partnerships with community groups, and recognizes students who distinguish themselves by independent, strong, long-term commitments to community health programs. The DISC program also gives students a longitudinal opportunity to work with underserved community members using the Community-Oriented Primary Care Model of healthcare education. Students who participate in the DISC program gain important leadership skills as they learn from and contribute to identify needs in a population that interests them. A DISC Steering Committee comprised of faculty from RWJMS meets biannually to review student proposals and progress.

Roseann Marone and Sunanda Gaur, MD, are faculty advisors to medical students in the DISC program.

MEDICAL IMAGING SCIENCES (SHRP)

The Diagnostic Medical Sonography, Cardiac Sonography, and Vascular Sonography programs serve over 600 community members on High School Tech Prep Careers Day each year, when participants are given the opportunity to have hands-on experience with ultrasound equipment in an effort to educate the community about the profession. Students in the Diagnostic Medical Sonography program were involved in the coat drive for the Healing Hearts Foundation, Jersey Care's Day, and a food drive for Hurricane Sandy victims. The Radiologic Imaging Modalities and Master of Science Radiologist Assistant programs serve over 200 students at local universities each year by demonstrating the services provided by imaging professionals. The Nuclear Medicine program participates in N.J. High School career days and annually hosts a meeting of the Garden State Society of Nuclear Medicine Technology.

MEDICAL STUDENT VOLUNTEER PROGRAMS (RWJMS)

The **Homeless and Indigent Population Health Outreach Project (HIPHOP)** was established by a group of RWJMS students in 1992 to help meet the health needs of the greater New Brunswick community. HIPHOP links medical students with the community in an attempt to reduce barriers that prevent community members from accessing primary and preventive health care and education. Program objectives of HIPHOP are:

- To provide a variety of health outreach services to an underserved population
- To provide medical, physician assistant, and public health students with meaningful service-learning experiences
- To create a heightened awareness of the role that RWJMS should play within its community
- To foster an atmosphere of responsible citizenship and encourage a lifelong commitment to community service and humanism in medicine
- To expand the program locally in such a way that it might be duplicated on a national level

The project has expanded from a small *ad hoc* group of dedicated medical students to a well-structured organization involving over 300+ medical and physician assistant students, public health students, faculty/staff members, and community representatives. In 2005, HIPHOP evolved into an umbrella program containing two major initiatives: the Community Health Initiative (C.H.I.) and the Promise Clinic. These initiatives are designed to link specific learning objectives for health professional students with the health-related needs of the community.

HIPHOP-Community Health Initiative (CHI) consists of projects and electives that promote healthy living practices, teach preventive health education, and support and advocate for the medically underserved of the greater New Brunswick Community.

CHI-Clinic Project offers community members increased support and advocacy in primary care with the assignment of medical students to shadow at EBCHC and the Robert Wood Johnson AIDS Program. HIPHOP student participants are exposed to indigent health care issues, their varied medical dynamics and health care systems.

CHI-Health Workshop Project is an educational program that develops a community mentoring relationship while providing health promotion educational workshops. This is accomplished through a series of interactive workshops presented to various community based organizations and public schools in the greater New Brunswick area. In these workshops students address issues such as HIV prevention, sexual health and responsibility, heart-healthy behaviors, environmental influences on health and behavior, nutrition, substance abuse and much more.

CHI-Electives program comprises Students Teaching AIDS to Students (STATS), Patients At/In Risk (PAIR), Issues in Cultural Competency and the Underserved Community Elective (ICCUCE), Supporting Wise Actions in Teens (SWAT), and Literacy Initiative for Students Teaching Older Spanish Speakers (LISTOS). These programs are in place to provide students additional opportunities to support, advocate and understand the issues of at risk communities. The students who participate in these

electives may volunteer to serve meals, attend lectures pertaining to issues of underserved populations, and accompany at-risk young pregnant mothers to health literacy education sessions or clinic visits, or sit through a chemotherapy session with a patient. These are some examples of elective participation among the many different forms of elective participatory options.

Family Medicine 3rd Year Clerkship-Health Workshops - As part of their community service requirement during their family medicine rotation, third year medical students provide community presentations on nutrition at a community-based organization for young adults who attend a vocational live-in school.

CHI-Project Outreach offers a multitude of one-time volunteer experiences for any student who would like to get involved. Such experiences include serving at Elijah's Promise Soup Kitchen, making knot blankets for the homeless, counting the homeless, reading to children, health fair screening/participation, organizing the program's annual drives/events such as its 5k Run, Youth Science Health Day and incoming first year medical student Volunteer Day.

HIPHOP-Promise Clinic was started in January 2005 by a group of HIPHOP students to provide increased access to health care for the homeless who receive their meals and social services at Elijah's Promise, Inc., a multiservice Soup Kitchen in New Brunswick. In the Promise Clinic, a student doctor team of first- through fourth-year students develops and implements a plan of care for their patients. This plan is overseen by volunteer faculty members from RWJMS who are the preceptors for this experience. The students collaborate with other groups to provide a broad range of social services to their patients and promote a culture of service among future health care professionals. The clinic is housed at Rutgers Eric B. Chandler Health Center. Patient medication is free of charge to the clinic's patients. Students assist clients with applying for patient prescription assistance programs and hospital Charity Care to offset the cost of laboratory testing, imaging studies, and emergency care. Related health workshops are conducted to address topics such as nutrition and exercise to complement the care of the patient and to train participating student doctors. Students are responsible for managing the operation of this experience (scheduling patients and faculty, purchasing and tracking medication).

The **Urban Health Initiative (UHI)** at the RWJMS regional campus in Camden provides a broad range of services to the Camden community and is critically important to RWJMS-Camden students. UHI is an organized opportunity for third- and fourth-year medical students to become involved in the Camden community in order to improve the overall quality of life of its citizens through service, charity, and education. Programs include an Adult Health Outreach Project (HOP) Clinic, a Pediatric HOP Clinic, a Women's HOP Clinic, and many school and community outreach programs.

In August 2000, the AAMC-Pfizer Caring for Communities Project awarded funding to third- and fourth-year medical students from RWJMS-Camden to support the development of the first Adult HOP Clinic. This clinic provides free medical care to 110 uninsured adult residents of Camden in medical student-run sessions at the Cooper University Hospital Ambulatory Medicine Clinic on Wednesday evenings. Thirty-five clinical faculty volunteer as preceptors in the HOP clinics. Students staff all aspects of the clinic, from the front desk to the pharmacy. All third-year RWJMS-Camden students participate in this elective experience, and each student follows from one to three

patients for the year. A Pediatric HOP Clinic, begun in 2003, now serves about 80 patients whose families are uninsured residents of Camden. A Women's Health HOP clinic, begun in 2005, serves up to 60 patients.

In addition to the free clinics, the UHI arranges for medical student volunteers to teach CPR and First Aid in schools, day care centers and churches throughout the city, as well as an Education Program in which medical students provide small group and one-on-one teaching on a variety of health topics to five sixth-grade students at the Promise Charter School.

A joint program between UHI and Cooper Hospital, the **Health Science Academy** was begun in 2006 as an opportunity for Camden high school students interested in health-related careers to gain first-hand exposure to the hospital environment and to receive advanced teaching in the health sciences. After an application process, high school students are selected to participate in this year-long program, which occurs every other Wednesday afternoon. These students head straight to the hospital after school for additional lessons on a range of health topics, such as diabetes, cardiology, bone/joint fractures, and substance abuse. RWJMS-Camden students are actively involved in presenting these lessons and mentoring the participants. On alternating sessions, the students are taken onto the hospital floors for tours of various clinical departments and talks about a variety of careers within the hospital setting.

Rarely today are patients given an extended amount of time to spend with their primary care provider to ask whatever health related concerns they have. Adopted as a UHI project in 2006, the **Ask-the-Provider** program gives local Camden residents just that opportunity. Once each month, the program provides an open forum for them to ask health providers any questions they have in an informal, intimate, and relaxed setting. In cooperation with Respond, Inc., a local day care organization, several medical students have connected Camden residents with the medical expertise of volunteer physicians. This year, the program has taken on new shape, integrating a teaching segment for medical students to present a health-related topic to the evening's audience. Teaching topics this past academic year have included nutrition, infant feeding, asthma, children's health, and gynecological care.

MINI-MEDICAL SCHOOL (RWJMS)

The Mini-Medical School program has become an integral part of RWJMS' commitment to community service and education. For the past six years the Mini-Medical School for High School Students--*Achieving Excellence in the Sciences*--has served a class of over 180 students from high schools around the state. In addition to these students who share a profound interest in medicine and science, we teach their science teachers and their parents. The program provides opportunities for students to explore scientific interests and to speak at length with professionals who address patient care, research, and community service issues in their daily work.

Over the sessions students attend lectures and discussion groups with faculty members who are national and international leaders in their fields – in areas as diverse as cardiac and renal transplantation, cancer biology and advanced therapeutics, stem cell research, advances in neuroscience and “the adolescent brain,” pediatric AIDS and drug development, and culturally competent patient-centered care. Students have the

opportunity to practice “bedside manner” in sessions with medical students acting as patients. As a final assignment students demonstrate self-directed learning by researching a topic and presenting it to classmates at their home schools. A diploma is awarded to mark this early achievement in health sciences education.

MINI-MEDICAL SCHOOL (NJMS)

This program is designed to acquaint the community with the theory and practice of modern medicine, as well as to give them an understanding of the educational process involved in becoming a physician. NJMS public medical education programs are guided by a simple philosophical position: an educated patient is your doctor’s best ally. By empowering the individual, the physician and other health care providers are better able to serve the person. The Mini-Medical School program provides an education that is meaningful and enjoyable for each of its participants. The functions of the Mini-Med school were increased in 2007 to include outreach programs for homeless and abused women, adolescent males in trouble with the law, as well as for female and male prisoners.

NEW BRUNSWICK COMMUNITY INTERPRETER PROJECT (RWJMS)

The New Brunswick Community Interpreter Project (NBCIP) currently provides Spanish medical interpretation and translation services at the Eric B. Chandler Health Center (EBCHC). The Interpreter Project represents a unique point in which three distinct communities come together: Rutgers students, Spanish speaking residents of New Brunswick, and doctors, nurses and medical students studying and working in the city. Through federal work study jobs and volunteer opportunities, students have the exciting opportunity to explore the emerging field of medical interpreting while they develop solid job-related skills, such as professionalism, and enhance their Spanish language skills and knowledge of medicine. Moreover, healthcare providers who partner with NBCIP interns have the opportunity to learn about issues such as cross-cultural communication, the Hispanic culture and how to work with a trained interpreter.

Founded in 1999, the program’s interns have interpreted more than 125,000 patient-provider encounters, and translated over 100 vital medical documents. The EBCHC website has been translated into Spanish under the program coordinator’s supervision. The NBCIP has conducted basic interpreter training for bilingual staff at the Cancer Institute of New Jersey and formerly participated in the bilingual workshop given by the Department of Family Medicine for third-year medical students before they begin their clerkships. Starting in 2009, the NBCIP has begun to offer 40-hour professional medical interpreter training to local hospitals and community organizations. In 2010, the NBCIP conducted two 40-hour trainings, one for Robert Wood Johnson University Hospital, and another for the Robert Wood Johnson University Medical Group. In 2011, a short training followed by an interpreting skills evaluation was conducted for advance medical Spanish students at RWJMS. The NBCIP staff has also provided three training sessions through the UMDNJ Global TB Institute on how to work with an interpreter. The program is staffed by two program coordinators and 35 student interpreters.

NEW JERSEY CENTER FOR PUBLIC HEALTH PREPAREDNESS (SPH)

The New Jersey Center for Public Health Preparedness at UMDNJ (NJCPHP), located at the UMDNJ-School of Public Health, is one of 14 Preparedness and Emergency Response Learning Centers funded by the federal Centers for Disease Control & Prevention at schools of public health across the country. The New Jersey Center, in partnership with the School of Public Health at the University at Albany, develops and provides education and training designed to ensure that public health, health care, emergency response, and other workers are prepared to more effectively respond to any biological, chemical, or nuclear threats or emergencies, as well as infectious disease outbreaks and natural disasters. At the state level, NJCPHP works closely with the NJ Departments of Health and Senior Services and Environmental Protection, the Office of Homeland Security, and member organizations representing most public health workers in NJ.

Service accomplishments for NJCPHP included education and training sessions on Climate Change and Public Health targeting public health professionals in all fields as well as a major State-wide conference linking multiple locations by live video on emerging and re-emerging infectious diseases and many smaller training sessions as well.

For more information contact Dr. George DiFerdinando at diferdge@sph.rutgers.edu.

NEW JERSEY POISON INFORMATION AND EDUCATION SYSTEM (NJPIES) (NJMS)

New Jersey's first poison center was established in the late 1950s. By 1975 there were 32 "Poison Control Centers" located in acute care hospitals throughout the state. In 1978, in response to a federal initiative to develop regional emergency medical services, New Jersey developed a task force to look into how to provide poison center services. In response to this initiative, the state legislature passed enabling legislation calling upon the New Jersey Department of Health to develop a drug and poison information program for the State. In February 1983, as the result of this legislation and in a cooperative effort between the New Jersey Hospital Association and the New Jersey Department of Health the regional poison control system, New Jersey Poison Information and Education System (NJPIES) was born.

NJPIES is a member of the American Association of Poison Control Centers (AAPCC) and is designated as a regional Poison Control Center under AAPCC guidelines. Additionally, NJPIES manages the Department of Health and Senior Services AIDS/STD hotline. The Center also serves as an information source for the NJDHSS in cases of product tampering or product recall and in food-borne illness incidents, performing a valuable public service in time of crisis. NJPIES provides 24-hour, 7-days-a-week emergency service statewide for poison exposures and for general poison and drug information. Specialists in poison information, who are physicians, registered nurses or pharmacists, handle all calls.

Many of the specialists are fluent in Spanish and several are fluent in additional languages. NJPIES also has a contract with a telephone interpretation service which

allows immediate access to hundreds of languages and dialects. We offer TDD/TTY service for the hearing impaired. Specialists answer questions about adverse effects of medications, possible risks for drug interaction or the potential effects of medicines on pregnancy or breast feeding. Specialists also answer questions prior to exposure to or use of a potentially poisonous or hazardous product, such as household chemicals, plants, cosmetics or environmental contaminants like lead. They help the callers to assess the possibility for harm or damage and give recommendations for minimizing or eliminating risk. The Poison Control Center is funded through a contract with the State of New Jersey, Federal and other grants, and from private donations.

Lead Poisoned Children

Lead poisoning from deteriorating paint that contains lead is a major hazard for urban children. Severe lead poisoning can lead to seizures and death, while lower levels can impair performance in school and increase encounters with law enforcement authorities.

The New Jersey Poison Information and Education System (NJPIES) has established the New Jersey Lead Consortium, a monthly meeting where individuals from varied organizations such as DYFS, Medicaid and HMO's--as well as MDs, RNs, social workers and industrial hygienists--come together to discuss prevention/treatment of lead-poisoned children. At the monthly meeting, problem childhood lead-poisoning cases are reviewed, appropriate speakers are invited, and/or current journal articles are presented and discussed.

NUTRITIONAL SCIENCES (SHRP)

Department of Nutritional Sciences programs and the **Institute for Nutrition Interventions** provided numerous community contributions this year. Faculty and staff in the department help to coordinate screening and education for the Special Olympics. Department faculty and dietetic interns have worked with the student-run inter-professional clinic in NJMS. The Institute of Nutrition Intervention's LIFT UP program provides lifestyle modification counseling to individuals across the University.

The Dietetic Internship Program participates in a variety of community nutrition initiatives targeted to children and adolescents. Interns participated in the annual Children's Dental Health Awareness Day at Liberty Science Center promoting the role of diet in oral health. To celebrate National Nutrition Month, culinary presentations and nutrition exhibits were presented to high school students from the Union County Academy of Health Sciences. Nutrition education was provided at multiple YMCA sites located in Bergen, Monmouth and Union counties to celebrate "Healthy Kids Day". In conjunction with HealthBarn USA, interns participated in a 10-week program that provided a hands-on experience designed to introduce children at a young age to try a variety of seasonal foods.

The Coordinated Dietetics Program provides nutrition education classes to local community groups, schools, religious groups, and organizations. The students conduct a variety of community-based health promotion/disease prevention programs as well as provide nutritional education to WIC participants, Senior Congregate Meal Program attendees, school lunch participants, summer camp participants and those who attend food banks or soup kitchens.

Food Stamp Education: In conjunction with Rutgers University Cooperative Extension, UMDNJ-School of Health Related Professions has been providing nutrition education sessions for food stamp recipients in Essex County since 1998. The sessions are held in schools, after-school programs and community agencies.

OFFICE FOR DIVERSITY AND COMMUNITY ENGAGEMENT (NJMS)

The Healthcare Foundation Center for Humanism and Medicine

The center focuses the ideals of humanism not just in our educational programs but in our research endeavors, clinical practice and community outreach activities as well. We see our commitment to humanism as not only a way to enhance the medical education of our students, but ultimately, to change the way medicine is practiced. They offer a number of community activities including All E.A.R.S. (Encouraging Active Reception and Self-reflection). The program was established to bring together a dedicated group of students who would work together with the palliative care team at University Hospital to interact with patients who lacked their own support system and faced very serious illness or end of life alone.

Summer Medical and Dental Education Program (SMDEP)

SMDEP is one of twelve national programs funded by the Robert Wood Johnson Foundation and administered through the Association of American Medical Colleges and the American Dental Education Association. It is a free (full tuition, housing, and meals) six-week summer medical and dental school academic enrichment program that offers highly motivated college freshman and sophomores intensive and personalized medical and dental school preparation.

The SMDEP at NJMS/NJDS serves to advance the Schools' core mission of meeting society's current and future healthcare needs by preparing individuals underrepresented in medicine and dentistry and doing so while championing cultural competency and humanism in all aspects of education. SMDEP reaffirms its continued commitment and involvement in pipeline initiatives that will permit the attainment of even greater diversity. The SMDEP builds on 30 years of experience in providing academic enrichment programs geared toward attracting students into the health sciences. The curriculum has been carefully designed to enhance students' skills academically and personally, a requisite for success in medical/dental school. The program strengthens students' skills by providing the science course work, critical thinking, problem solving, and communication skills necessary to ensure that they are competitive for medical/dental school.

The content includes an introduction of academically challenging courses with an emphasis on the acquisition of skills based on principles of adult learning. By the completion of the program, students are able to identify and apply strategies and skills that work best for them. Specifically, the ultimate goal is to make the learner responsible for their education, a requirement of the life-long learning skills expected of the medical and dental profession.

Overall objectives of the SMDEP:

- Involving the student in a problem-based learning model of science education used to promote critical thinking skills and the acquisition of study skills and strategies
- Improving students' writing and communication skills as they relate to success in the practice of medicine and dentistry
- Assisting each student to develop and implement a personal academic and career plan
- Increasing students' awareness of diverse and/or underserved populations and how this affects the practice of medicine and dentistry
- Providing students with a limited but informative set of clinical experiences under the direction of outstanding faculty preceptors and role models

Northeast Regional Alliance (NERA) MEDPREP Scholars Program

The Northeast Regional Alliance (NERA) MedPrep Scholars Program is a partnership between New Jersey Medical School, Mount Sinai School of Medicine Center for Multicultural and Community Affairs, Columbia University College of Physicians and Surgeons and the Manhattan Staten Island Area Health Education Center.

The Program uniquely builds on the collective expertise of four outstanding institutions to expand health careers preparation for underrepresented and disadvantaged students from junior high school through medical school with the goal of increasing competitiveness for medical school. Ultimately, we expect that our scholars will have the humanism, professionalism and interpersonal skills required of a future physician caring for a diverse population. The three-year program includes: a six-week reading and science enrichment program; a six-week MCAT preparation with shadowing experiences; and a six-week research component.

Dr. Richard Pozen and Ann Silver Pozen Community Service Scholars Program

Initiated in 2009, the program supports and encourages medical student participation in community service projects. Students gain a community service understanding under the tutelage of faculty and/or sponsors. The aim of this program is to stimulate a student's on-going interest and develop their community skills in service to others, with the ultimate goal of motivating them to practice medicine in which service to the community is an integral part. Projects have been conducted on the local, regional and international levels. Local projects have included: Contraception Awareness: A Vital Part of Family Planning, Kick For Kid; Educating Disadvantaged Children in Martial Arts to Promote Healthy Lifestyles; Student Run Free Clinics as a Referral Center For the Follow-up of Uninsured Health Fair Patients; and A Healthy Lifestyles Community Fair: Fun Tips on Living a Better Life.

The SMART (Science, Medicine, and Related Topics) Program

The main focus of SMART is to enable minority students in grades 6–12 who are capable of high level academic achievement (but may lack the interest, skills or resources) to reach their potential and become competitive in the pool of applicants pursuing science and medicine careers. The program focuses on youth development and academic excellence and provides opportunities to students to gain the knowledge and experiences necessary to maximize their potential for success. The program's functionality and strength arises from the fact that SMART's pre-college students are guided by a dedicated team of NJMS faculty, staff and certified science instructors within

a medical school environment where medical resources are readily available. The students are afforded access to doctors, scientists, researchers, and a myriad of health care resources within UMDNJ.

SMART students are able to participate in scientific and medical experiences that are pivotal in their growth process. SMART enables students to enhance their skills and provides the tools necessary to succeed in health-related careers. Programs include:

- Hands-on Laboratory Experiments
- Problem Solving and Critical Thinking Activities
- Math Skill Enhancement
- Research Using Computers
- Interpersonal Communication Skill Enhancement
- Educational Field Trips/College Tours
- Science Related Guest Speakers
- Oral & Written Presentations
- S.A.T. Preparation
- Career Exploration
- College Recruiter Counseling
- Teamwork Activities
- Leadership Training

The Winter SMART Program

The program offers an intense hands-on curriculum involving laboratory experiments and computer research. Laboratory sessions include experiments in biology, chemistry and physics. In addition to the lab work, sessions are also conducted in the following: Math in Physics and Chemistry, Essay Writing for the S.A.T.'s (11th and 12th grades), Professionalism, and Oral and Written presentations. All students will attend lectures by health related professionals. Previous lecturers have included scientists, medical doctors from a variety of specialties, dentists, and other notable figures who allow for gaining an invaluable insight into professions in medicine and science.

The Summer SMART Programs

Young Explorers-6th Grade

6th graders explore the world of biological sciences

ChemPros-7th Grade

7th graders explore the world of chemistry

Biotrek-8th Grade

8th graders spend 5 weeks exploring the world of human biology

Fantastic Voyage-9th Grade

9th graders explore the physiology behind the body systems

Enviroquest-10th Grade

10th graders spend 5 weeks exploring the connections between Health, Science and Environment

Mission Health-11th Grade

11th graders explore the concept of providing health care as a service to the community. Students also participate in SAT Prep, college tours, college counseling and lectures

Biomedical Health-12th Grade

Research for 12th graders, AP Science courses, SAT Prep, college tours, college counseling and lectures

Email: smartprogram@umdnj.edu Website: <http://njms.umdnj.edu/SMART>

OFFICE OF MULTICULTURAL AFFAIRS (RWJMS)

The RWJMS Office of Multicultural Affairs/Office of Special Academic Programs sponsors programs to address health disparities or focus on culturally competent health care as a way of eliminating health disparities. Its goal is to educate the medical school community regarding cultural issues affecting quality health care as well as to foster diversity through recruitment and retention of students from groups underrepresented in medicine. The Office develops, organizes and sponsors educational, cultural and summer program activities that focus on increasing awareness and sensitivity so that students, staff, and faculty gain a better appreciation and respect for the differences that exist in our society.

OFFICE OF PUBLIC HEALTH PRACTICE (SPH)**Centers for Education and Training**

The Centers for Education and Training (CET) provides training to over 3,000 men and women at its training facility annually, offering 250 continuing education short courses. The courses focus on environmental and occupational safety and health topics. Training is provided to professionals who are responsible for occupational safety and health or environmental management. Trainees include industrial hygienists, safety professionals, occupational health nurses and occupational physicians. Courses include:

- Asbestos Training
- Confined Space
- Ergonomics
- Hazardous Materials & Waste Site Operations
- Hearing Conservation
- Indoor Air Quality
- Industrial Hygiene
- Lead Training for New Jersey and New York State
- Noise Protection
- Occupational Medicine
- Occupational Health & Safety
- OSHA Compliance
- Process Safety Management
- Respiratory Protection
- Spirometry

Toxicology & Risk Assessment

CET courses are held at the SPH Building in Piscataway. This central New Jersey facility affords excellent accessibility by public transportation, parking facilities adjacent to the building and easy access to downtown New Brunswick. CET's courses are held in modern classrooms and a hands-on workshop room. Additionally, CET provides off-site training to industry and governmental agencies. Led by experts in the field, classes are structured to be small enough to allow active discussion and personal attention, yet large enough to provide for a diversified group of participants. The Office of Public Health Practice (OPHP) manages cooperative agreements with the National Institute of Environmental Health Sciences, the National Institute for Occupational Safety and Health and the Occupational Safety and Health Administration.

The UMDNJ-School of Public Health received funding from the Mayors Fund to Advance NYC to provide mold awareness and general safety training to homeowners in NYC. This project included collaboration with the CUNY School of Public Health at Hunter College. Additionally, the SPH received funds from the NJ Department of Health to provide mold awareness and general safety training to homeowners and volunteers as well as to public health and building code officials.

New Jersey Public Health Training Center

The NJPHTC is based at the SPH Office of Public Health Practice, and key partnerships include the UMDNJ-NJMS Department of Preventive Medicine and Community Health http://njms.rutgers.edu/departments/preventive_medicine/, the New Jersey Health Officers Association <http://www.njhoa.org/>, and the New Jersey Department of Health and Senior Services <http://www.nj.gov/health/>. The Center's overarching aims are 1) to address through training and education the professional needs of the statewide New Jersey public health workforce, the impending shortage of public health workers and the leadership training needs of public health professionals, and 2) to further strengthen high need/low resource communities through enhancing the essential public health competencies of public health professionals.

Through existing relationships, the NJPHTC will broaden the scope of training available to the existing public health workforce. The NJPHTC will also expand collaborative projects that involve students, faculty and community based organizations. These collaborations will focus on public health issues in medically underserved communities. The Center is supported by the Health Resources and Services Administration.

The major projects of the Center are:

- Leadership training for local health officers
- Accreditation readiness training for local health departments
- Course offerings in select topics for the workforce generally, reaching the entire state
- Training of the prospective workforce through placement of SPH students in local health departments, and through dissemination of a course on public health for use in New Jersey Community Colleges
- Web-based case-centered training for public health students and professionals

- Public health and preventive medicine grand rounds for public health students and professionals

For more information on the Office of Public Health Practice, please contact Mr. Mitchel Rosen at mrosen@sph.rutgers.edu

PATIENT-CENTERED MEDICINE COURSE (RWJMS)

RWJMS launched a new course in 2006, *Patient-Centered Medicine*, to provide students with more opportunities early in their education to learn in clinical settings, to integrate basic science and clinical information, to address ethical issues, to teach communication skills, to enhance cultural competency, and to strengthen community service links. All students participate in service learning activities providing health education workshops in the community. All students also visit agencies that provide care in the community for disabled and other vulnerable populations. *Patient-Centered Medicine* fosters the value of community involvement and enhances opportunities for students to engage in community health programs. The course spans the first three years of the curriculum and provides longitudinal community experiences in New Brunswick and Camden.

PRIMARY CARE (SHRP)

The Institute for Complementary and Alternative Medicine (ICAM): ICAM makes many contributions to the community, through education, research and service. ICAM provided information about alternative therapies at the University Behavioral Health Care Health Fair and at the Women for Women Open House at NJMS-UH Cancer Center. Weekly yoga classes are offered to UMDNJ employees and at “Take your Child to Work Day”. ICAM launched an inter-professional integrative medicine seminar series for the UMDNJ community. This year the second annual International Integrative Medicine Day was celebrated with a panel discussion on acupuncture that served over 30 community members in person, but that was also distributed on the web for the wider community. NJMS-UH Cancer Center conducted a massage therapy research study that provided massage to cancer patients undergoing treatment. ICAM also continues to collaborate on the FACE (Food: Accessible, in the Community, for Everyone) project with the University Hospital Women, Infants and Children (WIC) program, providing instruction in mindful eating and mind-body practices for stress reduction, and yoga instruction for mothers and children in Newark.

The Respiratory Care Program-North makes many contributions to the community through its efforts to participate and support SHRP’s community outreach goal. Faculty and students participate in fundraising activities coordinated by the American Lung Association on an annual basis. Participation in the NJ Special Olympics continues to be a major activity in which students play a major role coordinated by the faculty. Finally, after months of meetings and visits to the Jordon & Harris Health Center and the mobile van in the Ironbound district of Newark, the SHRP- Respiratory Care Program-North is now an official member of the inter-professional team providing health services to the community serviced by these health centers in the City of Newark. Respiratory care students and faculty will be members of the health care team providing needed services to the community. This team will be delivering medical care to three public housing developments located in Newark, Hyatt Court, Pennington Court and Terrell Homes.

There are approximately 3,000 residents living in these developments – many adults and children dealing with uncontrolled asthma and COPD. The primary role of the program staff is to help develop asthma action plans and provide asthma and COPD education for patients and caregivers. The program will also provide on-site pulmonary function testing with a portable spirometer. The test results from the spirometer are needed in order to provide the best treatment plan based on the severity of disease.

The Respiratory Care Program-South Faculty and students have contributed to the American Lung Association through fundraising. Faculty and students are continually involved in outreach programs aimed towards smoking cessation both at the school and in public. Students take part in carbon monoxide screenings and provide tobacco cessation tips and information. Faculty provides tobacco cessation counseling and are available once a week for students, staff and faculty at the Stratford campus who seek help in quitting tobacco. In September of 2012 the tobacco cessation program was opened to employees and family of Kennedy Health Systems. On July 1, 2013 this service was opened to the public, and plans its first public outreach later in July.

The Physician Assistant Program faculty and students have contributed to a wide array of public services. Together, they provide a weekly evening clinic to the underserved in New Brunswick, NJ. A faculty member serves as the Clinical Director of Health Promotions for Special Olympics New Jersey. This same faculty member serves as a Lieutenant Colonel in the US Army National Guard Medical Company. The faculty and students volunteer at Elijah's Promise Soup Kitchen, serving meals to the homeless population of New Brunswick, and one faculty member joined a two-week medical mission to Nepal. Another faculty regularly volunteers at a charity clinic in Red Bank, NJ and another member serves on a local Board of Health. Students and faculty participate in fundraising activities for organizations such as Habitat for Humanity, Multiple Sclerosis, Healing the Children, AIDS, Ronald McDonald House, St. Jude's Children's Hospital, American Heart Association, American Red Cross, Live Strong Foundation, American Cancer Society, American Diabetes Foundation, World Vision to provide clean water to Africa and several local First Aid and Rescue Squads. They also participate in numerous health fairs around the state. This past year students and faculty contributed many hours to assist with Hurricane Sandy relief. Professionally, two faculty members serve on the NJ State Society of Physician Assistants (NJSSPA) Board of Directors, one of whom is President and another Past President. A faculty member serves on the New Jersey State Board of Medical Examiners Physician Assistant Advisory Committee and another is a Commissioner for the ARC/PA, the accrediting body for PA Programs. In total, the faculty and students spent more than 2,000 volunteer hours providing community service.

PSYCHIATRIC REHABILITATION & COUNSELING PROFESSIONS (SHRP)

This program's faculty and students participated in a number of advisory boards to contribute to community services goals, including: Project Live non-Profit Mental Health Agency, the Collaborative Support Programs non-Profit Mental Health Agency board of directors, and the Carelink NJ All Stars Program advisory board. The PhD in Psychiatric Rehabilitation program contributed to several wellness initiatives that help well in excess of 1,000 persons in need of services for severe mental illness. These services include psychometric consultations through the Certified Psychiatric Rehabilitation Practitioner Commission and Executive Board Memberships on committees such as Collaborative

Support Program of New Jersey and Project Live Incorporated. Finally, the Integrated Employment Institute has provided on-site training and technical assistance to build staff capacity and improve service outcomes. This service has been provided at a number of community psychiatric rehabilitation sites.

Ancora And Greystone Park Clinical Affiliation: The overall purpose of the Ancora and Greystone Park affiliations are to enhance the quality of patient care services at these State psychiatric hospitals by improving the competencies of direct care staff. To that end, five faculty members from the Department of Psychiatric Rehabilitation provide a variety of programming and technical assistance initiatives that impact over 250 patients annually. These initiatives include on-site undergraduate psychiatric rehabilitation course work, in-service training to improve staff group work skills, and specialized programs like the Program Readiness Mall for patients unable to use traditional hospital programs.

Anti-Stigma Initiative “Meeting and Learning From People With Mental Illness”: In collaboration with persons with serious mental illness and Collaborative Support Programs of New Jersey, SHRP faculty provide 30 presentations annually to over 800 children and adults in middle schools, high schools, colleges, and community groups. Those attending meet people with mental illness and learn from them about their recovery and the importance of seeking help.

Illness Management and Recovery: Six SHRP faculty are engaged in the implementation of the evidence-based practice of Illness Management and Recovery (IMR) at all New Jersey Division of Mental Health Services facilities and select contract agencies throughout the State. These faculty train professionals and assist them in implementing this new practice.

Integrated Employment Institute: The Integrated Employment Institute is a program within the Department of Psychiatric Rehabilitation at SHRP and is funded by the New Jersey Division of Mental Health Services. The mission of the Institute is to increase employment among people with psychiatric disabilities. To this end, the Institute seeks to influence individuals, organizations, and systems. The Institute works to increase the expectation of employment outcomes and to:

- Build the capacity of individuals to achieve or support employment goals
- Develop organizational cultures, policies, and practices that promote employment outcomes
- Remove systemic barriers and advocate for effective policies, practices and resources

The Institute operates in eleven New Jersey counties. These include Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Ocean, and Salem.

As a demonstration of best practices in the field, the Institute provides direct supported employment services to ten persons annually. These services include individualized career planning, competitive job development, placement, and follow-along support. The Institute provides service seminars to more than 100 persons with serious mental illness a year. These seminars are designed to build the capacity of the individual to direct his or her own career planning and acquisition. The Institute also helps mental health

agencies promote employment services and employment outcomes for persons with serious mental illness through didactic and in-vivo training and on-going consultation. This includes training and technical assistance to outpatient departments, partial care programs, supported employment programs, supportive housing programs, assertive community treatment programs and others throughout the region. Nearly 2,000 professionals a year receive training on more than 40 topics. Low-cost conferences and workshops are offered throughout the State where the participants can earn continuing education credit. The Institute convenes meetings of stakeholders and providers in various counties. Six of the Department's faculty members work full-time on this initiative.

REHABILITATION AND MOVEMENT SCIENCES (SHRP)

Physical Therapy – North: The Doctor of Physical Therapy Program North students and faculty provided over 1,000 screening and evaluation physical therapy sessions for members of the Newark and University communities through the student run *Community participatory Physical Therapy Clinic*. This *pro bono* clinic is open Tuesday afternoons throughout the year. In addition the students and faculty were involved in the wellness project with the serious mental illness group. Students and faculty continued their involvement in educational programs at the Newark Housing projects. This occurs quarterly and serves about 75 participants on each occasion. Faculty from the Newark DPT program are providing consultative services to the Physical Education faculty in the Essex County Vocational Technical School district on the integration of fitness measures that high school students should know in order to maintain or monitor their health following graduation. During PT Week and Allied Health Week Students and Faculty provided screenings for posture and safety on campus. Throughout the year students and faculty volunteered in the intensive care unit at University Hospital as part of the Delirium project. In addition, throughout the year students and faculty donated their time to provide screenings and education sessions on preventing back pain and posture, stretching and exercise for Cancer survivors at church events in Newark, the Young Fathers group at UMDNJ, various Relay for Life activities and many marathons and races throughout New Jersey. Faculty and students from both programs are involved annually at the Special Olympics New Jersey Summer Games in Ewing NJ, an event that has over 1,000 participants annually. Participants are seen as part of the fit for life section of the Wellness area.

Physical Therapy – South: Community contributions provided by the Doctor of Physical Therapy - Stratford campus include the monthly NJ Fit for Life project. This provides professional services to individuals who are HIV positive; 82 participants were served through this program. Approximately 30 older adults participated in the Program's Balance and Falls Screening during PT Month. Forty-one adult migrant farm workers and three hundred thirteen of their children were screened by students and faculty of DPT South. The Student Physical Therapy Association provided services at the Cathedral Kitchen Soup Kitchen in Camden and participated in fundraisers for the National MS Society, the Arthritis Foundation, the Foundation for Physical Therapy, UNICEF, and the March of Dimes.

Physical and Occupational Therapy - Newark Therapy Services offers full physical therapy and occupational therapy evaluation and treatment services to public school children in Newark, Paterson, Morristown School Systems and Essex County Vocational

School. These services are part of the faculty practice plan of the Department but also include opportunities for physical therapy and occupational therapy students to participate as part of the Department's community service expectations. The service is provided to students with Individual Education Plans or 504 Plans at all levels of primary and secondary education in the school system. This service is the largest of its kind in the country offered wholly by a physical therapy program.

S.A.V.E. PROGRAM **(Screening Access of Value to Essex Residents) (NJMS)**

SAVE, a program of the UMDNJ-New Jersey Medical School (Department of Medicine) and the Department of Radiology at UMDNJ's University Hospital, administers the mobile mammography van. The mobile van is staffed by a physician or physician assistant and a mammography technician from UMDNJ. Radiologists and administrators interpret the mammograms for follow up by the UMDNJ-New Jersey Medical School-University Hospital Cancer Center oncologists and surgeons.

SAVE'S mobile unit brings testing to virtually any place in the county where people will come to be screened: churches, health centers, schools. An outreach staffer goes to these locations, provides cancer education and makes appointments for those who are interested. Free breast and cervical cancer screenings are available to women ages 50-64 whose annual income is three times the Federal poverty level or lower.

The SAVE Program also offers colorectal cancer screening by providing at-home stool testing kits to people 50 and over and information about symptoms of this disease and early detection guidelines. In addition, SAVE offers PSA (Prostate Specific Antigen) blood tests and digital rectal exams to check for changes in the prostate. They also offer a Pap test during the pelvic exam. It can show cancer or pre-cancer of the cervix. Women who participate in SAVE are offered this test annually. Cervical cancer is easily cured if found early.

SCHOOL OF NURSING COLLABORATIVE INITIATIVES (SN)

State Hospital Clinical Affiliation

The UMDNJ-School of Nursing has been involved in a hospital clinical affiliation with **Essex County Hospital** that is now in its **sixth** year. A nurse clinician works collaboratively with the Director of Patient Care Services and medical administration on quality improvement projects, such as monthly nursing grand rounds, reintegration programs for long term care clients and the establishment of a restraint reduction program for all hospital staff.

The UMDNJ-School of Nursing's consultative collaboration with the New Jersey Division of Mental Health Services for 2012 has been very active in the following areas:

- Reviewed state-of-the-art mental health trends and assisted in initiating best practice programs for hospital units in concert with clinical leaders;

- Developed and assisted in maintaining nursing services certification and continuing education programs, i.e. CPI, Nurses Continuing Education Series, etc. in concert with Nursing Administration;
- Provided a.m. observation rounds on patient care units to implement concepts presented in the classroom environment and provided feedback to nursing personnel and administration;
- Assisted with initiating and maintaining student nurse affiliations;
- Initiated a Nursing Services Reference Library;
- Participated in implementation of hospital quality assurance/performance improvement committee initiatives to support continued quality care services;
- Participated in ongoing efforts to enhance patient care services based upon priorities set by hospital administration; i.e., research, programs, training and/or evaluation projects/programs; and
- Secured a mobile classroom for the Ancora site to encourage and facilitate site nurse participation in SN courses and programs. The mobile classroom is funded by an American Recovery and Reinvestment Act grant (ARRA) administered by the DHHS/HRSA.

The Bergen Volunteer Medical Initiative, Hackensack, NJ

Dr. Mary DiGiulio currently volunteers as an Adult Nurse Practitioner in this program. She is also on the Oradell Board of Health.

Casa Israel Newark

Throughout the academic year faculty and students provide health education, nutrition teaching, exercise planning, physical examinations and screenings for hypertension and diabetes at this adult daycare facility.

La Casa de Don Pedro

La Casa de Don Pedro offers free, quality, and culturally appropriate early childhood education with an English/Spanish bilingual program. Curriculum, instruction, personnel and support standards as well as facilities are consistent with and under the auspices of Newark Public Schools. The Pre-K experience is designed to provide a welcoming learning and socializing environment. Pre-K education has been demonstrated to improve the learning performance of the children who attend. Currently the program serves 255 children ages 3 and 4 at its three centers.

Covenant House

Covenant House is the largest provider in the state to homeless, runaway and at-risk youth between the ages of 16-21. They serve youth regardless of race, color, or creed, including pregnant youth and their babies. Covenant House New Jersey provides a wide range of services, from fulfilling a youth's immediate needs of food, shelter and clothing, to providing them with medical care, educational and vocational services, counseling, legal services, life skills, education, recreation, aftercare, pastoral care, drug abuse treatment and prevention support. Covenant House New Jersey receives private and

public funds to sustain its operations. They are supported by government agencies at the federal, state, county and city levels, as well as private foundations, for-profit companies and individual donors.

Healing the Children Northeast Chapter

Dr. Clare Golden traveled to Columbia South America on her 46th medical mission as a member of the surgical team administering anesthesia for children undergoing reconstructive surgeries for birth defects and burn scars. In addition, over the past 25 years she has traveled on medical missions to Guatemala, Ecuador, Nicaragua and Bangladesh, and has mentored 11 graduate nurse anesthesia students who accompanied her on missions.

Ironbound Community Center

The Ironbound Community Center provides preschool care for children of Newark residents holding down multiple jobs.

Ironbound Community Corporation

The School of Nursing has supported the mission of the Ironbound Community Corporation by providing nursing outreach to the homebound elderly, the Ironbound Child Care Center, the Hawkins Street Elementary School and the Hyatt Court and Terrell housing projects. Community health nursing students and Professor Cindy Sickora have conducted monthly blood pressure screenings at various sites in the Ironbound Community. The School of Nursing participates in Annual Community Fairs where health education and promotion are provided.

Irvington Family Development Center

School of Nursing associate professors Ruth Monchek and Susan Wiedaseck provide classes on contraceptive counseling to pregnant and postpartum teenagers at the Center.

ISLA (Instrucción en Salud Latina)

Dr. Frances Munet-Viláro is currently implementing a health literacy program with monolingual Latinos in collaboration with the Ironbound Community Corporation (ICC). The program is funded by the RWJ New Jersey Health Initiative. Graduate and undergraduate nursing students participate in the program as part of their community health and public health nursing field experience.

Jersey Pride, Inc. and Monmouth County Health Department

Assistant Dean Wendy Ritch, along with over sixty SN faculty, staff and students worked with Jersey Pride and the Monmouth County Health Department to offer SN's second annual free vaccination clinic at New Jersey's statewide LGBTQ (lesbian, gay, bisexual, transgender and queer) Pride event in Asbury Park in June. Pre-vaccination health screenings and fifty-five immunizations (Hepatitis A, Hepatitis B, and Tdap) were provided to members of the LGBTQ community, which is an underserved population. In addition, 290 brief LGBTQ Health Needs Assessments were completed by Pride participants, which will allow SN to tailor its services to the needs identified by community members. The SN Mobile Healthcare Project was also on-site to deliver individual consultations to anyone who identified on the needs assessment that they wished to discuss their health concerns with a nurse.

The Jordan and Harris Community Health Center

Visiting each public housing development on a biweekly basis, the Mobile Health Project has brought primary “medical home” services to a population where nearly 50% of the residents between the ages of 18 and 64 are uninsured. The APNs work closely with the J&H staff to ensure case managed health services to this underserved population.

The Leaguers-Clinton Avenue, Newark, NJ and Elizabeth, NJ

Drs. Dula Pacquiao, Frances Munet-Vilaro, and Rula Wilson, as well as an MSN student Ms. Tammy Cooper provide monthly health education classes for parents in health nutrition, child abuse prevention and oral care. In addition, at the Elizabeth branch, Dr. Pacquiao provides weekly health promotion activities for 192 preschoolers, including individual oral examinations and demonstrations on tooth brushing and demonstrations and supervised return demonstrations of hand washing; determining individual BMI analysis and suggesting appropriate caloric allowances to parents; and following up with additional information for the Center director, teachers and kitchen staff on appropriate caloric allowances and food services. Collaborations with the Health Care Coordinator took place in order to refer children to the Wellness Mobile Healthcare Service of UMDNJ. In late summer 2012, Drs. Dula Pacquiao, Mercedes Echevarria, Barbara Caldwell, and Rubab Qureshi collected data to perform a nutritional and physical needs assessment at the Leaguers.

Newark Beth Israel Medical Center

Dr. Elaine Diegmann participates in the Nurse Midwifery Service, which serves an ethnically diverse, economically deprived population.

Newark Pre-School

To ensure that quality health care services are available and accessible to our children, the Alberta Bey Head Start Center operates a Women, Infants and Children (WIC) supplemental nutrition program at that site in cooperation with the Newark Department of Health. Newark Preschool Council also enjoys collaborating with the Newark Community Health Center to provide medical and dental screenings to the children enrolled in this program. It is desired that the NJCHP become the preferred provider of these services.

NJ Health Literacy Coalition

The NJ Health Literacy Coalition addresses the health literacy issues at an individual, community and health care systems levels and offers training and advice. Professor Frances Munet-Vilaró is a member of the board.

The New Jersey Board American Psychiatric Nurses Association

Professor Carrie Carretta sits on the New Jersey Board of the APNA and is also a member of the Steering committee for the Forensic Council of the National APNA.

The New Jersey Perinatal Collaborative

Dr. Elaine Diegmann serves as a member of this collaborative, which is sponsored by the New Jersey Hospital Association (NJHA), to provide evidence-based care to reduce the caesarean section rate in New Jersey. She is also a member of NJHA's VBAC (Vaginal Birth after Cesarean) Taskforce-Epidemiology Subcommittee to study and recommend VBAC as a safe option for the women of New Jersey.

Nursing Service Leadership in the Dominican Republic

UMDNJ School of Nursing faculty and 4th level nursing students, in collaboration with the College of Saint Elizabeth and the Foundation for Peace, attended lectures and educational sessions, collected medical and health supplies, and traveled to the Dominican Republic in late 2012 to provide care and outreach education to approximately 2,000 individuals in two rural clinics over the course of four days.

Programs for Parents, Inc.

Community health nursing students and faculty are supporting the efforts of the child care health consultants from Programs for Parents by assisting with dental education in Essex county preschools.

RESPIRA Program

The School of Nursing is supporting the UMDNJ RESPIRA program by providing asthma workshops (according to RESPIRA protocols) in the Newark public schools to English-speaking families. The nursing faculty and BSN students, all of whom have been IRB approved, are providing follow-up home visits to the identified families. Workshops are offered two to three times per month at schools across the city.

Saint John's Church

Community health nursing students and faculty participate in weekly clinic activities offered by the staff at St. John's Church. Students work in the soup kitchen and provide blood pressure screening. Nursing faculty support the project by providing respite for the church nursing staff.

Leaders in Faith Community Nursing Certificate Program

Community health nursing students initiated and participated in a Faith Community Nursing certificate program which entitles them to use the credential of FCN once they pass their NCLEX. The program was in collaboration with St. Francis Medical Center. They attended a series of educational sessions which taught them how to integrate service to mental, spiritual and physical dimensions in community nursing service.

Community Health Fair and Screening

Community health nursing students and faculty participated in two community health fairs and screening programs servicing residents of Camden County. They developed and disseminated health education information addressing community health issues.

Community Focus Immunization Clinic

Community health students and faculty participated in a free Immunization clinic servicing a vulnerable population in northern NJ. Their collaborating agency was The Monmouth County Department of Health and Human Services.

Cancer Prevention Education Program for Vulnerable Populations

Community health nursing students participated in an outreach activity to migrant farm workers. After touring the work camps and discussing lifestyles with a large scale farm owner, students developed a Spanish focused health education pamphlet about cancer prevention and donated sun screen for use during summer farm work.

High Blood Pressure and Stroke Prevention Program

Community health nursing students participated in a national blood pressure and stroke prevention program titled "Million Hearts" program. Million Hearts® is a national initiative

that was launched by the Department of Health and Human Services in September 2011 to prevent 1 million heart attacks and strokes by 2017.

FEMA Disaster Preparedness Drill & Volunteer Program

Community health students participated in an interagency training exercise for the city of Philadelphia which included Philadelphia Department of Emergency Medical Services and the Department of Health. Students became approved volunteers (MRC) enabling them to serve the community in instances of disaster events.

WHO/UNICEF Baby Friendly Designation Implementation at University Hospital

Dr. Asunta Beardsley has been involved for the past three years in this national initiative to achieve baby friendly status at UMDNJ's University Hospital. The initiative is funded through the hospital by NICHQ. Dr. Beardsley also provides staff education for cross-training purposes in aid of this initiative.

UH American Sign Language Medical Interpreter

Dr. Joyceann Fileccia serves as an American Sign Language interpreter at the University Hospital and at various other healthcare facilities. She also teaches the course entitled "Deaf Culture and American Sign Language for the Health Care Provider" at UMDNJ.

SHARE CENTER (STUDENT HEALTH ADVOCATES FOR RESOURCES & EDUCATION) (NJMS)

SHARE was created in 1996 to channel several student efforts in community service as a united voice with the common goals of helping others and each other. Since its inception, SHARE has been facilitating student initiatives in service-learning through community health and educational outreach programs to the inner-city population of Newark and beyond. Through the seven sub-organizations of SHARE, NJMS students can engage in direct patient care, community education, youth mentoring, and more. SHARE also serves as a database for the many community programs in Newark with which students can get involved.

SHARE has three objectives:

- To establish and maintain community partnerships in order to improve the quality of outreach programs through ongoing community needs assessment.
- To encourage health promotion and disease prevention in the underserved Newark community and provide opportunities for patient and student education.
- To maintain the sustainable infrastructure that assumes responsibility for coordinating student projects and centralizes operations of existing community service programs at NJMS.

SHARE supports the following groups:

Early Start Mentoring Program

This is a community outreach project that places trained mentors into Newark elementary schools to promote positive social behavior and non-aggressive conflict resolution. The focus of the program is to develop self-esteem and social problem-

solving skills, while offering a caring and supportive outlet for Newark's youth. ESMP is designed to help provide these children with a foundation for accomplishing their future educational and social goals.

New Moms Program

In 2002, SHARE Center launched its latest initiative to impact the care of young mothers within the city of Newark. This program is designed to increase awareness about women's health among medical students as well as future mothers, and to encourage a healthy lifestyle during and after pregnancy. As a community-based health care organization, medical students enter the Newark community and effectively communicate with pregnant women about pressing maternal and prenatal health issues, identify at-risk mothers, and provide interventional support to increase the health and well-being of mothers and children in the city.

Program in Advocating Community Leader Empowerment (PINACLE)

PINACLE aims to educate and empower members of the Newark community by providing useful information about pressing medical issues and by training community leaders in disease prevention and treatment so that they may teach their members.

Relationships in Education for the Advancement of Community Health (REACH)

REACH is an outreach organization that aims to facilitate positive interactions and mentoring relationships between the medical students and the community that will ultimately improve healthcare outcomes for the people of Newark. It exists to reach out to the local population by promoting lifestyle change and prevention, while also providing a means for healthcare to the underserved. Activities involve health intervention programs, health screenings, and educational workshops. Professionals that REACH works with include community leaders (church leaders, community center leaders), physicians, local businesses, and more. Community groups that REACH works with include churches, hospitals, homeless shelters, and other community service groups.

Student Family Health Care Center (SFHCC)

SFHCC has been providing care to Newark's uninsured and underinsured residents since 1967. NJMS students join the clinic in their first year with third year students assuming the role of team leader. It provides a unique opportunity to care for those who often have no other place to go. Students enhance their understanding of the complexities of the delivery of care when access, language, education, and other socioeconomic factors are involved. This clinic is offered two evenings a week. Approximately (30-40 %) of clinic patients are Spanish-speaking. Implemented this year, the SFHCC has partnered with

- Casa Israel: older adult medical day care center, therapeutic and recreational services, primary and preventive health care (120 clients/day)
- La Casa de Don Pedro Community Centers: youth, family and counseling assistance, adult development including a Hispanic women's resource center, senior programs and domestic violence (5 sites)
- St. James Social Services Corp: after school youth programs, workforce development training, feeding programs, computers for seniors, food pantry (10,000 clients/year)

- Vision of Hope Community Development Corp: juvenile delinquency, substance abuse, domestic violence, lack of affordable housing, legal help, child care, feeding program, ex-offenders re-entry
- Fairmount Homeless Shelter: nighttime shelter, evening meals for about 40 homeless men and women who need on-site basic primary clinical care for acute and chronic diseases
- Newark Now: 15 Family Success Centers providing residents with tools to improve their neighborhoods. There is a need for increased health literacy and health education for all clients. Two agencies have predominantly Spanish-speaking clients.

Student Sight Savers

This is an organization dedicated to eliminating preventable eye disease through vision screenings and education as well as educate peers and to serve the Newark community. The NJMS chapter of Student Sight Savers is involved in the following activities:

- Preliminary vision screenings for children and adults in soup kitchens, homeless shelters, schools and at REACH health fairs.
- Telemedicine Outreach Program Services (TOPS) at UMDNJ.
- Vision education program presentations teaching students and adults about eye anatomy and eye disease by examining the history of ophthalmology through unique perspectives, such as the comparison of ancient and modern ophthalmologic procedures, art history seminars addressing eye disease in eminent artists and discussing of the social history of eyeglasses.

Students Teaching AIDS to Students (STATS)

STATS is an outreach program in which first- and second-year medical students lead HIV education and prevention workshops in Newark's middle and high school programs, health fairs, and within the UMDNJ community. STATS also reaches out to local adolescents living with HIV by matching them with medical students in a peer support program run in conjunction with the University Hospital.

SPECIAL OLYMPICS SUMMER GAMES (SHRP and NJDS)

For the 17th year, UMDNJ continues to provide services to the Special Olympics Summer Games.

The Special Olympics-Health Promotions program: The mission of the health promotions program is to obtain health screening data and provide health promotion education to as many Special Olympics Athletes as possible in one and a half days. Health screening data includes: weight, body mass index, bone mineral density, nutrition habits, tobacco exposure history, sun exposure history and blood pressure screening. In addition to obtaining this critical data for Special Olympics International, the SHRP team provides education on the following topics: tobacco avoidance, nutrition and healthy

eating, safe sun exposure, blood pressure and cardiovascular health. Students, staff and faculty from all SHRP departments participate in this inter-professional event.

In addition, SHRP faculty take a leadership role in the education and screenings provided by the American Physical Therapy Association in the Special Olympics "Fun Fitness" program by providing services under "Fun Fitness" (Also a part of Healthy Athlete).

The Special Olympics-Special Smiles program: The mission of this program is to increase access to dental care for Special Olympics athletes, as well as all people with intellectual disabilities. Dental screenings, oral hygiene instruction, and the fabrication of sports mouth guards are part of a collaborative effort by SHRP and NJDS to focus attention on the dental health issues facing New Jersey's Special Olympics athletes,

The two UMDNJ Schools also sponsor a health and wellness center for the Healthy Athletes Initiative of New Jersey Special Olympics, providing education and community service to New Jersey residents who join in Special Olympics activities.

Data collected on June 8th and 9th 2013 at NJ Special Olympics Summer Games will help to generate a snapshot of the health of a representative sample of the hundreds of thousands of Special Olympics athletes around the world. This data is used to encourage increased education and funding. Oral and nutrition research projects identifying oral and nutrition health status of these athletes have been presented and published on the international level, and have been used to support the need for extended services to this population.

STATEWIDE NETWORK FOR COMMUNITY ORAL HEALTH EXTRAMURAL DENTAL CENTERS (NJDS)

The New Jersey Dental School has shown its commitment to Newark and to the State of New Jersey with the creation of the Statewide Network for Community Oral Health. Needs assessment was performed which revealed that access to dental care was a problem for historically underserved populations; i.e., the low income, the indigent elderly, migrant workers and their families, those physically and mentally challenged, and patients living with HIV/AIDS. The purpose of the Statewide Network for Community Oral Health is to carry out the educational and service missions of the University and the Dental School. The Statewide Network provides dental services to communities throughout the State of New Jersey, with dental centers in Atlantic, Camden, and Somerset Counties.

The Statewide Network and the New Jersey Dental School in Newark had over 100,000 patient visits this past year. The dental centers in the Statewide Network serve as a venue for increasing the number of oral health care providers in underserved communities in New Jersey; increasing access to quality oral health care; and expanding the educational component of training proficient oral health care providers who are culturally competent and sensitive to the needs of the underserved. The UMDNJ-New Jersey Dental School with its Statewide Network of Oral Health Centers is the largest single provider of oral health care to the State's Medicaid population. In addition, it also is the largest provider of oral health care to the special needs and underserved populations in New Jersey. New Jersey Dental School is the only undergraduate

academic dental Institution in New Jersey. This year 113 seniors received DMD degrees from NJDS and went on to postgraduate training and private practice.

STUDENT GOVERNMENT AND CENTER FOR ACADEMIC SUCCESS (SN)

The Apostles' House Food Pantry, Newark

The School of Nursing Student Government Association and Community Ambassadors jointly sponsored a food drive for The Apostles' House Food Pantry during the 2011 holiday season. Both faculty and students participated in this very successful campaign to raise awareness and to bring holiday cheer to many families in need.

The Apostles' House Adopt a Family Program, Newark

The School of Nursing Community Ambassadors and Student Government Association jointly sponsored The Apostles' House Adopt a Family Program, providing age-appropriate holiday gifts for families in need in their family shelter residence.

Book Drive for The University Hospital

The Student Government Association led a book drive last fall. Students collected over 100 novels to provide free of charge to patients and their families during and after hospitalization.

Winter Coat and Shoe Drive for The University Hospital

The Student Government Association led a winter coat and shoe drive last fall to provide assistance to individuals who arrive at the hospital with inappropriate or inadequate winter coats and footwear.

Men's Clothing Drive for Mental Health Unit at The University Hospital

The Student Government Association led a men's clothing drive to collect gently used clothing for the Mental Health Unit at The University Hospital. The nurse manager was extremely grateful for their efforts and stated they have enough clothing for the next several years.

Missionaries of Charity Soup Kitchen, Newark

The School of Nursing Community Ambassadors and Student Government Association volunteer with other undergraduate students at the Missionaries of Charity Soup Kitchen at least two times per month. Students work with other church volunteers to provide a hot meal to individuals in need within the community.

Trinity Church, Newark

The School of Nursing Community Ambassadors and Student Government Association volunteer with other undergraduate students at the afterschool program at Trinity Church. The program is designed to assist school-age children with their homework. They also serve as mentors and provide social and behavioral role modeling.

Nursing Service Leadership Trip to the Dominican Republic

Lynne McEnroe and Sharon Anderson helped organize and participated in the Nursing Service Leadership trip (for the 5th consecutive year) as part of the Community Health and Pediatric Nursing courses in the undergraduate program. This collaborative community, transcultural, and interdisciplinary health effort between the RN to BSN, Masters in Psychology, and undergraduate Global Studies students from the College of

Saint Elizabeth and the accelerated BSN students from the UMDNJ School of Nursing provided health services and health education to several communities surrounding Santo Domingo. The students led a fundraising effort to provide ceramic water filters to each family (~110) residing within the community so each has a source of clean water in their home.

SUMMER CLINICAL INTERNSHIPS FOR UNDERGRADUATES INTERESTED IN MEDICINE (RWJMS)

The Summer Clinical Internship Program was initiated in 2002. Each year approximately 30 students have the opportunity to shadow clinical faculty members at the medical facilities in New Brunswick. Students are paired with faculty in specialties representing students' interests and are encouraged to keep the hours of the clinicians in order to get a real sense of the specialty, the issues in patient care and the practice of medicine. A lunchtime seminar series on issues as diverse as caring for patients with limited English proficiency to ethical issues related to patient care to barriers to organ donation, complement the clinical experiences. Students will also take part in a pedagogic exercise at the end of the program with brief presentations to their peers on topics selected and researched with the guidance of the faculty preceptors.

SUPER NEIGHBORHOOD COMMUNITY COVENANT PARTNERSHIP FOR HEALTH CARE (SNCCPH) (NJMS)

Super Neighborhood Community Covenant Partnership for Health Care (SNCCPH) is a partnership between the NJMS Department of Family Medicine and the Office of Community Outreach and Engagement of the City of Newark. Under this partnership the principles of community-based participatory engagement are followed. Community-based participatory research is a collaborative approach to research and outreach that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities.

TOBACCO DEPENDENCE PROGRAM (SPH)

The Rutgers -Tobacco Dependence Program (TDP) is a joint effort between the Rutgers-School of Public Health, Robert Wood Johnson Medical School, and the Cancer Institute of New Jersey. The program comprises a multidisciplinary team with specific expertise in treating tobacco dependence and in training other health professionals to do so effectively. More details on the work of the program can be found at <http://www.tobaccoprogram.org/>.

The Tobacco Dependence Program Clinical Activities The Tobacco Dependence Program opened its doors in January 2001 to provide specialist assessment and treatment for people who want help to stop tobacco use. Since then, the TDP has seen over 6,000 patients, approximately 30% of whom remain abstinent six months following their quit date. The TDP serves as a tertiary referral and consultancy center for health professionals throughout the country who may need assistance.

Tobacco Training and Consultancy for Health Professionals The Tobacco Dependence Program offers specific consultation and training services for treatment and service providers. TDP is a nationally-recognized leader in tobacco education, having trained over 2,000 healthcare professionals from 38 states and ten countries around the world to become eligible for Certification as a Tobacco Treatment Specialist. TDP is one of a handful of tobacco training programs Accredited by the Council for Tobacco Treatment Training Programs.

Research The TDP is active in tobacco research and has published over 100 papers in peer-reviewed journals over the past ten years, including clinical trials on pharmacotherapy, evaluation of tobacco treatment interventions in various smoking populations, predictors of abstinence (night smoking, menthol), and attitudes and practices of healthcare providers. Many of our publications have been authored by our students on work conducted with community agencies for fieldwork placements.

Tobacco Control Policy TDP has worked with numerous organizations with their tobacco-free campus policies, including the Cancer Institute of New Jersey and Robert Wood Johnson University Hospital. These organizations' slogan "**Clean Air Because We Care,**" illustrates a commitment to the health and well-being not only of our patients and their families, but also to the University community.

For more information about the Tobacco Dependence Program, please contact Michael Steinberg, MD, MPH, FACP; Director of the Rutgers-Tobacco Dependence Program at michael.steinberg@rutgers.edu

TRINKETS AND TRASH: ARTIFACTS OF THE TOBACCO EPIDEMIC (SPH)

This program monitors and collects current and historic examples of tobacco products, promotional items, tobacco marketing materials and advertising. It is intended to serve as a source for scholarly research; provide a historic record of tobacco industry products, marketing and promotion; and serve as a tool for advocacy and educating the general public. The website <http://www.trinketsandtrash.org/> features a search engine and archive of downloadable images of the newest products and promotions, along with images of older, more familiar items and some rare antiques. Detailed information about the content of many items in the collection is also maintained in offline databases as part of ongoing surveillance and research activities. In addition, Trinkets and Trash develops and disseminates monthly Surveillance Updates, page-long summaries describing and linking readers to images of the latest tobacco advertising activities, and uses Twitter to highlight tobacco marketing news and new additions to the collection in real time. Examples of the collection are on display at SPH in Piscataway. For more information on this project please contact Dr. Jane Lewis at lewismj@rutgers.edu

THE UMDNJ-SN MOBILE HEALTHCARE PROJECT/ NEW JERSEY CHILDREN'S HEALTH PROJECT (SN)

The UMDNJ School of Nursing, in a collaborative joint partnership initiative with the Children's Health Fund and the Healthcare Foundation of New Jersey, has implemented a Mobile Healthcare Project designed to improve access to care for the underserved

residents of Newark, Irvington and Elizabeth, New Jersey. The Project staff provides primary care and screening services via a mobile healthcare facility designed to reduce the traditional barriers to health care access. This grant-funded initiative employs a collaborative approach and outcomes oriented focus for a nurse-faculty managed, university-based mobile healthcare project, in collaboration with the UMDNJ University Hospital. The Project effectively uses faculty-supervised nursing and medical students and an interdisciplinary mobile healthcare team staff, in association with the clinical affiliates of UMDNJ, community-based organizations (CBOs) and faith-based healthcare initiatives.

To foster community support, the Project uniquely creates public-private partnerships to improve access to care for urban at-risk populations. The broad objectives of this nurse-faculty managed mobile healthcare project are: 1) to screen, identify and provide health promotion disease management services for at-risk populations; 2) to foster community involvement in the health assessment and referral process; and 3) to provide culturally and linguistically sensitive health promotion/disease management health education. To implement this initiative, the Project Director secured over \$2.5 million in federal and foundation grant awards from the Health Resources and Services Administration, The Robert Wood Johnson Foundation, The Healthcare Foundation of New Jersey and the Children's Health Fund. Attesting to its widespread recognition, the Project has been showcased in the lay press and is the subject of numerous articles appearing in nursing publications. To date, the Project has logged over 3,400 scheduled patient encounters, in partnership with 24 community-based organizations.

FISH Hospitality Program Trinity Presbyterian Church, East Brunswick

The mission of the FISH Hospitality Program (FHP) is to serve homeless families and single women by providing shelter and meals, and such other assistance as they are able, in order to give them a new opportunity to live independently in their communities as respected families and individuals. FHP assists and enables our guests to obtain housing, jobs, medical services, and other assistance to which they are entitled, as far as resources allow. FHP serves people in need without regard to race, religion, national origin, or disability. Beth Knox APN is a volunteer for this program.

Trinity Presbyterian Church Mission outreach programs

Trinity Presbyterian Church, East Brunswick is an East Brunswick Community Shelter during times of disaster such as "Hurricane Sandy". Beth Knox APN is a volunteer at this shelter. She participated in organizing shore town soup kitchens for victims of Hurricane Sandy in the fall of 2012 and is currently participating in the Sandy Presbyterian Disaster Relief project housed at Aldersgate Methodist Church, East Brunswick. The Methodist church is providing shelter for the volunteers and Trinity Presbyterian church is preparing meals for the volunteers.

VOLUNTEER OPPORTUNITIES IN COMMUNITY- ENGAGED SERVICE (SPH)

Volunteer Opportunities in Community-Engaged Service (V.O.I.C.E.S.) is a student and faculty community service organization established in 2004 at the UMDNJ-School of Public Health. V.O.I.C.E.S. is dedicated to working together with community groups in cities across New Jersey to identify public health needs and design useful service projects for students, faculty and staff that address these needs. Its mission is to provide a forum for public health students, faculty and staff on all three SPH campuses (Newark;

Piscataway/New Brunswick; Stratford/Camden) to reach out to their communities by organizing and participating in volunteer community service projects with a public health focus.

The organization allows students to gain practical public health experience, interact with other students with similar interests, and incorporate social responsibility into their academic experience. At the same time, it provides mentoring opportunities for faculty and enables students and faculty to positively impact the communities in which they live, both locally and globally. In 2012-2013, a Newark chapter of VOICES was also established. Projects for Piscataway and Newark included:

Piscataway Projects

Fall:

- Back to School Welcome for SPH students with healthy snacks
- Healthy Snack Bar for Clients at Elijahs Promise
- Food Day “Super-Size Me” and Healthy Pizza/October 19
- Fall Food Drive/October
- Seed Sale for New Brunswick Community Gardens
- Nutrition Education/Woodrow Wilson Football Team/Camden/October 15
- Blood Drive/American Red Cross/November
- World AIDS Day Event/AIDS Memorial Quilt Exhibit/November 27th-29th
- Pie Sale/Pre-Thanksgiving/November
- Soup Sale for a fundraiser for Operation Smile/December 6th
- Giving Tree/DR Project/December
- Children’s Holiday Wish Gift Drive/December
- Second Annual V.O.I.C.E.S. Cookbook/ongoing

Spring :

- Foot Health Education & “Sock Drive” for MLK/Cathedral Kitchen/Jan 21st
- Cervical Cancer Education—SPH Foyer/January 30th
- RED Heart Bake Sale/February 14thFundraiser for AIDS Memorial Quilt Project (\$175) /February 19th
- *Soundtrack for a Revolution*/ Black History Month/February 19th
- Nutrition Education/Granola Bars Sale for Habitat for Humanity/SPH Public Health Symposium/April 3
- “Make your Own Sundaes” Fundraiser for Habitat for Humanity /April 9
- Beach Clean-up—Sea Isle, NJ/April 13th

- Habitat for Humanity/April 20th with Coastal Habitat
- Blood Drive—American Red Cross April 25th

Newark Projects:

Fall:

- Making Strides Against Breast Cancer Walk (October): Participated in American Cancer Society's annual 5K walk to raise money for breast cancer.
- Food Week (October): Partnered with SGA to collect canned goods and donate to local area food bank;
- Halloween Healthy Goody Bags (October/November): Collaborated with SPH SGA and School of Nursing to create healthy goody bags for pediatric in/outpatients at University Hospital (bags were delivered in November instead of on Halloween due to Hurricane Sandy)
- National Food Day (October): held potluck with SPH SGA in celebration of National/World Food Day; served healthy pizza to UMDNJ community in cafeteria on National Food Day, helping to raise awareness about sustainable food options
- Bake sale (November): Sold baked goods and raised over \$320 for Wynona's House
- Wynona's House Christmas Activities (December): money was donated to Wynona's House to help fund and support their Christmas party which provides clothing and toys to children who are unable to afford these items

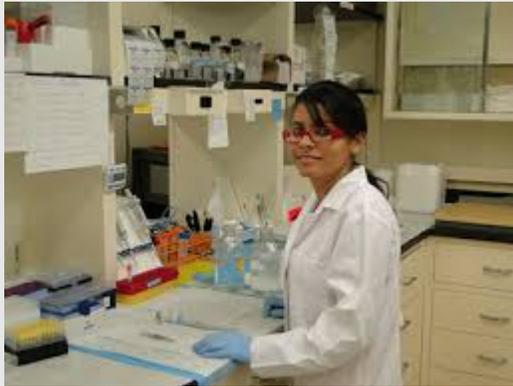
Spring

- Pre-Valentine's Day Bake Sale: raised over \$200 for Wynona's House (for a grand total of over \$500 raised this year).
- Read Across America (celebration of Dr. Seuss' birthday): collected over 1,000 books for Wynona's House and celebrated the day with the children there.
- April Public Health Awareness Campaign for National Public Health Week
- Fairmount Garden Project clean-up (April)
- Habitat for Humanity build project in Newark (April 19)

For more information on V.O.I.C.E.S., go to <http://www.sph.rutgers.edu/service/voices/index.htm> . In Piscataway contact Dr. Bernadette West at westbm@sph.rutgers.edu and in Newark contact Teri Lassiter at lassiter@sph.rutgers.edu

YAFFA ROSE INTEGRATED CARE CENTER (NJMS)

The Yaffa Rose Integrated Care Center is collaboration between UMDNJ-University Behavioral Health Care Center (UBHC) and New Jersey Medical School, Department of Family Medicine to provide comprehensive healthcare to UBHC consumers. Integrated care is a health care approach in which primary care and mental health providers partner to manage the treatment of persons with mental health problems in the primary care setting. Two decades of research have demonstrated that the integrated care model improves primary care patients' mental health outcomes with a minimal investment of resources.



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FY 2013 FINAL UMDNJ RESEARCH REPORT

On July 1, 2013, the New Jersey Medical and Health Sciences Education Restructuring Act went into effect, integrating Rutgers, The State University of New Jersey, with all units of the University of Medicine and Dentistry of New Jersey (UMDNJ) except the School of Osteopathic Medicine in Stratford, which merged with Rowan University and University Hospital, which is now free-standing. The legacy UMDNJ Schools as well as biomedical schools/units from Rutgers University were designated a fourth “campus” of Rutgers University, the Rutgers Biomedical and Health Sciences (RBHS) campus.

This marked the official end of UMDNJ as the leading New Jersey institution of graduate biomedical education and life sciences research and the beginning of an integration that will support and extend the opportunities for “legacy UMDNJ” schools to conduct invaluable research, make remarkable discoveries, train the scientists of the future and create a positive economic impact on the State of New Jersey and beyond.

UMDNJ’s record of attracting sponsored research funding has been consistently impressive, having received more than \$2.2 billion in funding over the last decade. UMDNJ pioneered multiple medical breakthroughs and has been at the forefront in the understanding, diagnosis and treatment of infectious diseases, cancer, and diseases of childhood and the aging community. UMDNJ has recruited and produced internationally recognized leaders in diverse areas ranging from the impact of environmental toxins on human health to the role of the oral cavity in prevention and diagnosis of disease. Teaming with the best talent locally and globally, UMDNJ has advanced the science, technology and clinical practice of medicine, and the legacy UMDNJ schools will continue to do so as Rutgers/Rowan researchers.

Translating the discovery of new medical interventions and treatments into commercialized products requires a strong partnership with industry. In recognition of the need to streamline this partnership, UMDNJ invested in two critical areas. The Office of Technology Transfer and Business Development worked closely with biotechnology and pharmaceutical companies to license our technologies, and with venture capitalists to fund faculty start-up companies across the state. In the past seven years, intellectual property (IP) revenue has increased from \$0.16M to \$8.1M, and the number of UMDNJ start-up companies has grown to 29 – all focusing on new diagnostics and therapies – and all in New Jersey. Our Clinical Research Organization (CRO) was developed to oversee and support UMDNJ’s clinical research infrastructure – the largest of its kind in New Jersey – in the conduct of industry and federally-sponsored clinical trials. There are currently over 3,000 clinical studies and more than 400 clinical trials conducted at legacy UMDNJ schools.

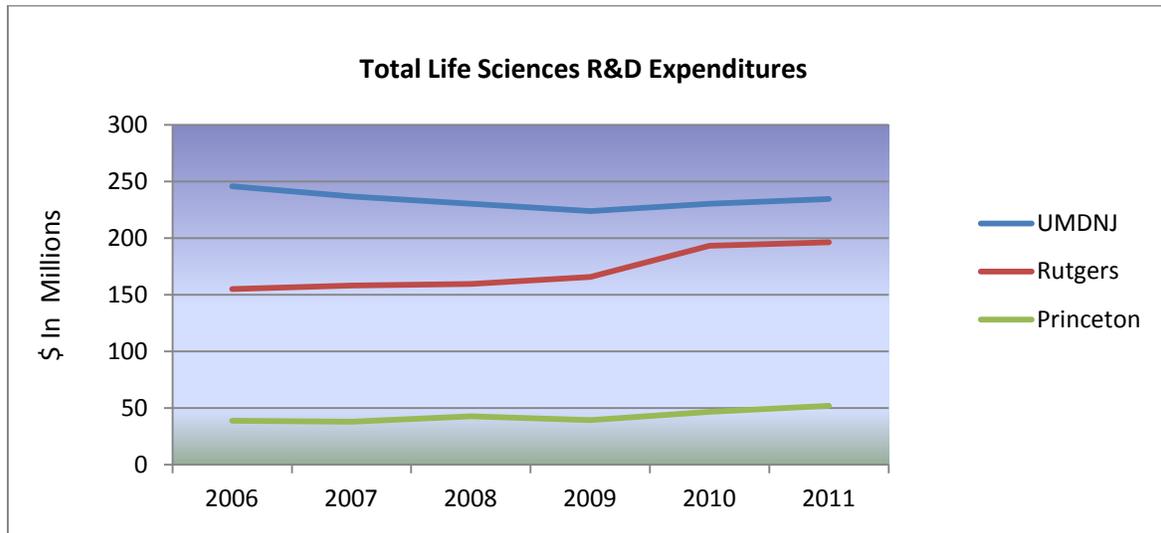
UMDNJ was a very successful research enterprise in terms of scientific discovery and economic development. A snapshot of some of the more recent research structures and highlights is provided in this FY 2013 report.

UMDNJ RESEARCH FACTS

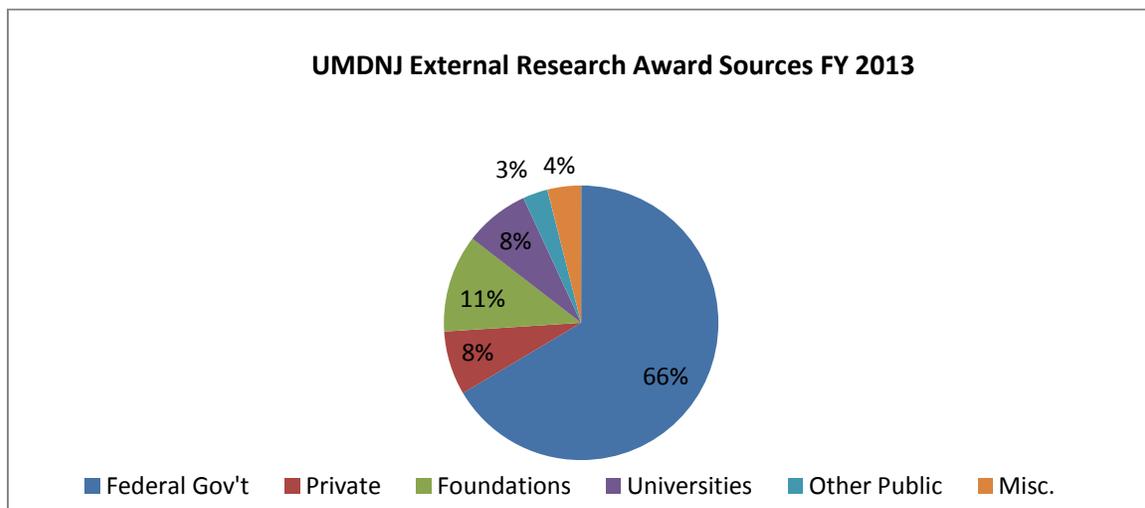
- UMDNJ consistently topped all New Jersey universities in total life sciences and federal life sciences research expenditures, according to the most recent published NSF comparison data (FY2011) (\$234.4 million and \$124.6 million, respectively). Among all public and private U.S. universities these expenditures rank #53 and #57, respectively.
- UMDNJ also led N.J. universities in NIH awards. In FY2012 NIH awarded \$89.1 million to the University.
- UMDNJ faculty published their research findings in top national and international journals, including Science, Cell, Nature, The New England Journal of Medicine, Proceedings of the National Academy of Sciences, etc.
- UMDNJ faculty received many prestigious national and international awards for their research achievements.
- UMDNJ faculty sat on major national and international advisory panels.
- UMDNJ is conducting nearly 3,000 clinical studies (clinical trials, other bio-medical and social behavioral) and more than 400 active clinical trials with more than 25,000 subjects enrolled.
- UMDNJ researchers worked with more than 400 companies, including most major pharmaceutical and biotech firms.
- UMDNJ increased its intellectual property (IP) revenue from \$160K to over \$8.1 M in the last 7 years,
- UMDNJ commercialized multiple medical technologies, including the ARISK autism test, T-Spot TB assay, and AMH fertility diagnostic test.
- UMDNJ teamed with the Foundation of UMDNJ to create the first and only university venture fund in the state.
- UMDNJ created 29 new spin-out companies with 272 new NJ jobs.
- UMDNJ trained the biomedical researchers of the future, offering the most biomedical graduate degrees in the state.

LIFE SCIENCES RESEARCH

Due to the broad expertise and strong research history of its many faculty, UMDNJ was very successful in obtaining external funding. Over the last 10 years UMDNJ was awarded more than \$2 billion dollars to conduct important biomedical research, train future scientists and expand research facilities. Comparative data for the next two largest life sciences research universities in New Jersey in recent years are shown below.



Each year roughly two-thirds of UMDNJ's research awards were provided by federal government sponsors, NIH in particular. In the last five years, NIH awards to UMDNJ totaled \$544.2 million dollars. Federal funds represent new and outside money to the state of New Jersey, the local impact of which is described in the Economic Impact section of this report. The following graph shows the relative proportion of research award sources in FY 2013.



CLINICAL RESEARCH

UMDNJ Clinical Trials and Public Access

Clinical trials test and validate the safety and efficacy of new drugs, diagnostics, medical devices and treatment modalities in human subjects. Academic medical centers are key contributors to this development process by providing access to highly skilled and knowledgeable clinical research faculty, experienced research staff, and depth of expertise in important therapeutic areas.

UMDNJ was an active leader in clinical research to advance the treatment of disease, identify the most effective methods of treatment and understand the effects of nutrition and the environment on human health. All three of UMDNJ's medical schools, as well as the Schools of Nursing, Public Health, Dentistry, Health Related Professions and Biomedical Sciences, lead studies on a wide range of diseases. In addition, UMDNJ had a broad range of facilities that are utilized and specialized for the purpose of conducting research, including the RWJMS-Cancer Institute of New Jersey (one of approximately 40 National Cancer Institute designated Comprehensive Cancer Centers), the Pediatric and Adult Clinical Research Centers (CRC) at RWJMS, the dental CRC at NJDS (one of only 9 Dental Clinical Research Centers in the US), the NJ Cancer Center, The Tuberculosis Institute, and the Public Health Research Institute at NJMS.

Clinical research at UMDNJ was conducted with the support of the federal government, various foundations, and in partnership with industry.

UMDNJ was the coordinating center for two large, high-profile national trials which were recently successfully completed. The Carotid Revascularization Endarterectomy versus Stenting Trial (CREST) showed similar outcomes for carotid artery stenting and carotid endarterectomy for the treatment of carotid stenosis. The CREST trial comparing these two interventions enrolled 2,502 patients from 117 US and Canadian centers.

The University was also a lead site for the Women's Health Initiative (WHI) trial, which addressed the most common causes of death, disability and impaired quality of life in postmenopausal women. The WHI was a 15 year multi-million dollar endeavor, and one of the largest U.S. prevention studies of its kind. Over 161,000 subjects were enrolled nationally.

One of the challenges of clinical research is to ensure that new therapies are tested in multiple populations to determine efficacy for everyone. UMDNJ-New Jersey Medical School was awarded a grant to specifically focus on improving access to cancer trials for patients of diverse ethnicities. UMDNJ had also been creating, testing, and deploying novel methodologies for individuals at risk for diseases such as hepatitis C, providing them with information to assess their risk and seek testing and treatment. In the case of the hepatitis C effort, the anticipated outcome is a significant reduction in the number of patients requiring liver transplants in the future.

The FDA and payors are relying on the pharma/biotech industries to utilize biomarkers to predict the need for expensive new drugs. UMDNJ is a leader in the development of these specialized diagnostic tests to both identify and clinically validate these new biomarkers. Several research core centers across UMDNJ as well as a CLIA certified

testing laboratory at NJMS support this effort and provide valuable services within the university and to the external clinical community.

The UMDNJ Clinical Research Organization (CRO)

Recently, UMDNJ brought its statewide resources together with a single point of contact in order to maximize operational efficiency and compliance, leverage scarce resources and serve as an engine for growth. The UMDNJ Clinical Research Organization (CRO) was created to provide “local control and global coordination” which is well suited to the diverse capabilities and resources available throughout the university. The CRO provides a portal into the University to select services at specific sites, or concurrent services at multiple sites across the state; it matches internal capabilities with external partners. As a result, UMDNJ increasingly became a preferred strategic partner to industry (pharmaceutical, biotech, and medical device), other CROs, and the federal and state governments for the execution of clinical research and the performance of clinical research-related functions including outcomes research. UMDNJ had strengths in all aspects of the clinical research process, from initial studies in humans to the management of large multi-center trials. UMDNJ faculty were active in developing new study protocols, conducting studies and data to support publication and submission of the results for regulatory approval.

This initiative will provide significant benefit to the State of New Jersey by enhancing the reputation of the state in healthcare, increasing New Jersey’s ability to retain and recruit pharmaceutical, medical device, diagnostic and biotechnology companies, and by providing a mechanism for training of the clinical research workforce. The integration with Rutgers University will strengthen and enrich the capabilities of the CRO with the goal of providing leadership in clinical research, education and training to Rutgers clinical researchers as well as affiliates and partners across the state of New Jersey, and access to the latest clinical advances for the people of New Jersey.

HUMAN SUBJECT PROTECTION PROGRAM – 2012-13

The mission of UMDNJ's Human Subject Protection Program (HSPP) is to support the University's research enterprise by ensuring the protection of individuals who participate in research; ensuring compliance with all pertinent federal and state laws and regulations; fostering the ethical conduct of human subjects research; and providing education and other services to the University's researchers regarding regulatory requirements and best practices.

HSPP assures that UMDNJ fulfills its institutional responsibilities for the conduct of research involving human participants through its three University IRB Campus Systems, in Newark, New Brunswick/Piscataway and Stratford/Camden; a contractual relationship with [Western IRB \(WIRB\)](#) for review of industry-sponsored protocols conducted by UMDNJ faculty at UMDNJ performance sites; a program of education for faculty and other researchers; and an audit/review program for oversight of studies in progress.

UMDNJ IRB committees are comprised of physicians, nurses, pharmacists, physical and social scientists, non-scientists, and unaffiliated community members. From July 2012 to June 2013 there were approximately 3000 open studies conducted throughout the UMDNJ system. The four Newark campus IRB committees had oversight for approximately 1400 studies. There are 64 active IRB members (both regular and alternates); seven of whom are community members. The four New Brunswick/Piscataway IRB committees had oversight for approximately 1200 studies. In New Brunswick/Piscataway there are 57 active members; four of whom are community members. The one Stratford IRB committee oversees approximately 75 studies. There are eighteen Stratford IRB members, two of whom are community members. As of July 1, 2013 the Stratford IRB members of the School of Osteopathic Medicine became part of Rowan University. Western IRB (WIRB) currently oversees about 150 sponsored studies.

The HSPP has an audit team that conducts routine, for-cause and quality assurance assessments on the IRB's approved studies to ensure that proper regulatory requirements are followed, through proper documentation, record keeping, data analysis and compliance components that constitute good academic research practice. The team continually evaluates, provides education, and improves research process. The HSPP audit team consists of a Director, two (2) Senior Analyst/auditors and one (1) Junior analyst/auditor.

HSPP reports to the University's Associate Vice President for Research Regulatory Affairs, who is UMDNJ's Institutional Official and Research Integrity Officer.

COLLABORATIONS AND AFFILIATIONS

With several campuses and many hundreds of research faculty and medical specialists across New Jersey, many other research organizations team up with UMDNJ to conduct research, treat patients and train future generations of scientists and doctors.

Our research partners include:

Albert Einstein College of Medicine	Novo Nordisk Pharmaceuticals, Inc.
Allergan, Inc.	Pfizer, Inc.
Bayer	RAND Corporation
Boehringer Ingelhiem Pharmaceuticals, Inc.	Rutgers, The State University of NJ
Bristol-Myers Squibb Company	Sanofi-Aventis
Case Western Reserve University	St. Luke's Roosevelt Institute for Health
Celgene Corporation	Science
Cepheid Corp	Schering-Plough Research Institute
Colgate-Palmolive	Serono Laboratories, Inc.
Columbia University	SIEMENS Corporation
Cornell University	Social and Scientific Systems, Inc.
DePuy, Inc.	Synthes, Inc.
Drexel University	TEVA Neuroscience, Inc.
Duke University	Thomas Jefferson University
Ethicon, Inc.	Tibotec Therapeutics
Fudan University, China	Tulane University
Genentech, Inc.	University of Cambridge
Gilead Sciences, Inc.	University of Cincinnati
GlaxoSmithKline	University of Iowa
George Washington University	University of Miami
Harvard College	University of Minnesota
Hoffman La Roche, Inc.	University of Pittsburgh
Johns Hopkins University	University of Rochester
Merck and Company, Inc.	University of Texas
Merck Research Laboratories	University of Washington
Mount Sinai School of Medicine	University of Wisconsin
New York University School of Medicine	Wake Forest University
Northwestern University	Yale University
Novartis Pharmaceuticals	

ECONOMIC IMPACT

The economic impact of research conducted at UMDNJ stretched across the state and the country. This impact was evident not only in the direct effect of research dollars on employment and local and state tax revenue, but also in the total economic product that resulted from the outcomes of the research. These indirect benefits include, among others, intellectual capital, company formation and revenues associated with product creation and sales.

Based on a methodology established by the Bureau of Economic Analysis with the U.S. Department of Commerce, the Association of American Universities (www.aau.edu) developed a metric to estimate local employment impact of academic research and development. The AAU calculated a multiplier of 36 jobs per \$1 million of spending. Using NSF FY 2011 expenditure data (\$ 234.4 million), we supported and/or created more than 8,400 full and part-time jobs directly through our research activities and through the local ripple effect.

Related to the creation of high-paying jobs, research funding also benefits the economy by driving increased spending. A 2004 study performed at the University of North Carolina and North Carolina State University showed that for every dollar of funding attracted by those schools, \$1.70 is spent by local consumers. An extrapolation of this result estimates a minimum of approximately \$400 million dollars in local spending stemming from UMDNJ research activities.

The National Institutes of Health estimated that every \$1 of its funding generates \$2.21 in local economic growth, on average. Using this formula, we can estimate that our FY 2012 NIH award total (\$89.1 million) generated more than \$195 million in economic growth in New Jersey. It is clear that, regardless of the figures used in impact estimates, UMDNJ's research was a highly critical component of economic stability and growth in the state.

Economic benefits were also realized through the licensing of UMDNJ technology to industry. Innovative biomedical research has led to the formation of twenty-nine New Jersey spin-off companies. Together, these companies have created over 270 local jobs and raised millions in aggregate funding. For example, PTC Therapeutics, headquartered in South Plainfield, NJ has formed around innovation technology developed in the laboratory of Dr. Stuart Peltz (RWJMS). PTC has attracted venture capital from the West coast and European venture firms and now has treatments in late stage clinical trials for Cystic Fibrosis and Duchenne's Muscular Dystrophy. In addition, PTC has established active collaborations with leading biopharmaceutical companies such as Celgene, Genzyme, Merck, Pfizer, AstraZeneca and Roche based on the application of its proprietary technologies.

In summary, UMDNJ was the clear state leader in academic biomedical research. Our schools have developed an interconnected web of biomedical research activities that cover the spectrum from basic to clinical to community outreach, and back. Combined with the expertise in pharmacy, chemistry, engineering, business, law, health policy and more that is provided by the historic merger with Rutgers University, legacy UMDNJ schools will continue their trajectory towards becoming a national leader in biomedical research.

EXTERNAL FUNDING
Totals for Fiscal Year 2012

Unit	Total Awards ¹	Research Awards
New Jersey Medical School ²	\$97,458,438	\$65,426,833
Robert Wood Johnson Medical School-P ³	\$89,582,568	\$76,856,929
Robert Wood Johnson Medical School-C	\$8,629	\$0
School of Osteopathic Medicine	\$12,899,345	\$4,463,748
New Jersey Dental School	\$6,557,147	\$2,242,966
Graduate School of Biomedical Sciences ⁴	\$321,240	\$0
School of Health Related Professions	\$6,686,234	\$762,172
School of Nursing	\$41,571,210	\$757,570
School of Public Health	\$8,500,394	\$2,940,364
University Hospital	\$9,669,371	\$8,500
University Behavioral Healthcare-P	\$20,104,084	\$384,885
University Behavioral Healthcare-N	\$3,435,659	\$0
Central Administration and Physical Plant	\$3,387,703	\$0
University Academic Affairs (Including Continuing Education)	\$3,668,285	\$0
University Correctional Health Care	\$146,997	
GRAND TOTAL	\$303,997,304	\$153,843,967

1 Research, educational and service awards, including indirect costs from all external sources.

2 Includes PHRI.

3 Includes Child Health Institute, CABM, EOHSI and Cancer Institute.

4 The Graduate School of Biomedical Sciences draws its faculty from that of the medical schools; grants to these faculty members are reported under the medical schools.

Source: UMDNJ-Office of Cost Studies

ACADEMIC R&D EXPENDITURES*
Totals for Fiscal Year 2012

Expenditures*	Amount
Total Academic R&D Expenditures	\$206,504,000
Federally Financed	\$110,595,000
Institutionally Financed	\$49,375,000

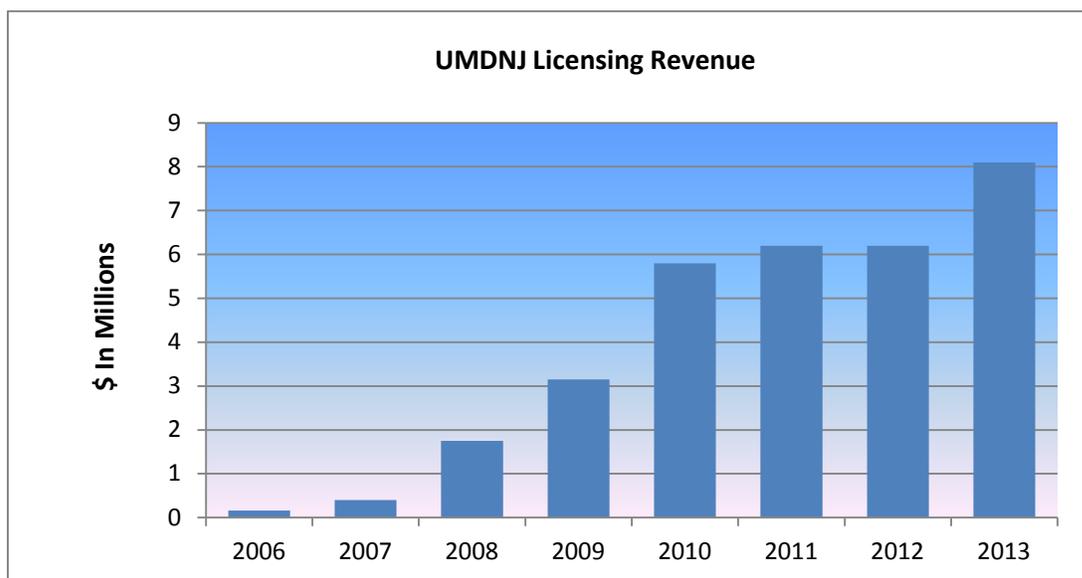
*As reported in the 2012 National Science Foundation (NSF) Survey of Research Expenditures.

Source: UMDNJ-Office of Cost Studies

PATENTS, TECHNOLOGY TRANSFER and BUSINESS DEVELOPMENT

The mission of the UMDNJ Office of Technology Transfer and Business Development (formerly the Office of Patents and Licensing) was to work closely with research faculty at the University to develop intellectual property around the growing number of medical innovations that were discovered in UMDNJ laboratories and to create technology transfer alliances with the diagnostic, biotechnology, medical device and pharmaceutical industries to bring these technologies to market, helping to solve critical unmet medical needs.

UMDNJ dramatically increased patenting and licensing activity over the last several years as a result of greater recognition and support of applied innovation, strategic acquisition, the establishment of a rigorous process to assure patenting of our best technology and an aggressive and focused marketing approach. The graph below demonstrates the explosive growth in patent revenue garnered through the licensing of UMDNJ innovations.



INNOVATION

UMDNJ had a long history of discovery that has led to new company formation and beneficial health care. Some examples:

Dr. Jeffrey Kaplan of our New Jersey Dental School discovered Dispersin B, which breaks up bacterial biofilms, which form during surgery and can be dangerous for patients who receive medical devices or wound healing agents. This invention was honored a few years ago as one of the top five inventions in the country by the National Institutes of Health. Dr. Kaplan's technology has been licensed to a company that is coating Dispersin B on catheters and a variety of other medical devices and the incidence of bacterial infection appears to be dramatically reduced.

Dr. James Millonig of RWJMS won the Thomas Alva Edison Patent Award for discovering the linkage between the ENGRAILED 2 gene and the onset of autism, a disorder with a high incidence rate here in New Jersey. This invention was patented and licensed to Integragen, a diagnostic company that has successfully launched this UMDNJ technology through ARISK as the first genetic autism screening test commercially available in the US and Europe. Autism is generally very difficult to identify in young children, and this diagnostic holds the promise of helping with early diagnosis, which could lead to early medical intervention.

At our NJMS Public Health Research Institute, a breakthrough TB test was developed by Dr. Marila Gennaro that identifies TB faster and more efficiently than anything presently on the market. The technology has been approved by the US FDA, as well as regulatory bodies in Europe and China, and can make a difference for the millions around the world who are infected with the disease.

A technology created in the field of collagen biomaterials was licensed to a small firm, Col-Bar, as its platform technology. After additional development, Johnson & Johnson was so impressed with the dermatological applications of the invention, it purchased the Col-Bar Company, mainly on the strength of collagen technology that was discovered at UMDNJ. We have also licensed the Molecular Beacons probe technology to Becton-Dickinson Corporation, headquartered in Franklin Lakes, New Jersey. These are the types of high value alliances that demonstrate the synergies when universities work closely with local life sciences companies.

Patents Issued Between July 1, 2012 and June 30, 2013

U.S. Patents		
Inventor	Patent Number	Title
Barton, Beverly	8,389,481	Glutamate-Enhanced Cell-Penetrating Peptides and Methods of Using Same
Brodsky, Barbara	8,280,710	Method for Determining Thermal Stability of Collagen or Collagen-Like Peptide
Dougherty, Joseph	8,247,167	HIV-1 Latency Model for High Throughput Screening
Fine, Daniel	8,389,015	Salivary Bioassay for Early Detection of Bone Loss
Flowers, Stephen	8,415,316	Method for Increasing Bone Mass
Lange, Gudrun	8,457,748	Vagus Nerve Stimulation for the Treatment of Fibromyalgia
Laskin, Jeffrey	8,343,971	Pharmacologically-Active Vanilloid Carbamates
Lobel, Peter	8,277,800	Methods of Treating a Deficiency of Functional Tripeptidyl Peptidase I (CLN2) Protein
Ma, Jianjie	8,420,338	Serum MG53 as a Diagnostic Marker for Tissue Injury
Montalvo Stanton, Evelyn	4,313,763	RESPIRA USA
Montelione, Gaetano	8,450,085	Labeled Biomolecular Compositions and Methods for the Production and Uses Thereof
Rameshwar, Pranela	8,383,806	Method of Reversing Carboplatin Resistance by Inhibition of HGFIN
Rowzee, Anne	8,377,655	Assay for the Measurement of IGF Type 1 Receptor and Insulin Receptor Expression
Ryazanov, Alexey	8,349,576	eEF2K Assays for Identifying Compounds That Inhibit eEF2K Activity
Santos, Janine	8,362,209	Telomerase Reverse Transcriptase Variant

U.S. Patents (Continued)		
Inventor	Patent Number	Title
Santos, Janine	8,252,282	Nuclear Telomerase Reverse Transcriptase Variant
Vatner, Stephen	8,263,401	Adenylyl cyclase antibodies, compositions and uses thereof
Vatner, Stephen	8,440,640	Methods and Compositions for Treating Obesity and Related Disorders
Welsh, William	8,455,537	Estrogen Receptor Modulators and Uses Thereof
Woodbury, Dale	8,318,413	Amniopunch and Uses Thereof
Foreign Patents		
Inventor	Country/ Patent Number	Title
Gennaro, Maria	Canada 2,372,583	Secreted Proteins Of Mycobacterium Tuberculosis And Their Use As Vaccines And Diagnostic Reagents
Liang, J.	Europe 1339732	Specific Double-Stranded Probes For Homogeneous Detection Of Nucleic Acid And Their Application Methods
Madura, Kiran	Canada 2,469,492	Diagnostic Methods for Protein Profiling
Park, Stephen	Australia 2006272568	Assays For Resistance to Echinocandin-Class Drugs
Park, Stephen	Europe EP 1907588 B1	Assays For Resistance to Echinocandin-Class Drugs

***License and Option Agreements Executed Between
July 1, 2012 and June 30, 2013***

Abcam	Foundation Venture Cap Group / Davidov
Asklepios BioPharm	Foundation Venture Cap Group / Gause
Aquarius Biotechnologies (Ex Lic)	Linden Pharm
Aquarius Biotechnologies (Option)	MentiNova
BioChek	NovoPedics, inc.
BioLamina AB	OncoPath Genomics
Bioo Scientific	Physicians Ref Lab
Biosearch & U Penn	ProCelo
Cellxlore, Inc	Prolong Pharm
Check-Points	Qiagen
CreOsso LLC	Sentrimed, Inc.
EMD Millipore	Transdent Therapeutics, LLC
EMD Millipore	TriMedicine, Inc.
EMD Millipore	Wellgen, Inc. / Rutgers
EMD Millipore	
EPO Advance	

Source: Office of Technology Commercialization

RESEARCH STRUCTURE & STRATEGIC MANAGEMENT

Executive level research oversight at UMDNJ was provided by the Office of the Vice President for Research (OVPR), the Council of Research Deans (CoRD) and the Research Administrators Committee (RAC). The leadership of the OVPR included the Vice President of Research and the Associate Vice President of Research Regulatory Affairs. Given the mandate to expand and develop biomedical and healthcare research to its fullest potential, the OVPR also had oversight of the Office of Technology Transfer and Business Development, the UMDNJ Clinical Research Organization and Office of Human Subjects Protection.

Ultimately the OVPR was responsible for supporting the establishment and growth of the research environment across the schools where biomedical research played a key role in that school's mission. The Dean of each School has responsibility for supporting the research enterprise to the extent possible and typically delegates oversight to a Senior Associate Research Dean and/or to Associate/Assistant Research Deans as required. The Research Deans of the various schools are charged with promoting research excellence and innovation and overseeing administration of their respective research portfolios. The CoRD and RAC teams included the research deans and research administrators from each of UMDNJ's schools. This structure will largely remain intact under the RBHS Office of the Vice Chancellor of Research and include additional RBHS schools/units within the Rutgers system.

The OVPR and the CoRD met monthly to address evolving research administration issues and develop strategies for ensuring continued excellence and growth. This cohesive research oversight matrix of centralized and de-centralized management fostered research excellence, ensured research compliance, promoted discoveries leading to better health and well-being, and created economic benefit for New Jersey.

RESEARCH HIGHLIGHTS: 2012-2013

Every year, UMDNJ's faculty, trainees and staff make critical discoveries that have the potential to improve health and well-being worldwide. They publish these findings in premier scientific journals, present their research at national and international meetings, and receive coveted awards recognizing their scientific achievements. Below are highlights of FY 2012-13 research discoveries that are poised to advance the diagnosis and treatment of disease, and improve the quality of life.

BASIC SCIENCES

- Discovered that mitochondrial function simultaneously influences neuronal and neurovascular properties in the working brain
- Demonstrated that mitochondrial calcium signaling impacts activation-induced neocortical response in an intact animal model using clinically relevant electrophysiological and fMRI markers
- Demonstrated that mitochondrial calcium uptake ability influences neuronal activity and the resting state fMRI signals in an intact animal model
- Developed a methodology to account for fMRI signal changes due to vascular and anatomical constraints to better interpret fMRI responses in human populations that are non-homogeneous
- Showed that a complex of three previously uncharacterized proteins is required to regulate all the developmental processes of the model bacterium *Bacillus subtilis*, including sporulation, biofilm formation and competence for horizontal gene transfer. It is likely that this FAD and Fe-S cluster containing complex is controlling development in response to the redox state of the cell
- Discovered why the laboratory strain of *Bacillus subtilis* exhibits a high frequency of horizontal gene transfer (transformation) while forming poor biofilms, while natural "undomesticated" strains of this bacterium show the opposite behavior. This difference is caused by a point mutation of a single gene, suggesting the existence of an evolutionary trade-off between the two processes
- Demonstrated that hundreds of *Bacillus subtilis* proteins are modified by lysine acetylation. The identification of these acetylated sites opens the door for further analysis of the underappreciated role of this posttranslational modification in the life of a model Gram positive bacterium
- Discovered that salsolinol stimulates dopamine neurons in slices of posterior VTA indirectly by activating μ -opioid receptors
- Demonstrated that GABAergic actions mediate opposite ethanol effects on dopaminergic neurons in the anterior and posterior ventral tegmental area
- Demonstrated that Microinjection of Glycine into the Ventral Tegmental Area Selectively Decreases Ethanol Consumption

- Demonstrated that Salsolinol Facilitates Glutamatergic Transmission to Dopamine Neurons in the Posterior Ventral Tegmental Area of Rats
- Demonstrated that Single sevoflurane exposure decreases neuronal nitric oxide synthase levels in the hippocampus of developing rats
- Demonstrated that Intra-ventrolateral preoptic nucleus injection of γ -aminobutyric acid induces sedation in rats
- Demonstrated that Electroacupuncture decreases excessive alcohol consumption involving reduction of FosB/FosB levels in reward-related brain regions
- Demonstrated that Cocaine facilitates glutamatergic transmission and activates lateral habenular neurons
- Discovered that Propofol Stimulates Noradrenalin-inhibited Neurons in the Ventrolateral Preoptic Nucleus by Reducing GABAergic Inhibition
- Demonstrate that MicroRNA Expression Profile and Functional Analysis Reveal that miR-382 is a Critical Novel Gene of Alcohol Addiction
- Discovered that interferon regulatory factor 5 (IRF5) is critical for monocyte trafficking to sites of inflammation
- Discovered a new interacting partner of IRF5 that controls its protein stability in both unstimulated and stimulated cells
- Developed a new RNA-seq technology and analysis pipeline for the determination of IRF5 transcript expression in primary immune cells from healthy donors and patients with autoimmune diseases such as systemic lupus erythematosus (SLE)
- Developed new peptide inhibitors that target IRF5 activation for the treatment of SLE
- Developed a new technique for quantifying autoantibodies in patient serum
- Discovered a novel pathway for the efferocytosis of apoptotic cells by epithelial cells
- Identified two novel phosphorylation sites on the Crk oncogene using mass spectrometry analysis
- Identified phenylalanine derived rhodanine derivative as potent inhibitors of HCV NS5B polymerase.
- Characterized the Coumarin and Neoflavone derivatives for their anti-HCV NS5B polymerase activities.
- Identified Thumb pocket I as the binding site of these compounds on NS5B employing mutant counter screening approach.
- Discovered and characterized the pyrazolobenzothiazine scaffold derivatives as anti-HCV and anti-NS5B inhibitors through a interdisciplinary approach of virtual screening, rational drug design, organic synthesis, and biological assays.

- Demonstrated synergistic anti-tumor activities of type I and type III interferons in a mouse model of hepatoma growth
- Developed reporter cell lines for studying interactions between Tyro-3, Axl and Mer tyrosine receptor kinases and their ligands
- Established that inhibitors of histone deacetylases and the PFKFB3 enzyme can have additive effects on glucose metabolism and inhibit proliferation of colon cancer cells.
- Developed a new technique for label-free analysis of S-nitrosylated proteins.
- Developed a new technique to distinguish transnitrosylase target proteins from denitrosylase targets.
- Discovered the role of the cellular NF90/NF45 complex in human papillomavirus (HPV) gene expression, with implications for HPV-induced oncogenesis, p53-mediated apoptosis, and cervical carcinoma.
- Identified a novel function of the NF90/NF45 complex in the repair of DNA breaks via non-homologous end joining mediated by the DNA-dependent protein kinase.
- Described the eIF5A regulon, consisting of two classes of genes that are regulated by eukaryotic initiation factor eIF5A and function in cell growth and death.
- Discovered that DNA pol E homologue from *Geobacillus* has mismatch extension activity.
- Discovered that inhibition of 5-lipoxygenase will promote intramembranous bone healing
- Discovered that vanadium salts can be used to therapeutically enhance bone fracture healing
- Discovered that osteoclasts have a key regulatory role during bone fracture healing
- Discovered that cyclooxygenase-2 is abundantly expressed in osteoclasts
- Established that specific microRNAs and RNA binding proteins compete for the same regulatory site to control bone morphogenetic protein (BMP2) expression.
- Created a novel mouse line to test the influence of a regulatory region that has remained similar in the last 450 million years since the fish and mammalian lineages diverged.
- Demonstrated that knockdown of the mitochondrial ATP-dependent protease Lon or ClpXP leads to cell death of mantle cell lymphoma cells.
- Demonstrated that the mitochondrial ATP-dependent Lon protease is inhibited by the anti-cancer agent bortezomib.
- Discovered that cAMP-dependent protein kinase (PKA) serine phosphorylates mitochondrial transcription factor A (TFAM) within its high-mobility box 1 domain (HMG1).
- Demonstrated that HMG1 phosphorylation of TFAM impairs DNA binding and transcription activation
- Discovered that the mitochondrial Lon protease selectively degrades DNA-free TFAM.

- Developed a new technique to examine alternative cleavage and polyadenylation
- Discovered that most mRNA and lncRNA genes have multiple cleavage and polyadenylation sites
- Discovered that the proteolytic cleavage of Amyloid- β Precursor Protein (APP), leading to the generation of protein fragments relevant to Alzheimer's disease, occurs in a perinuclear compartment associated with peripherin-containing neurofilaments
- Discovered a functional interaction between Amyloid- β Precursor Protein (APP) and neurofilaments - dysregulated in amyotrophic lateral sclerosis (ALS) - suggesting a possible crosstalk/overlap between the molecular mechanisms of Alzheimer's disease and ALS
- Discovered that Girdin, a protein that regulates endosomal trafficking, cooperates with the scaffold protein Disrupted in Schizophrenia 1 (DISC1) in regulating the intraneuronal levels of Amyloid- β (A β), a peptide with relevance to Alzheimer's disease
- Discovered that antioxidant therapy completely prevents reactive oxygen species production, S-nitrosation of soluble guanylyl cyclase (sGC), hypoglycemia associated autonomic failure (HAAF) and impaired hypothalamic glucose sensing following repetitive hypoglycemic episodes
- Discovered that the ability of neuropeptide Y neurons to sense glucose deficit is impaired during cancer cachexia
- Characterized the effects of estrogen on glucose sensing neurons and established sex differences in these neurons
- Discovered that antioxidant therapy partially restores baseline epinephrine secretion in response to hypoglycemia and hypothalamic glucose sensing
- Discovered that the intestinal calcium transporter TRPV6 ion channels act as coincidence detectors for calmodulin, and PIP2 depletion during calcium-induced inactivation
- Demonstrated that the TRPC6 activator hyperforin exhibits an arrhythmogenic effect in the heart. Its action is likely mediated by generating an inward current and increasing the calcium load in cardiac myocytes through the SOCE pathway
- Revealed the potential antiarrhythmic effect of methyl 3,4,5-trimethoxycinnamate, a bioactive substance extracted from the roots of polygalae radix, via suppression of triggered activities in rabbit myocytes
- Demonstrated by using the DNA 2D gel technique that the level of Holliday junctions increases in ribosomal DNA during the replicative aging process of yeast cells
- Demonstrated that mitochondrial DNA fragments accumulate in circular form in the nucleus, when somatic cells reprogram to induced pluripotent stem cells
- Demonstrated that the accumulation of mitochondrial DNA sequences in the nucleus is reversible when pluripotent stem cells differentiate to somatic cells
- Demonstrated that the transcriptional co-factor Yap1 is critical in mediating cardiomyocyte survival and compensatory growth during myocardial infarction

- Demonstrated that mice deficient in Yap1 have greater injury and worsened cardiac function following chronic myocardial infarction
- Demonstrated that Yap1 promotes activation of the pro-survival kinase Akt in cardiomyocytes
- Demonstrated that Yap1 promotes cardiomyocyte proliferation both in cultured cells and in the mouse heart
- Discovered that sarcolipin expression is significantly increased in the skeletal and cardiac muscles of mdx and mdx:utr^{-/-} mice (animal models of Duchenne muscular dystrophy)
- Demonstrated that increased levels of sarcolipin correlate with severity of muscular dystrophy
- Identified that ablation of sarcolipin in DMD mice is not lethal
- Identified that loss of one allele of the sarcolipin gene extends the life-span of mdx:utr^{-/-} mice
- Identified that loss of one allele of sarcolipin gene improves muscle structure and function in mdx and mdx:utr^{-/-} mice
- Demonstrated that Epac1 accelerates metastasis and angiogenesis of melanoma via FGF2-dependent intercellular communication
- Found that downregulation of Rpd3 (HDAC1, histone deacetylase 1) can recover the shorter stress resistance and lifespan which overexpression of Loco (RGS protein) induces, depicting the genetic interaction between Rpd3 and Loco aging phenotypes
- Discovered that embryonic stem cells derived from muscular dystrophy mice trigger muscular dystrophy when injected into normal embryos
- Discovered that a bone marrow deficient in a transcription factor termed 'Id' triggers cardiac fibrosis when transplanted into normal mice
- Identified transcriptional regulation patterns using high-resolution chromatin immunoprecipitation during cardiac hypertrophy
- Determined that a general transcription factor (TFIIB) can collectively and selectively regulate the transcription of cardiomyopathy-related genes during cardiac hypertrophy, without affecting the transcription of essential genes
- Identified G3BP1, a RNA binding protein as an upstream regulator of cardiac-enriched microRNA-1 in heart that plays an essential role in rapid downregulation of mature miR-1 levels during induction of cardiac growth
- Demonstrated that constitutively active GSK-3 β S9A delayed aging-associated cardiac pathologies including apoptosis, fibrosis, hypertrophy, and dysfunction through Ulk1
- Demonstrated that PPAR α and Sirt1 form heterodimer to suppress fatty acid oxidation genes in the failing heart
- Discovered that Mst1 kinase phosphorylates Beclin1, thereby deteriorating myocardial protein quality control through inhibiting autophagy

- Demonstrated how cell fate specification factors can regulate subsequent morphological differentiation of neuronal cells
- Developed the first molecular diagnostic assay for the rapid detection of the fungus *Exserohilum rostratum*, which is the major etiologic agent of patients who developed meningitis following pain injections with contaminated steroids.
- Developed a prototype of a new host-based diagnostic platform measuring immune cell responses to infection by using fluorescence in situ hybridization to detect activation of gene expression and flow cytometry to obtain single-cell, multi-parameter readouts. These studies are conducted within a multi-PI project.
- Demonstrate TLR2 activation enhances HIV nuclear import and infection through T cell activation independent and dependent pathways and estrogen inhibits HIV infection of primary macrophages through induction of interferon alpha.
- Discovered a novel mechanism of regulation of mitochondrial function by two-component signal transduction pathway in *Candida albicans*
- Demonstrated that histidine phosphotransfer protein is not essential for viability in *Candida albicans* as previously thought. These findings will have profound implications for mechanistic understanding of two-component signaling pathways in *C. albicans* and perhaps in other pathogenic fungi
- Demonstrated that rationally designed transmembrane peptide mimics of the multi drug transporter protein Cdr1 act as antagonists to block drug efflux and chemosensitize drug-resistant clinical isolates of *Candida albicans*
- Discovered that polyamines inhibit porin-mediated fluoroquinolone uptake in mycobacteria, and that reduction in intracellular uptake contributes to the phenotypic drug resistance of *M. tuberculosis* in the non-replicating state (published in PLoS One Jun 2013)
- Demonstrated that plasma interferon-g-inducible protein (ICP) 10 is predictive of viral load in HIV-1-infected individuals
- Described immunohistology of spinal tuberculosis granulomas from patients with and without HIV co-infection
- Defined immunologic correlates of spontaneous latency in a rabbit model of pulmonary tuberculosis
- Established and characterized a rabbit model of latent *Mycobacterium tuberculosis* infection (LTBI), the only model that consistently mimics human latent TB infection, in which, similar to most humans, complete clearance of pulmonary Mtb-CDC1551 infection and pathological characteristics occurs spontaneously
- Showed that Mtb-CDC1551-infected rabbits achieve LTBI, rather than sterilization, based on the ability of the bacilli to be reactivated after immune suppression. We showed early activation of immune cells and an early peak in the TNF- α level, without any necrotic lung granulomas in these rabbits
- Established that LTBI and CDC1551 control was associated with down-regulation of several metalloprotease genes and an absence of lung fibrosis

- Demonstrated the early molecular events triggered upon Mtb infection of macrophages by analyzing the transcriptional responses of murine bone marrow-derived macrophages (BMM) to infection with two clinical Mtb strains, CDC1551 and HN878
- Discovered that compared to HN878, infection by CDC1551 of BMM was associated with an increased global transcriptome, up-regulation of a specific early (6 hours) immune response network and significantly elevated nitric oxide production, despite similar intracellular growth rates
- Showed that at 24 hours post-infection of BMM by HN878, more host genes involved in lipid metabolism, including cholesterol metabolism and prostaglandin synthesis were up-regulated, compared to infection with CDC1551
- Showed that intracellular CDC1551 cells were exposed to a higher level of stress leading to increased up-regulation of the bacterial stress response genes, compared to HN878
- Showed that Mtb CDC1551 and HN878 differentially activate macrophages during infection probably leading to their ability to either resist host cell immunity and progress to active disease (HN878) or to succumb to the host protective responses and be driven into a non-replicating latent state in rabbit lungs (CDC1551)
- Found that PGL-1 in its purified form or expressed in a recombinant *Mycobacterium bovis* Bacillus Calmette-Guérin (BCG) background (rBCG-PGL-1) selectively modulated the induction of specific monocyte cytokines and chemokines and, when used as prestimulus, exerted priming and/or inhibitory effects on the induction of selected cytokines/chemokines in response to a second stimulus
- Showed that PGL-1 may play an important role in the development of the anergic clinical forms of disease and in tissue damage seen in lepromatous patients and during the reactional states of leprosy
- Demonstrated the molecular determinants of the immune response to *Mycobacterium tuberculosis* HN878 infection in a rabbit model of pulmonary cavitary tuberculosis
- Showed that the outcome of HN878 infection of rabbits was determined early during infection by a suboptimal activation of innate immunity and delayed T-cell activation
- Discovered group of anti-bacterial compounds (isothiocyanites) active against microbial pathogens with low resistance frequency
- Showed the predominance of specific *M. tuberculosis* strains in African population
- Completed study on the evolution of DR region of *M. tuberculosis* genome
- Demonstrated Induction of mycobacterial resistance to quinolone class antimicrobials
- Developed "SuperSelective" nucleic acid amplification primers that enable the detection of mutant DNA from as few as ten cancer cells in a clinical sample containing wild-type DNA from one million normal cells, even though the only difference between the mutant and the wild type is a single-nucleotide polymorphism
- Discovered that gestational flu exposure induces changes in neurochemicals, affiliative hormones and brainstem inflammation, in addition to autism-like behaviors in mice

- Developed a mouse animal model to discover that new peptide mimetics that mimic antimicrobial peptide activity are potent against oral and systemic *Candida* species and bacteria in vivo
- Discovered that human beta defensin-1 transcription is directly regulated by IRF7 and PU.1 transcription factors and is not dependent on interferon alpha
- Developed "SuperSelective" PCR primers for the selective amplification of rare mutant nucleic acid sequences in the presence of abundant wild-type sequences
- Identified post-initiation regulation of mRNA biogenesis in macrophages as a response to infection with *M. tuberculosis*
- Discovered that brain inositol is a novel stimulator for promoting *Cryptococcus* penetration of the blood-brain barrier to develop fungal meningitis.
- Identified YiH protein Kinase as a central regulator for bacterial stress response and stress-mediated programmed cell death
- Demonstrated that bicyclomycin is synthetically lethal when co-exposed to a gene expression inhibitor, such as tetracycline, chloramphenicol, or rifampicin, indicating that bicyclomycin exposure normally induces protective protein(s) that suppresses bicyclomycin lethality
- Transcription in higher eukaryotes is inherently noisy. We found that this noise does not propagate into gene regulatory pathways because chromatin insulates downstream genes from cell-to-cell variations in transcription factors.
- Expanded the contribution of reactive oxygen species to antimicrobial lethality from Gram-negative bacterium *Escherichia coli* to Gram-positive species *Staphylococcus aureus*
- Developed a treatment that improves cell survival in eyes with age-related macular degeneration (AMD)—a treatment that may help render cell transplantation a sight-preserving and sight-restoring therapy for patients with AMD
- Discovered a conditioned medium that significantly enhances cell survival on aged and AMD Bruch's membrane
- Identified the molecular weight fractions containing bioactive molecules in conditioned medium
- Identified the protein component in the bioactive molecular weight fractions
- Determined that a bioactive fraction of conditioned medium can be used to support cells in culture to a greater degree than standard culture medium
- Published results of studies aimed at the identification of neurotrophic factors contributing to retinal preservation in conditioned media harvested from retinal pigment epithelium
- Demonstrated that Pyrazinamide treatment modulates the host immune response to *M. tuberculosis* infection by reducing pro-inflammatory cytokine production
- Showed that *M. leprae* interfere with the development of monocyte classical activation (M1) and that BCG vaccination can render monocytes resistant to diversion away from M1 activation in response to *M. leprae*

- Demonstrated a method to predict therapeutic response of tumor cell populations to cocktails of chemotherapeutics and radiopharmaceuticals
- Discovered at least 4 proteins essential for HIV infection and replication in primary cells
- Discovered identify that pannexin-1 hemichannels are essential for the pathogenesis of multiple sclerosis
- We discovered that Dengue virus can directly infects cells of the brain
- We demonstrated that gap junction channels are essential to trigger bystander apoptosis in the context of NeuroAIDS
- We showed several aspects of the transmigration of *Cryptococcus Neoformans* across the blood brain barrier in the context of HIV and drug abuse.
- Characterized determinants of highly quaternary epitopes on HIV-1 Env recognized by novel monoclonal antibodies with potent neutralizing activities
- Characterized a novel V3-specific masking effect mediated by clade C V3 sequences
- Analyzed the V1/V2 specificities of antibodies in RV144 vaccine recipients that correlated with protection against infection
- Performed structural characterizations of V1/V2-specific monoclonal antibodies with potent neutralizing activities
- Generated a *M. tuberculosis* conditional mutant of the essential iron dependent regulator IdeR and demonstrated that this protein is absolutely essential for *M. tuberculosis* to establish an infection. Results indicate that IdeR is a valuable target to develop new antituberculosis drugs
- Generated mutants in the iron storage genes in *M. tuberculosis* and identified ferritin as a main factor necessary to maintain iron homeostasis. Furthermore, a ferritin mutant of *M. tuberculosis* is highly susceptible to killing by antibiotics and is unable to establish a chronic infection in mice. These results had established a previously unknown link between iron homeostasis and the bacteriocidal activity of antitubercular drugs
- Recognized a novel metabolic pattern of triacylglycerol in the lag phase of *M. tuberculosis*
- Postulated a novel role of the major catabolic route of newly-synthesized triacylglycerols in the lag phase for the formation of a major component of *M. tuberculosis* cell wall during the reactivation from dormancy
- Started characterizing fatty acid composition of *M. tuberculosis* triacylglycerols using mass spectrometer.
- Discovered that airborne lead is significantly associated with blood Pb
- Identified molecular descriptors significantly associated with cardiovascular diseases

- Developed a new statistical model for protein synthesis and degradation rates to identify distinct patterns of translational regulation of protein expression
- Demonstrated that the protein DJ-1 protects cells through Nrf2-mediated transcriptional induction of the redox molecule thioredoxin 1, thus identifying this axis as a therapeutic target for disorders associated with oxidative stress such as Parkinson's disease
- Discovered that a currently marketed opioid drug ameliorates the motor complications of the gold standard therapy for Parkinson's disease, L-dopa, in a non-human primate model of the disease. This finding allows repositioning this drug for development for a new indication
- Discovered that a compound found in coffee, eicosanoyl-5-hydroxytryptamide (EHT), is neuroprotective in two mouse models of Parkinson's disease, making it a prototypical molecule for further pharmaceutical development
- Showed that a cell death signaling kinase known as ASK1 mediates the susceptibility of dopamine neurons in a mouse model of Parkinson's disease. This discovery identifies a new target to inhibit as a disease modifying therapy for this disease
- Identified biomarkers that can predict the therapeutic response to Glatiramer acetate, an approved drug for multiple sclerosis
- Identified cytokine changes in multiple sclerosis that could predict clinical response to interferon-beta therapy
- Discovered that spontaneous development of experimental autoimmune encephalomyelitis decreases with aging due to an increase in CNS-specific Foxp3⁺ regulatory T cells and their suppressive activity
- Discovered that commensal bacteria play an essential role in spontaneous development of experimental autoimmune encephalomyelitis
- Discovered that *Clostridium difficile* expressing the Surface Layer Protein-A, which encodes a myelin basic protein mimicry peptide, is a candidate gut-associated bacteria involved in initiation and/or progression of Multiple Sclerosis
- Conducted the first gene wide association study (GWAS) of maternally acting alleles in any dataset, in a large collection of families with autism and reported finding 1 locus with a p-value below the genome wide association threshold and 5 loci with suggestive p-values including a SNP in CNTN5, a gene previously implicated in autism
- Conducted a follow up GWAS study in a second large dataset of families with autism and reported 2 loci with p-values below the genome wide association threshold and 5 loci with suggestive p-values
- Conducted a meta-analysis of data from the two previously reported GWAS datasets and found an additional 6 regions of interest including a SNP in shank2 a gene previously implicated in autism, bringing the total to 19 regions of interest
- Discovered that microRNAs-7 protects neuronal cells through suppressing p65 (relA) expression in a cellular model of Parkinson's disease
- Discovered that parkin, which causes Parkinson's disease when mutated, inhibits mTOR kinase

- Elucidated the importance of taxanes in induction of the pro-apoptotic BH3 only Bcl-2 family member Bim, which promotes cell death by apoptosis and tumor suppression
- Discovered the expression of a H-ras^{V12} or K-ras^{V12} oncogene up-regulates basal autophagy, which is required for tumor cell survival in starvation and in tumorigenesis
- Found that mTORC2 can regulate insulin signaling at the level of insulin receptor substrate-1 (IRS-1)
- Discovered, via a comprehensive RNAi screen, it appears that HCMV may require AMPK or related activity for viral replication and reprogramming of cellular metabolism
- Discovered chronic stress promotes tumorigenesis in vivo
- Discovered regulation of energy metabolism is a novel function of p53 that mediates tumor suppression
- Discovered the Dpp and Fat-Hippo signaling pathways that regulate growth in *Drosophila* are directly interlinked and act synergistically to promote growth, in part via regulation of the microRNA gene *bantam*, and their ability to promote growth is mutually dependent
- Discovered overexpression of miR-200s is associated with increased risk of metastasis in breast cancer and promotes metastatic colonization in mouse models, phenotypes that cannot be recapitulated by E-cadherin expression alone
- Discovered new approaches to target tumor cells with p53 mutations
- Identified Elf5 as key regulator of the EMT through analyses of Elf5 conditional knockout animals, various in vitro and in vivo models of EMT and metastasis, an MMTV-neu transgenic model of mammary tumor progression, and clinical breast cancer samples
- Demonstrated Elf5 suppresses EMT by directly repressing the transcription of Snail2, a master regulator of mammary stem cells and a known inducer of EMT, establishing that Elf5 is not only a key cell lineage regulator during normal mammary gland development, but also a suppressor of EMT and metastasis
- Demonstrated interaction between BRCA and DNA repair pathways with anti-oxidant system
- Discovered Pfh1 and Pif1 promote DNA replication and separation of converged replication forks, and prevent replication fork stalling, offering a new mechanism to suppress DNA damage at hard-to-replicate sites
- Developed new methods to determine protein structures and solved important protein structures relevant to cancer drug discovery
- Described major mechanisms of inflammatory responses
- Described the molecular basis of chemotherapeutic toxicity
- Discovered major new insights into cancer drug sensitivity and resistance
- Developed novel analytical methods of cancer drug pharmacokinetics

- Discovered novel anticancer agents
- Invented new drug formulations
- Optimized cancer drug application
- Invented new detection methods for cancer drug response
- Discovered surgical removal parametrial fat pads stimulates apoptosis and inhibits UVB-induced carcinogenesis in mice
- Discovered β -endorphin neurons suppress cancer growth and metastasis
- Discovered Grm1 is an oncogene in epithelial cells
- Discovered 1Q GAP1 in the stability and transactivation of Nrf2
- Demonstrated that suppression of CAPER alpha suppresses breast cancer cell engraftment to bone in a xenograft model
- Identified two candidate deubiquitinases (DUBs) for the antiapoptotic protein Bfl-1
- Demonstrated that Pou4f1/Brn3a regulates dorsal root ganglion sensory neuron specification and axonal projection into the spinal cord
- Uncovered a role of Barhl2 in regulating the ipsilateral/contralateral subtype divergence of the dl1 sensory neurons during spinal cord development
- Explored the effect of glycan modification on efficacy of a protein therapeutic for late infantile neuronal ceroid lipofuscinosis
- Identified three previously unclassified lysosomal proteins
- Identified potential biomarkers for disease progression in mouse models of Niemann-Pick Type C diseases
- Demonstrated a clear link between the location of food allergy immunoreactive epitopes in shrimp tropomyosin and their molecular structure and stability
- Designed a series of peptides that bind to the NS1 effector domain of the influenza virus
- Designed nanoparticle-forming peptides automatically embed themselves into a collagen matrix
- Developed a novel metric for assessing protein three-dimensional structure similarity that aids in detecting distantly related metalloproteins
- Created a synthetic collagen peptide interactome for use in controlling assembly of multi-component protein materials
- Developed biochemical and computational methodologies to quantitate phosphorylation kinetics of two-component proteins *in vivo*
- Discovered that the phosphorylation profile of *Escherichia coli* response regulator PhoB saturates at a level far below stoichiometric phosphorylation

- Determined that optimal levels of expression of bacterial signaling proteins are important for fitness and are under strong evolutionary selection
- Demonstrated inhibition of polymerization of cytoskeleton proteins, FtsZ and MreB, in *Escherichia coli* by a novel membrane-bound toxin for cell division, CptA (YgfX)
- Demonstrated YeeU enhancement of the bundling of cytoskeletal polymers of MreB and FtsZ, antagonizing the CbtA (YeeV) toxicity in *Escherichia coli* by YeeU
- Demonstrated growth and translation inhibition through sequence specific RNA binding by a *Mycobacterium tuberculosis* VAPC toxin
- Characterized structure-based design and screening of inhibitors for an essential bacterial GTPase, Der
- Characterized a MazEF toxin-antitoxin homologue from *Staphylococcus equorum*
- Identified the first functional toxin-antitoxin system in Streptomyces
- Demonstrated acquisition of ACA-specific RNA sequence recognition via the Loop 2 region of MazF mRNA interferase
- Demonstrated intramolecular regulation of the sequence-specific mRNA interferase activity of MazF fused to a MazE fragment with a linker cleavable by specific proteases
- Developed an assay for high throughput screening of anti-influenza drugs
- Combined X-ray crystallography and amide exchange measurements by mass spectrometry in collaboration with J. Hunt (Columbia University) to demonstrate that ATPase active-site electrostatic interactions control the global conformation of the 100 kDa SecA translocase
- Organized and published the recommendations of the international wwPDB NMR Validation Task Force for community standards to be used assessment and validation of protein NMR structures
- Supervised the assessment of template-based homology modeling in the international Critical Assessment of Protein Structure Prediction (CASP10), which included bioinformatic analysis of >50,000 predicted models submitted by >100 scientists around the world
- Demonstrated the use of ¹⁹F NMR to characterize conformational dynamics in a functionally-important protein-protein interface of the influenza A non-structural protein 1, providing the first data demonstrating protein dynamics within a protein-protein interface
- Organized and supervised the CASD-NMR 2013 program, an international program assessing unsupervised analysis of 3D protein structures from raw NMR data by artificial intelligence software
- Discovered the structural basis for the sequence-specific recognition of human ISG15 by the NS1 protein of influenza B virus, in collaboration with R. Krug (Univ of Texas)

- Developed new data collection and computational methods for accurate protein structure determination of larger proteins using sparse NMR data and/or homologous structure information, in collaboration with D. Baker (University of Washington)
- Determined three-dimensional structure of the human cyclin dependent kinase 2 associated protein 1 (also called deleted-in-oral cancer), and important oncogene, and provided mechanisms for its activation by disulfide bond formation
- Developed novel principles for designing ideal protein structures and novel enzymes by combining NMR structure determination and protein design in collaborations with D Baker (University of Washington)
- Developed improved methods of using protein NMR structures to determine phases for solving X-ray crystal structures by molecular replacement
- Developed new methods for production of isotope-enriched membrane proteins and for segmental isotope labeling of proteins for NMR structural studies, in collaboration with M. Inouye (RWJMS)
- Discovered novel influenza virus inhibitors targeting NS1A utilizing fluorescence polarization-based high-throughput assay, in collaboration with R. Krug (Univ. of Texas)
- Collaborated in determining the structure and function of human vimentin linker 1 and rod 1B domains, and important cytoskeletal protein associated with chemotaxis and metastasis, together with J Hunt (Columbia University)
- Developed improved methods for NMR structure quality assessment including the RPF server, quality assessment tool for protein NMR structures, and predictor of equivalent X-ray structure resolution (with P. Güntert, Frankfurt University)
- Demonstrated small angle x-ray scattering as a complementary tool for high-throughput structural studies, in collaboration with E. Snell (Hauptmann Woodward Res Institute)
- Demonstrated that sepiapterin reductase is a mediator of chemical redox cycling in the lung
- Showed that injury to the cornea generates lipid peroxidation end products that control expression of stress response proteins including sepiapterin reductase
- Showed that exposure to the polybrominated diphenyl ether mixture DE-71 damages the nigrostriatal dopamine system
- Discovered that the farnesoid X receptor results in post-translational modification of poly (ADP-ribose) polymerase 1 in the liver
- Reported that developmental deltamethrin exposure affects white adipose tissue gene expression
- Showed that inhibition organochlorine and pyrethroid insecticides inhibit human MDR1 and BCRP transporter ATPase activity
- In a microdialysis study, found that acute effects of pyrethroids affect serotonin release in the striatum of awake rats

- Analyzed ozone-induced injury and oxidative stress in bronchiolar epithelium are associated with altered pulmonary mechanics
- Showed the role of galectin-3 in classical and alternative macrophage activation in the liver following acetaminophen intoxication
- Discovered that hepatic and renal Bcrp transporter expression were altered in mice treated with perfluorooctanoic acid
- Found that pregnancy represses induction of efflux transporters in livers of type I diabetic mice
- Showed the alteration of the expression of pesticide-metabolizing enzymes in pregnant mice and the potential role in the increased vulnerability of the developing brain
- Reported on the regulation of hepatic phase II metabolism in pregnant mice
- Determined that redox cycling chemicals had the potential to inhibit P450 mediated drug metabolism
- Discovered that the human *FRY* gene encodes a new mammary carcinoma susceptibility gene
- Demonstrated that the *FRY* gene induces epithelial cell differentiation and suppresses tumor progression by inhibiting epithelial-mesenchymal transition (EMT), a process by which cancer cells become more like stem-cells (cancer stem cells)
- Demonstrated that a chemopreventive regimen of dietary MSC restores normal epigenetic regulation of circadian gene expression by restoring the NAD⁺-dependent histone deacetylase activity of Sirtuin 1
- Demonstrated that exposing pregnant female rats to zeranol accelerates the onset of puberty and alters the susceptibility to mammary carcinogenesis not only in the pups exposed *in utero*, but in subsequent generations (transgenerational effect)
- Demonstrated that CArG-Box Binding Factor A (CBF-A null) mice show an increased incidence of tumorigenesis following exposure to carcinogen and display behavioral abnormalities that include hyperactivity and lack of fear
- Sampled multiple homes for mold bacteria particulate and VOCs related to damage from Hurricane Sandy and measured key flood related environmental markers
- Identified the core set of factors required for selenocysteine incorporation in vitro
- Identified novel functions for the selenium-specific translation elongation factor eEFSec
- Discovered that the ability to utilize selenocysteine as an amino acid co-evolved with specific ribosomal functions
- Demonstrated a clear link between the location of food allergy immunoreactive epitopes in shrimp tropomyosin and their molecular structure and stability
- Designed a series of peptides that bind to the NS1 effector domain of the influenza virus

- Designed nanoparticle-forming peptides automatically embed themselves into a collagen matrix
- Developed a novel metric for assessing protein three-dimensional structure similarity that aids in detecting distantly related metalloproteins
- Created a synthetic collagen peptide interactome for use in controlling assembly of multi-component protein materials
- Explored the effect of glycan modification on efficacy of a protein therapeutic for late infantile neuronal ceroid lipofuscinosis
- Identified three previously unclassified lysosomal proteins
- Identified potential biomarkers for disease progression in mouse models of Niemann-Pick Type C diseases
- Determined cell separation defect caused by diphtheria toxin
- Discovered that the gene, HMGA2, can cause benign tumor cells to become metastatic
- Discovered that HMGA2 activates the specific expression of TGF β RII which leads to the cells being responsive to the ligand, TGF β , which is known to be involved in metastasis.
- Discovered that HMGA2 is expressed in human tumors at the periphery of the tumor which is the location from which cells metastasize to other organs
- Demonstrated two DNA helicases UvrD and DinG as suppressors for lethality caused by mutant *cspA* mRNAs
- Showed relevance of overexpression/deletion of CsdA, RNase R and PNPase to low-temperature RNA metabolism by global transcript analysis
- Discovered that the RNA-binding protein HuR controls a gene expression program required to initiate and sustain T cell activation
- Discovered that chaperone Hsp70 controls posttranscriptional gene silencing of messenger RNAs encoding immune regulatory proteins
- Discovered that RNA decay factor AUF1 can work in a cooperative or competitive fashion with microRNAs to control posttranscriptional gene silencing
- Discovered that heterochromatin protein 1 (HP1) determines self-renewal and control of regenerative proliferation of adult stem cells
- Discovered that microRNA miR-155 regulates immune regulatory properties of mesenchymal stem cells by targeting TAK1-binding protein 2 (TAB2)
- Discovered that chaperone Hsp27 and the ubiquitin-proteasome component β -TrCP control expression of RNA decay factor AUF1
- Discovered novel targets for the development of broad spectrum antibiotics
- Identified a new function for a bacterial toxin family by demonstrating that ribosomal RNAs are cleaved at highly conserved, functionally significant sites

- Identified the kinase that inactivates an essential bacterial elongation factor, leading to inhibition of protein synthesis and cell death
- Discovered that gene looping, which juxtaposes the ends of protein-encoding genes in eukaryotic cells, functions in recruitment of a chromatin remodeling complex to modulate gene expression
- Showed that tRNA gene expression fluctuates during the cell cycle and that transcription is highest in M phase when the tRNA genes associate with nuclear pores
- Showed that DNA circularization prevents disruption of sister chromatid cohesion by transcription
- Showed that two functions of Sir2, sister chromatid cohesion and transcriptional silencing, are separable by mutation
- Discovered a novel mechanism to induce DHFR degradation through cofactor depletion in neoplastic cells by inhibition of NAD kinase, the only enzyme responsible for generating NADP, which is rapidly converted to NADPH by dehydrogenases/reductases
- Demonstrated that benzamide riboside (BR), via anabolism to benzamide adenine dinucleotide (BAD) known to potently inhibit inosine monophosphate dehydrogenase (IMPDH), also inhibits cell growth through a mechanism involving downregulation of DHFR protein
- Demonstrated that the penetratin-coupled peptide a peptide that bound tightly to the E2F-1 promoter consensus sequence has potent in vitro and in vivo cytotoxic effects against a range of cancer cell lines, particularly against Burkitt lymphoma cells and small cell lung cancer (SCLC) cells
- Discovered that the replicative helicase translocates on duplex DNA when it encounters GC rich regions without DNA polymerase
- Discovered that the mitochondrial RNA polymerase bends and unbends the DNA promoter
- Discovered that the mitochondrial RNA polymerase discriminates promoter from nonpromoter DNA by an induced fit mechanism
- Discovered specificities of post-transcriptional elements in developing neocortices
- Discovered specific roles of distinct ELAVL4 isoforms during neocortico genesis
- Discovered developmental combinatorial codes of ribosomal proteins in developing neocortices
- Discovered life-long consequences of transient prenatal insults
- Discovered the Atrophin family of proteins as positive regulators of the conserved Notch signaling pathway in both vertebrates and invertebrates

- Discovered that Shh signaling from an intrinsic tissue source in the spinal cord, the floor plate, is specifically required for the development of the ependymal zone, one of the few adult stem cell reservoirs in the adult CNS
- Discovered a number of protein co-factors that are associated with Gli transcription factors in embryonic chicken spinal cord cells
- Demonstrated that loss of the autism associated gene, Engrailed 2, causes many behavioral abnormalities associated with affected children including abnormal childhood and adult social interactions, deficits in learning and memory as well as responses to fear-producing circumstances, and subtle motor abnormalities
- Discovered that the drug, desipramine, a norepinephrine reuptake inhibitor, corrects many of the autism associated behaviors that occur in Engrailed 2 knock-out mice, suggesting its utility for treatment
- Discovered that in the developing hippocampus, a region critical for learning and memory, the ubiquitous neurotoxin methylmercury induces cell death of neural stems cells primarily during the first few postnatal weeks, suggesting that vulnerability to the toxin occurs during a defined temporal window
- Demonstrated that in the absence of the autism associated gene, Engrailed 2, there is increased neuronal excitability in the hippocampus, a likely basis for the cognitive deficits these mice exhibit
- Discovered that microRNAs whose levels that are altered in schizophrenia, regulate neuronal development in cell culture models by influencing both precursor proliferation as well as differentiation
- Discovered that Par-1/MARK, a polarity protein implicated in autism, regulates PSD-95 dynamics and conformational changes
- Discovered that knockout of MARK2 regulates neuronal development in vivo and affects mouse behavior
- Characterized the molecular mechanisms by which PAR-3 regulates APP trafficking and processing
- Discovered that histone deacetylase 1 is upregulated in axons following traumatic brain injury and is associated with markers of axonal pathology 3 days post injury in mice
- Demonstrated that interrupting BDNF signaling pathway by pharmacological agents TAT-Pep5 (p75 antagonist) and 7, 8-dihydroxyflavone (7,8-DHF) (TrkB agonist) resulted in less neuronal degeneration and cell death following lateral fluid percussion injury in mice
- Showed that TAT-Pep5 (p75 antagonist) treatments to mice after lateral fluid percussion injury had better motor outcomes similar to the p75 ^{-/-} mice
- Showed that inhibiting Eph/Ephrins by EphA6-Fc treatments following lateral fluid percussion injury in mice prevented cell death and reduced neurodegeneration
- Discovered that neuropeptide VGF phosphorylates the TrkB receptor by the ELISA method

- Set up studies to determine whether the antidepressant effects of neuropeptide VGF in corticosterone treated (hGFAP^{tk} transgenic) mice are dependent upon neurogenesis
- Validated and analyzed five non-synonymous VGF SNPs and showed that altered mRNA transcript and protein expression patterns results
- Established that neuropeptide OFQ inhibits dendritic morphogenesis through activation of RhoA
- Demonstrated that Dopaminergic neurons can be generated from iPS cells
- Discovered subtype-specific functions of body hormones in the mesolimbic system
- Established a cellular model for addiction study using human neurons derived from iPS cells
- Discovered that mice lacking the MOR-1 receptor exhibit increased proliferation of hippocampal neural progenitors
- Discovered that mice lacking the proSAAS precursor protein exhibit a normal glucose tolerance response that is essential for the rescue the lethal diabetic phenotype of CPE KO mice
- Discovered that IGFBP-3 and TNF- α regulate retinal endothelial cell apoptosis
- Discovered that exogenous GLP-2 and IGF-1 induce a differential intestinal response IGF binding protein-3 and -5 double knock-out mice
- Determined that metabotropic agonists through the mediation of astrocyte-derived BDNF increase levels of mature oligodendrocyte traits in a model of Multiple Sclerosis
- Continued studies indicating that astrocyte-derived and oligodendrocyte-derived BDNF may impact development of cholinergic neurons and oligodendrocytes in the basal forebrain
- Discovered, in preliminary studies, that oligodendrocyte-derived BDNF affects the response of basal forebrain cholinergic neurons and oligodendrocytes to a fimbria-fornix lesion in adult mice
- Discovered that despite reperfusion of a block cerebral vessel, many small areas still have inadequate oxygen delivery
- Demonstrated a reduced cerebral metabolic response to excitatory amino acids in an animal model of tuberous sclerosis-autism
- Demonstrated that thioredoxin-1 plays an important role in the increased blood brain barrier permeability associated with the early stages of cerebral ischemia
- Demonstrated that elementary school aged children who spoke in two-word utterances before 14 months of age are more likely to have gifted verbal abstract reasoning abilities, whereas those who began to use two-word utterances at or after 14 months are equally likely to be gifted or non-gifted in this area
- Showed that children with prenatal cocaine exposure who are males show greater risk-taking propensity in adolescence

- Demonstrated that prenatal cocaine exposure, high risk environment, and male sex each predicted externalizing problems such as aggression and antisocial behavior in late childhood
- Found that injury behavior in 7 year-olds was predicted by male sex, prenatal drug exposure (particularly cocaine), and greater levels of environmental risk
- Found that Japanese preschoolers showed more self-control than US preschoolers but children from both cultures were equally likely to lie when asked if they violated an adult prohibition
- Demonstrated that preschoolers with greater intelligence were better able to resist the temptation to peek at a “forbidden” object but they were also more likely to lie about it once having done so
- Found that the emotional aspect of intelligence was found to be the most important for predicting how long children could resist peeking at a “forbidden” object
- Found that preschoolers from families with greater religiosity are less able to resist the temptation to peek at a “forbidden” object after controlling for intelligence
- Demonstrated that neglected children show heightened initial cortisol response upon arriving to a laboratory visit, suggesting that neglected children exhibit greater reactivity to the perceived stress associated with a laboratory visit
- Found that children prenatally exposed to cocaine exhibited slower pubertal development during early adolescence
- Children prenatally exposed to tobacco showed greater activation in inferior parietal regions, whereas unexposed children showed greater activation in inferior frontal regions during a working memory task when undergoing functional magnetic resonance imaging. These differences were observed when they made a correct response, suggesting that exposed and unexposed children use different brain regions and approaches to succeed in working memory tasks
- Demonstrated that children raised without a father-figure and whose mothers had a history of antisocial behavior during adolescence are more likely to show characteristics of psychopathy during adolescence
- Demonstrated that children who lack close relationships with friends in childhood are more likely to show callousness and a lack of emotionality during adolescence
- Demonstrated early maternal caregiving behavior consists of three core qualities: Responsiveness/Positive Affect, Flat/Detached Affect, and Intrusive/Negative Affect
- Found that chaotic environments have adverse impact on externalizing and internalizing emotional problems as well as legal involvement with the police
- Found that regional brain volumes measurements on MRI images of young children with ASD were associated with their self representation abilities such that greater white matter volumes in medial prefrontal cortex, temporal pole and middle- and superior temporal cortex were associated with lesser self representation abilities

- Demonstrated that four year old children, when faced with failure on easy tasks, made negative self-attributions which were related to the children's emotional behavior: in particular, the amount of shame they showed at their failure
- Found that the effects of gender and prenatal cocaine exposure affected adolescent males who showed the most stress
- Found that cortisol response to stress in 4 and 6 year olds revealed that cocaine-exposed children showed the highest stress levels
- Found that poor outcomes in at-risk juvenile offenders was related to their level of shame and their blaming others for their failure
- Found that there was a significant relation between environmental risk and the completion of federal Job Corps programs which can be used to screen potential Job Corps applicants
- Showed GATA-6 regulation of epiblast survival during epithelial morphogenesis
- Demonstrated the mechanisms of apoptosis-mediated epithelial lumen formation
- Showed the role of CREG in proliferative vascular disease
- Characterized atypical PKC knockout mice
- Identified Abi1 as a new substrate of the tumor suppressor PTEN
- Showed that Abi1 is degraded after tyrosine and serine dephosphorylation by PTEN
- Demonstrated that Abi1 mediates loss of PTEN-induced defects in stem cell maintenance and epithelial morphogenesis
- Identified a novel interaction between Abi1 and Smarcc1 of the SWI/SNF chromatin remodeling Complex
- Demonstrated that Smarcc1 mediates impaired epithelial differentiation upon PTEN loss
- Confirmed the PTEN-Abi1-Smarcc1 pathway in human glioblastoma and breast cancer cells
- Identified Zizimin1 as a Cdc42 activator during vasculogenesis
- Identified Rap1GDS1 as a Cdc42 activator during vasculogenesis
- Identified a novel interaction between CREG and Sec8 of the exocyst
- Mapped the Sec8 binding site in CREG using in vivo and in vitro binding assay
- Generated CREG knockout embryonic stem (ES) cells and found that deletion of the CREG gene in ES cells inhibits cardiac differentiation
- Performed mechanical imaging of the prostate
- Evaluated the Relationship Between BMP-6 and Obesity in Transgenic Mice

- Studied the role of BMP-6 in castration-resistant prostate cancer
- Investigated androgen receptor and neuroendocrine prostate cancer
- Evaluated association of TGF-beta and prostate cancer aggressiveness
- Studied a knock-out mouse model of cystinuria type I
- Generated and characterized 4 primary glioblastoma cell lines from patient samples for expression and function of several adhesion molecules including cadherins and integrins, measured dispersal velocity, single cell motility, TST, assessed FNMA, actin organization, attachment to substrate, and the effects of Dex treatment on these parameters
- Initiated studies exploring the feasibility of using zebrafish as an invasion model of GBM
- Designed and tested a new ex vivo assay to test dispersal of GBM cells
- Acquired several hMSC lines and induced them to generate CAFs
- Initiated studies in which induced and non-induced hMSC cells were mixed with either rat or human prostate stromal cells to assess mixing behavior
- Showed that Dex treatment led to increased actin organization and reduced motility in prostate cancer cells
- Established a new method to measure the dispersal velocity of aggregates of prostate cancer cells on prostate stromal cells
- Assessed the effects of Dex on shear-induced detachment
- Discovered that pro-inflammatory responses in the periphery are primarily generated by components of anaerobes from the *Bacteroidetes* genus and these responses are primarily produced by myeloid dendritic cells
- Showed that the common prophylactic therapy for sepsis, the Nichols-Condon bowel preparation which consists of neomycin and metronidazole given orally to patients the day before surgery, is ineffective for clearing *Bacteroidetes* from the intestine
- Determined that in response to acute intestinal injury, this treatment induced increased systemic inflammation and faster death when compared to treatment free mice, and these outcomes did not correlate with the spread of bacteria in extra-intestinal tissues
- Discovered that spillage of gut microbial products in extra-intestinal tissues, rather than the gut microbes themselves, could cause the initiation of systemic inflammation leading to death. Systemic injection of gut-derived bacterial supernatants of treated mice showed declined survival percentage compared to that with treatment free mice
- Showed that 2B4 is expressed on almost all hematopoietic CD45⁺ cells in the gut mucosa. In contrast, 2B4⁺ cells were detected only on minor cell populations of other tissues and lymphoid organs
- Showed that 2B4 was also found to be expressed at high levels in human small intestine and colon
- Discovered that by using UBC-GFP bone marrow chimera and lymphotoxin- α deficient

mice, we revealed that 2B4 imprinting on gut hematopoietic cells occurs directly in the gut mucosa and independent of the gut-associated lymphoid tissue (GALT)

- 2B4 expressing cells largely disappeared in germ-free (GF) and antibiotics treated mice, indicating a critical role of gut microbiota. In “conventionalized” GF-mice, 2B4 expression in the gut mucosa reappeared
- Showed that 2B4 deficiency renders mice susceptible to oral infection with *Listeria monocytogenes*
- Discovered that leukocytes from the mother’s breast milk survive the GI tract of MHC-mismatched infant mice
- Discovered that while the majority of immune cells found in breast milk are myeloid cells, the majority of cells that home to the neonatal PPs are actually CD8 α T lymphocytes that express LPAM1, a gut adhesion molecule rather than a peripheral adhesion molecule such as CD62L
- Investigated the function of maternal milk CD8 α T cells in infant immunity and protection against enteric microbes
- Identified *APO ϵ 4* as a determinant of the response to human sepsis and a wide-spanning but selective regulator of human innate immunity
- Used large scale Metabolomics platform (Metabolon), to identify key alterations in plasma metabolites associated with response to human endotoxemia
- Analyzed cellular bioenergetics and metabolic regulation in human and mouse models of endotoxemia and high-fat diet induced insulin resistance
- Continued to establish novel protein expression indicators in leukocytes from patients with diabetes
- Investigated the role of fibronectin in heterogeneous cell-cell interactions and cohesion
- Worked on developing customized approaches to treating wound complications after post-mastectomy radiation therapy
- Continued studies into strategies for improving growth factor function in diabetic wounds
- Worked on development of biologically stable and active fibronectin-PEG conjugates for use in treating chronic wounds
- Continued studies examining modulation by the microenvironment of fibrogenic potential in human mesenchymal stem cells
- Discovered chromatin modifying factors that promote somatic cell reprogramming
- Developed an unbiased screen for factors that control neural cell fate during reprogramming
- Established a library of lentiviral vectors for neural cell reprogramming
- Developed a cell transplant / cell recovery model for analysis of cell reprogramming in vivo

- Studied use of visible and near infrared optical technologies for better intraoperative visualization and spectral characterization of structures in the neck (parathyroid, thyroid, lymph node, fat, thymus, salivary gland)
- Studied the association between fat and malignancy to investigate whether obesity is a risk factor for thyroid cancer
- Discovered that inhibition of bone morphogenetic protein (BMP) type I receptors with siRNA and small molecule antagonist causes growth inhibition and death of lung cancer cell lines
- Discovered that the anti-tumorigenic effects of BMP antagonists is mediated by down-regulating the expression of inhibitor of differentiation proteins (Id1-Id3)
- Discovered that inhibition of BMP signaling causes a feedback activation of Erk-1/2 signaling that led to increased expression of Id proteins. Inhibition of BMP and Erk-1/2 signaling with small molecule antagonists caused a greater reduction in expression of Id proteins than either drug alone
- Discovered that pregnane X receptor (PXR), a hepatic nuclear receptor involved in the detoxification and elimination of toxic foreign substances including pharmaceutical drugs, mediates dyslipidemia in mice induced by HIV protease inhibitors that are widely used to treat HIV-AIDS
- Developed and implemented computational quantitative ion character-activity relationship (QICAR) models to estimate associations of human cardiovascular (CV) diseases (CVDs) with a set of metal ion properties commonly observed in ambient air pollutants
- Identified potent inhibitors of the human organic anion transporters 1 and 3 (respectively, hOAT1 and hOAT3), which are the major transporters in the basolateral membrane of kidney proximal tubules that mediate the elimination of diverse drugs
- Demonstrated that Bisphenol A, a base chemical used extensively in many consumer products and a known endocrine disrupter, activates the human pregnane X receptor (PXR) in mice
- Discovered a novel chlamydia-specific transcription factor that is critical for activation of gene expression in the obligate intracellular bacterial pathogen *Chlamydia*, and may serve as a novel therapeutic target for chlamydial diseases
- Demonstrated the reconstitution of chlamydial type III secretion system in *Escherichia coli*. The reconstituted system will be extremely useful for characterizing the chlamydial type III secretion system and study of its role in chlamydial pathogenicity
- Collaborated with investigators at the NIH and the Weizmann Institute to demonstrate that a designed protein molecule was shown to inhibit interferon, the body's antiviral defense molecule, in live monkeys infected with the monkey counterpart of the HIV virus
- Discovered that Murine Leukemia Virus p12 acts as a tether to mitotic chromosomes to maintain the virus in the nucleus following cell division
- Discovered that Murine Leukemia Virus Integrase protein interacts with host BET proteins to direct viral integration into transcriptional start sites and CpG Islands; targeting integration to these sites is the major cause of gene activation caused by the virus

- Identified a key role for Mg^{2+} in TRPM7's control of ROS levels during cell stress
- Discovered underlying mechanism for interaction between the autophagy pathway and phosphatidyl inositol pathway
- Demonstrated that DNA topoisomerase II beta is responsible for doxorubicin-induced cardiotoxicity
- Discovered that DNA topoisomerase II beta deficiency can lead to enhanced camptothecin-induced apoptosis
- Showed that chemotherapeutics and radiation can stimulate MHC class I expression through elevated interferon-beta signaling in breast cancer cells
- Discovered that one of the immune consequences of Pertussis Toxin exposure is the induction of high levels of lymphocyte infiltration into peripheral blood
- Completed genotyping of >2,000 single sperm samples with nearly 2,000 genetic markers on the short arm of chromosome 18
- Discovered meiotic recombination crossover pattern along the short arm of chromosome 18 on a fine scale
- Discovered six large segmental variations on the short arm of chromosome 18
- Discovered differences in meiotic recombination rate among different individuals that cannot be determined with family pedigree studies
- Discovered that a significant portion of "single nucleotide polymorphisms" may consist of paralogous sequences sharing a high degree of sequence identity
- Discovered a central role for the nuclear export pathway in protein degradation
- Discovered that nuclear substrates of the proteasome can be detected at the nuclear periphery
- Determined that specific mutations in the Srp1/Importin- α protein causes a failure in nuclear targeting of proteasomes
- Determined that Srp1 performs distinct roles in nuclear import and nuclear protein degradation
- Discovered that the Rad23 shuttle factor oscillates between the nucleus and the cytosol, in response to the availability of nuclear-targeted proteasomes
- Defined the residues in Rad23 that are phosphorylated
- Determined that phosphorylation can affect the protein degradation and the DNA repair functions of Rad23
- Discovered that purified nuclei contain very low levels of proteasome activity
- Discovered that nuclear substrates of the proteasome accumulate in punctate cytosolic aggregates in specific export mutants

- Identified severe mitochondrial morphological defects in specific proteasome mutants
- Developed reagents to simultaneously monitor the nucleocytoplasmic movement of nuclear substrates, in relation to proteasome targeting to the nucleus
- Discovered that androgen receptor can be modified by neddylation
- Demonstrated that neddylation of androgen receptor occurs on specific lysine residues and affects androgen receptor's transcriptional activity
- Discovered that the proteasome is involved in regulating HIV-1 latency, the primary barrier to virus eradication, providing the basis for further exploration of a novel interaction essential for controlling HIV-1 persistence
- Discovered that Elongation Factor 2 kinase is essential to maintain germline quality and is therefore critical to reproductive success and survival of a species
- Discovered a transcription factor that plays a critical role in transcription regulation in cortical and hippocampal neurons of mouse embryo
- Identified a novel mechanism for dendritic development
- Identified genetic interactions between components of the Swr1 chromatin remodeling complex and histone deacetylases
- Determined domains of the yeast homologue of KDM5C that contribute to kinetochore function
- Found a CD4+ T cell population, termed ThGM, that produces high concentrations of GM-CSF, a strong pro-inflammatory cytokine
- Discovered that tumor mesenchymal stem cells (MSCs) have a strong ability to promote tumor growth through recruiting macrophages. The tumor MSCs promoting ability of tumor MSCs can endow naïve MSCs with the tumor-promoting properties by co-culturing. Therefore, targeting tumor MSCs could lead to better tumor therapy
- Revealed an immune promoting function of mesenchymal stem cells under low inflammatory conditions, providing important information for better application of MSCs for treating inflammatory diseases
- Discovered that inflammatory cytokines induce in mesenchymal stem cells the expression of intercellular adhesion molecule-1 and vascular cell adhesion molecule-1, which are critical for immunosuppression during stem cell therapy
- Identified sites in the protein, tropomyosin, responsible for the cooperative regulatory function of myosin
- Tested and refined a model of the actin-tropomyosin-myosin filament
- Identified and tested the sites on actin required for binding tropomyosin
- Identified residues on muscle and non-muscle forms of tropomyosin that contribute to their isoform-specific functions

- Created mutants in the tropomyosin gene of fission yeast that actin cytoskeleton assembly and function, including cell division
- Demonstrated that the DCC/frazzled gene is required for bringing together cardiac cells at specific sites of attachment during embryonic cardiac tube formation
- Showed that cell alignment is established during cardiac tube formation by the differential regulation of the cytoskeleton
- Showed that the receptor protein Roundabout2 functions in a non-cell autonomous manner to regulate lumen formation in the cardiac tube
- Discovered three neuronal signals that regulate the WAVE/SCAR proteins during embryonic and larval morphogenesis in *C. elegans*
- Demonstrated that the WAVE/SCAR actin nucleation complex is required to promote endocytosis and early endosome morphology in polarized epithelia in *C. elegans*
- Developed assays for live imaging of the actin cytoskeleton during embryonic development
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- Characterized the mechanical properties of meniscal roots in ovine knees, and the implications that this strength has on fixation techniques
- Demonstrated the use of gennipin and EDC as a crosslinker and radioprotector for allogenic tissue. Tests have been performed in an ovine model
- Developed a fiber reinforced collagen sponge for intervertebral disc regeneration. This project is still in its first stages, but a preliminary design has shown promise
- Showed the effect of E2f1-3 switch from activators in progenitor cells to repressors in differentiating cells
- Identified novel cell and molecular functions of the BCCIP gene in cancer progression
- Characterized the conditional BCCIP knockdown mouse model to investigate its role in brain tumor and breast cancer

- Completed and published a study on the role of autophagy in PALB2-associated hereditary breast cancer
- Identified DPP3 as new factor involved oxidative stress response and defined the mechanism of its function
- Systematically investigated BRCA1 structural elements and clinical mutations in DNA homologous recombinational repair and drug sensitivity
- Generated mouse Brca2 and Palb2 breast tumor models and cell lines and studied the cellular sensitivity to oxidative stress-inducing chemopreventive agents
- Showed how Radioprotection provides functional mechanics but delays healing of irradiated tendon allografts after ACL reconstruction in sheep
- Demonstrated that Dopaminergic neurons can be generated from induced pluripotent (iPS) cells
- Discovered subtype-specific functions of body hormones in the mesolimbic system of the brain
- Established a cellular model for the study of addiction using human neurons derived from iPS cells
- Discovered that an epilepsy-associated mutation of the neuronal synaptic protein, CNTNAP2 results in secretion and failure to properly localize in the cell membrane
- Showed that interactions between the post-synaptic family of leucine repeat proteins (FLRT proteins) and the latrophilin G-protein coupled receptors play a key in the development and functions of glutaminergic synapses
- Demonstrated a link between phthalate exposure and risk of preterm birth
- Discovered that phthalate exposure can alter differentiation of stem cells
- Showed modulation of neonatal neutrophil functions by mesenchymal stem cells
- Discovered a CD4⁺ T cell population that produce high concentrations of GM-CSF, termed ThGM
- Discovered that tumor mesenchymal stem cells (MSCs) have a strong ability to promote tumor growth through recruiting macrophages
- Revealed an immune promoting function of mesenchymal stem cells under low inflammatory conditions
- Discovered that inflammatory cytokines induce the expression of intercellular adhesion molecule-1 and vascular cell adhesion molecule-1 in mesenchymal stem cells. These molecules are critical for immunosuppression during stem cell therapy
- Identified a new class of T cells that are present in adipose tissue and may regulate obesity
- Determined that the balance between different BTB-zinc finger transcription factors helps determine innate T cell differentiation

- Identified novel targets of PLZF that may explain how PLZF+ innate NKT cells perform immunoregulatory functions
- Demonstrated that ubiquitination of the PAF15 cell cycle regulator is required for its proper function in mouse hematopoietic stem cell development
- Showed that long non-coding RNAs play a previously unrecognized role in hematopoietic cell development
- Discovered that pro-inflammatory responses in the periphery are primarily generated by components of anaerobes from the *Bacteroidetes* genus and these responses are primarily produced by myeloid dendritic cells
- Showed that 2B4 is expressed on almost all hematopoietic CD45⁺ cells in the gut mucosa and that 2B4 deficiency renders mice susceptible to oral infection with *Listeria monocytogenes*
- Discovered that leukocytes from the mother's breast milk survive the GI tract of MHC-mismatched infant mice
- Discovered that CDX2 expression primes trophoblast progenitor fate from differentiating human embryonic stem cells in the formation of the placenta
- Showed that defects in the homologous recombination DNA repair pathway limits pluripotency reprogramming in aging human fibroblasts
- Discovered that microRNAs play a role in podocyte damage in pediatric nephrotic syndrome
- Discovered that type 1 interferon signaling mediates podocyte damage in response to innate immune signals
- Showed that transient proteinuria induced by TLR ligands is a physiologic response that enhances urinary clearance of toxic bacterial products
- Showed that the anti-cancer activity of histone deacetylase inhibitors involves loss of histone methyltransferase-mediated gene silencing
- Determined that a segment of the human T cell leukemia virus Tax transactivator-encoding RNA is responsible for altered Tax RNA stability and induction of virus from latency
- Discovered that the highly conserved, stem cell gene, PDCD2 is essential for cell cycle entry

TRANSLATIONAL RESEARCH

- Completed Delphi study for design of a pilot clinical trial of yoga intervention specifically designed for people with moderate disability due to multiple sclerosis
- Completed translational research on the effectiveness of school-based programs to support a national evidence-based practice guideline for pediatric weight loss.

- Completed translational research on the the influence of environmental and community level factors on childhood overweight to support a national evidence-based practice guideline for pediatric weight loss.
- Studied Correlations between Statistical Models of Robotically Collected Kinematics and Clinical Measures of Upper Extremity Function (Federal Funding)
- Studied the involvement of frontoparietal regions in control of grasping. (Federal Funding)
- Studied the patterns of neural reorganization in the brain of stroke patients after training in virtual reality. (Federal Funding)
- Studied motor control and learning issues in individuals with autism spectrum disorder. (University Funding)
- Studied the effect of using robotics and virtual environments to improve functional skills in the hemiplegic arm post stroke.
- Published an article with collaborators on Aging Contributes to Inflammation in Upper Extremity Tendons and Declines in Forelimb Agility in a Rat Model of Upper Extremity Overuse
- Discovered Novel Potential Cytogenetic Biomarker(s) for Risk Stratification in Barrett's Derived Adenocarcinoma of the Esophagus
- Demonstrated the Effect of Acid and Bile on Barrett's Epithelium-Carcinogenesis by Exome Sequencing and Epigenetic Studies
- Discovered the Role of Benzopyrene B[a]P in Esophageal Cancer Development and Chemoprevention by Curcumin using an *in-vitro* Carcinogenesis Model
- Discovered Elf5 inhibits the epithelial-mesenchymal transition in mammary gland development and breast cancer metastasis by transcriptionally repressing Snail2
- Discovered polymorphic variants TSC1 and TSC2, involved in the mTOR pathway, and their role in the age of onset of estrogen receptor positive breast cancers
- Discovered mesenchymal stromal cells protect mantle cell lymphoma cells from spontaneous and drug-induced apoptosis through secretion of B-cell activating factor and activation of the canonical and non-canonical nuclear factor kappaB pathways
- Discovered autophagy suppresses RIP kinase-dependent necrosis enabling survival to mTOR inhibition
- Identified a potential lead compound for p53 targeted drug development
- Continued evaluation of CTA Measurement of Pro-angiogenic Markers in Patients with Hepatic Metastases undergoing Selective Internal Radiation Therapy
- Demonstrated that the loss of FRY expression is a sensitive and specific biomarker for progression of carcinomas originating in many organs

- Founded GeneAssess Inc, a start-up biotechnology company, to develop diagnostic prognostic, and genetic tests based on the FRY, and develop novel, targeted therapeutic approaches for the treatment of carcinomas lacking FRY
- Published a paper on the optimization of cell receptor-specific targeting through multivalent surface decoration of polymeric nanocarriers
- Analyzed the toxicodynamics of rigid polystyrene microparticles on pulmonary gas exchange in mice and demonstrated that there were implications for microemboli-based drug delivery systems
- Developed a wound healing model to evaluate topical anti-inflammatory agents
- Demonstrated that the chemopreventive agent, methylselenocysteine (MSC), restores circadian gene expression that is disrupted after exposure of rodents to carcinogens (NMU; shift work protocol)
- Developed a PB/PK model for the uptake, metabolism and excretion of zeranol in humans
- Developed new personal monitors for a National Children's Study (NCS) segment
- Developed location-wide Exposure Index that uses extant data to define the basic ranking of exposure for locations of NCS in each county
- Developed a full body robotic mannequin in the Controlled Environmental Facility to examine the release of nanoparticles and agglomerates from clothing
- Developed chemical, physical and biological markers for personal and microenvironmental monitoring
- Conducted EPA-funded research to examine the use of refined exposure surrogates for ambient particulate matter exposure in epidemiologic research
- Initiated exposure studies associated with nanoparticle releases from consumer products and evaluated the risk of nanoparticle exposures
- Reported that inhalation of diesel exhaust leads to elevated oxidative stress levels in exhaled breath condensate among subjects with asthma
- Reported that malondialdehyde in both exhaled breath condensate and urine is a biomarker of air pollution induced oxidative stress
- Reported that the triggering of myocardial infarction by fine particles is enhanced when particles are enriched in secondary species
- Demonstrated that commuting exposure to traffic pollution leads to increased respiratory oxidative stress and decreased endothelial function
- Reported an example of successful community participatory research, regarding mercury exposure from recreationally caught fish in New Jersey; stakeholders posed key questions, identified critical species, participated in specimen collection, discussed implications of analytic results, balanced risks, and were central to the risk communication

- Reported that selenium:mercury molar ratios in fish are not stable enough to guide risk communications regarding benefits and risks of fish consumption
- Reported that lead leaching from industrial-source rocks used to stabilize a beach, contaminated invertebrates and fish in near shore waters
- Reported that the public continued to use a lead contaminated beach despite posted warnings of lead contamination
- Identified CREG-eluting stent for treatment of in-stent neointimal formation
- Analyzed continued differentiation of carotid plaque in an ex-vivo model assessing a newly derived class of anti-cholesterol polymers
- Investigated entrainment of peripheral clock genes by cortisol
- Completed studies of the effect of the route of feeding (enteral versus parenteral) on heart rate variability and gene expression
- Participated in a study of human volunteers administered intravenous *E. coli* endotoxin or placebo
- Demonstrated that the responses of human volunteers administered intravenous endotoxin meet the accepted criteria for the Systemic Inflammatory Response Syndrome (SIRS)
- Conducted two volunteer trials of Clinical Center Reference Endotoxin Injection, lot 3, by studying the differential regulation of monocyte and neutrophil cell-surface receptors, pro- and anti-inflammatory cytokine production and counter-regulatory hormone production in human volunteers administered intravenous endotoxin
- Discovered a lead compound that reactivates mutant p53 in cancer. This is one of the first anti-cancer drugs that targets mutant p53, the most commonly mutated gene in human cancer
- Evaluated Inter-rater Reliability and Validity of FOUR coma Score
- Compared CT Head vs. CT Maxillofacial for Identification of Facial Fractures
- Studied Dysphagia Following C-spine Injury or C-spine Surgical Intervention
- Evaluated Fall From Standing: More Than Just a Hip Fracture
- Evaluated BID Lantus Dosing in the SICU
- Studied Behavioral Interviewing
- Studied Rate of Self-extubations in ICU Patients Whose Primary Language is not English
- Studied Hyperglycemia with Therapeutic Hypothermia
- Participated in a Multicenter Study of Duration of Antibiotics for Intra-Abdominal Infection

- Developed (with Prabhas Moghe, RU) a systematic computational procedure to accelerate and streamline the design, optimization, and property prediction of a novel class of biomaterials with cardiovascular therapeutic properties
- Discovered (with Richard Howells, RU-NJMS) a series of triazole-based small molecule inhibitors of human multiple myeloma (MM) cell proliferation; MM-900, thus far the most active compound in the series, inhibits MM cell proliferation with $EC_{50} = 350$ nM and exhibits no adverse effects in mice at efficacious doses
- Invented (with David Diller) the *Avalanche* computer algorithm and associated searchable compound databases containing 2+ million approved drugs and drug-like chemical compounds; the algorithm rapidly searches the databases using a specified query molecule and retrieves 'hits' based on four separate and distinct metrics for evaluating molecular similarity: fingerprint searching, 1D alignments, shape-based comparisons, and 3D alignments
- Invented a series of delta opioid receptor selective compounds
- Discovered and patented a series of inhibitors of the Apicomplexan parasite family which includes malaria and toxoplasmosis
- Invented topical skin lightening and depigmentation agents for cosmetic and medical applications
- Invented Shape Signatures, a computer algorithm and associated chemical database for ligand-based and receptor-based drug design using molecular shape and electrostatic complementarity
- Invented a series of triazole-based anti-mitotic anti-proliferative compounds for the treatment of cancer and related pathologies
- Invented labeled bimolecular compositions and methods for production and uses
- Discovered modification of mitochondrial functions can effectively prevent and treat type II diabetes
- Demonstrated that placenta-derived stem cells (PDAC) inhibit induction and progression of EAE, the mouse model disease of multiple sclerosis
- Established that multiple subcutaneous injections of PDAC do not cause any adverse effects associated with morbidity or mortality while multiple intravenous injections of PDAC into mice are not well tolerated
- Showed that the class of drugs known as proteasome inhibitors (PIs) can also act as antagonists of HIV-1 latency, which has the potential to contribute significantly to the development of strategies to clear HIV-1 infection
- Demonstrated that drugs affecting different aspects of post-transcriptional gene regulation can be utilized together to more precisely regulate expression of a gene in gene therapy protocols
- Developed a fiber reinforced collagen sponge for meniscus regeneration. Multiple polymer fiber types and patterns have been experimented with, and our design has shown promise in an ovine model

- Completed a methodology to identify synergistic/antagonistic drug combinations from the pooled analysis of clinical trials
- Completed a methodology to design optimal personalized combination therapies for cancer treatment
- Completed a study identifying genes in folate metabolism whose expression associates with the response to the antifolate drug methotrexate
- Collaborated with Rutgers Makerspace to investigate the application of 3D-printing to the manufacture of radiation oncology devices such as boluses
- Investigated dose perturbation characteristics and clinical application to breast patients of a novel hydrogel fiducial marker TracelT (Augmenix)
- Collaborated with William Beaumont Hospital to investigate heterogeneity-corrected cardiac doses for breast balloon brachytherapy patients
- Quantified the amplitude and phases of lung tumor motion during radiation, using non-rigid registration between 4DCT and fluoroscopy images, and developed an online patient setup strategy to minimize the setup errors due to respiratory motion
- Examined the heart motion signal from fluoroscopy images using non-rigid registration propagation and frequency domain analysis to extract and quantify the impact of cardiac motion on lung tumor and provided a solution to compensate for the corresponding motion during radiation treatment planning

CLINICAL SCIENCES

- Demonstrated that Dexmedetomidine infusion during multilevel spinal fusions improves the quality of recovery and, possibly, reduces fatigue in the early postoperative period
- Discovered that COX-2 dependent mechanisms may play a role in the development of postoperative cognitive dysfunction.
- Demonstrated that dexmedetomidine infusion during vitreoretinal surgery under sub-Tenon block is comparable to propofol for sedation, hemodynamic stability and surgeon satisfaction
- Demonstrated that there is a correlation between infusion rate of propofol and bispectral index in patients receiving total intravenous anesthesia
- Demonstrated the multiple coagulation test system is a feasible concept in assessing coagulation status
- Demonstrated that age is not a factor in determining conservative treatment modality for patients with lumbar spinal stenosis, herniated nucleus pulposus, and degenerative disc disease
- Designed, researched and developed novel bite block to prevent tongue laceration during motor evoked potentials monitoring

- Studied and discovered new trends in Pituitary Tumor Excision and Associated Perioperative Complications in the Nationwide Inpatient Sample
- Discovered and researched tool to measure climate of bullying among anesthesia care providers
- Showed, that Acute Hyperkalemia and Hyponatremia can follow Intraoperative Mannitol Administration
- Researched and discovered that Visual Evoked Potentials are reliable when patient's eyes protected with tegaderm
- Described Perioperative Anesthesia Challenges in a patient with Congenital Chronic Superior Mesenteric Artery Syndrome
- Discovered that Propofol induced-sedation involves Inhibition of noradrenalin in the ventrolateral preoptic nucleus
- Described first case of Esophageal Stethoscope Knotting around Endotracheal Tube
- Described Anesthesia-Induced Rhabdomyolysis During Corrective Spine Surgery
- Developed Interactive Problem Based Learning Discussion on Anesthesiologist's Burnout
- Demonstrated that pancreatic cancer treatment in a poor patient population can result in survivorship comparable with clinical trial populations, if intense supportive services are provided. (with Bernadine Donahue M.D., *et al.*)
- Demonstrated that HIV-infected pregnant patients taking protease inhibitors did not suffer an increased risk of preterm birth in our cohort (with Shauna Williams M.D. *et al.*)
- Published results showing the utility of topical timolol for treatment of periocular pediatric hemangiomas
- Discovered the use of a new generation of fluoroquinilones in the treatment of nasal lacrimal obstruction
- Demonstrated retrospectively that combined pars plana vitrectomy and Baerveldt tube placement in the posterior chamber may be effective in lowering elevated intraocular pressures
- Developed a unique new system for telemedicine—telepresence— in ophthalmology
- Developed and validated new software for optic nerve imaging in glaucoma
- Developed a unique new system for telemedicine in ophthalmology
- Developed new methods for LASIK surgery
- Ascertained genetic factors in diabetic retinopathy in type 1, insulin-dependent African Americans
- Described relationship of depression and diabetic retinopathy in type 1, insulin-dependent African Americans

- Determined that retinal vein dilation is an early and independent indicator of progression of diabetic retinopathy from mild to severe in type 1, insulin-dependent African Americans
- Demonstrated that the Miller Fisher variant of Guillian Barre Syndrome may masquerade as acute sphenoid sinusitis with orbital apex syndrome
- Determined amplitude latency and constriction dilation velocity of an afferent pupillary defect as measured by pupillometry
- Studied orbital complications of chronic inflammatory demyelinating polyradiculoneuropathy
- Described and analyzed therapeutic agents and their effectiveness in sarcoid optic neuropathy
- Described subarachnoid hemorrhage-negative Terson's syndrome following balloon-assisted coil embolization with underlying antiphospholipid antibody syndrome
- Studied effects of head elevation and time on intraocular pressure, retinal imaging, ultrasound imaging of the optic nerve, and pupillometry in the prone position
- Conducted a multi-center prospective study of idiopathic intracranial hypertension (pseudotumor cerebri)
- Showed that infection of human monocytes with 5 closely related *Mycobacterium tuberculosis* strains that collectively caused extensive disease (n = 862) among US-born tuberculosis patients to show 2 growth phenotypes, slow (doubling ~55 hours) and fast (~25 hours)
- Showed that the faster growing Mtb strains elicited more tumor necrosis factor α and interleukin 1 β than the slower growing strains and caused accelerated death of infected guinea pigs (~9 weeks vs 24 weeks) associated with increased lung inflammation/pathology
- Showed that the faster growing Mtb strains were associated with human immunodeficiency virus infection and more limited in spread
- Evaluated the changes in plasma cytokines in patients undergoing treatment for TB as a means of identifying candidate host markers associated with microbiologic response to therapy
- Showed that Plasma concentrations of interferon-inducible protein-10 (IP-10) and vascular endothelial growth factor (VEGF) were significantly reduced upon TB treatment, regardless of co-infection with HIV
- Showed that VEGF plasma concentration, measured during early TB treatment, could represent a surrogate marker to monitor sputum culture conversion in HIV uninfected individuals
- Characterized the *M.tuberculosis*-specific T cell-associated cytokine production and proliferative capacity in peripheral blood from adults with progressively higher mycobacterial loads-that is, persons with latent M. tuberculosis infection (LTBI), with smear-negative pulmonary tuberculosis (TB) and smear-positive TB

- Showed that patients with smear-positive TB had decreased polyfunctional IFN- γ (+)IL-2(+)TNF- α (+) and IL-2-producing specific CD4 T cells and increased TNF- α single-positive cells, when compared with smear-negative TB and LTBI. TB patients also had increased frequencies of *M. tuberculosis*-specific CD8 T cells, compared with LTBI
- Showed that *M.tuberculosis*-specific CD4 and CD8 T cell proliferative capacity was profoundly impaired in individuals with smear-positive TB, and correlated positively with ex-vivo IFN- γ (+)IL-2(+)TNF- α (+) CD4 T cells, and inversely with TNF- α single-positive CD4 T cells
- Demonstrated that during 6 months of standard anti-TB treatment, specific IFN- γ (+)IL-2(+)TNF- α (+) CD4 and CD8 T cells increased, whereas TNF- α and IFN- γ single-positive T cells decreased
- Developed a rat model of *Kingella kingae* infections
- Demonstrated that RTX-toxin, produced by the organism, plays the key role in the *Kingella kingae* virulence and affects the rats immune system.
- Characterized the mechanism of resistance to β -lactams in *Kingella kingae*
- Demonstrated that both cytolethal distending toxin and leukotoxin from *Aggregatibacter actinomycetemcomitans* have an effect on bone loss in a rat model for periodontal disease and that both factors affect rat lymphocytes in an in vitro test.
- Developed a new system for culturing cells, bacteria and biofilms at different gas environments.
- Investigated the effect of oxygen on biofilm formation.
- Enhanced the antimicrobial and anti-biofilm efficacy of predatory bacteria using high oxygen levels.
- Examined the potential use of predatory bacteria to manage and reduce multi drug resistant pathogens.
- Examined the potential use of predatory bacteria to manage and reduce bacteria associated with eye infections.
- Evaluated the toxicity of predatory bacteria on human cells.
- Isolated new antimicrobial and anti-biofilm compound from bacteria.
- Fluorescent camera caries detector device can detect caries on teeth with certain pit and fissure sealant, allowing dentists to monitor sealed teeth for signs of caries progression.
- Analyzed the diagnostic performance of the fluorescent camera system.
- Determined the numerical value that most accurately identifies teeth with dentin caries.
- Demonstrated that a clinical evaluation of two caries risk assessment kits indicate that a system designed to detect high salivary levels of *Streptococcus mutans* can discriminate between caries free and caries affected individuals if the subjects refrained from eating or drinking for one hour prior to sample collection.

- Evaluated the permeability of tooth dentin to nonsteroidal anti-inflammatory drugs using an in vitro method.
- A caries scoring system was developed and used to assess the role of lactoferrin in mice infected with *Streptococcus mutans* and fed a high sucrose diet.
- Three-dimensional assessment of morphologic changes of constricted maxillary arches treated with Rapid Maxillary Expansion and Damon System
- A Comparison of Closing loops and NiTi retraction coils in extraction space closure: An In-Vitro 3D analysis
- Mechanical evaluation of Niti overlay Wire for force eruption of maxillary canine.
- Using Next Generation Sequencing (NGS) to identify genetic risk factors for aggressive periodontitis
- Developed bioinformatics methods to leverage information obtained from SNP arrays to nearly whole genome sequence coverage for studies of complex diseases including dental fluorosis and caries.
- Discovered that gingival epithelial cells can convert inactive vitamin D to the active form.
- Demonstrated the membrane activity of antimicrobial peptide mimetics on *Candida albicans*
- Discovered that vitamin D inhibits the induction of inflammation in gingival epithelial cells
- Discovered that LtxA targets dog WBCs in a specific manner.
- Discovered that caspase 8 is required for LtxA-mediated cell death in lymphocytes.
- Showed that LtxA rapidly eliminates large B-cell tumors in mice.
- Demonstrated the predictive effect of neuropathic pain in rat model of Exercise Induced Analgesia
- Showed the effect of Diclofenac, Duloxetine and Pregabalin on pain modulation profile
- Demonstrated the role of IL 32 and IL 8 in acute and chronic stages of neuropathic pain
- Showed the role of the Endogenous Opioid System in Exercise induced Analgesia
- Showed the role of Topical medications (Ketoprofen, Duloxetine, Diclofenac) in infra orbital induced neuropathic pain.
- Demonstrated the additive effects of combination drug therapy in neuropathic pain
- Observed a potential Salivary Biomarker for amyloid pathology.
- Demonstrated the protective role of human lactoferrin against *Aggregatibacter actinomycetemcomitans* infection in in vivo mice model
- Delineated the molecular mechanism of action of Diallyl sulfide against *Aggregatibacter actinomycetemcomitans*.

- Demonstrated the essential role of human lactoferrin against dental caries causing *Streptococcus mutans* in in vivo mice model.
- Identified and tested naturally occurring organosulfur compound against *Porphyromonas gingivalis*
- Identified and characterized natural product to alleviate dry mouth syndrome
- Demonstrated the role of aromatic residues in salivary alpha-amylase binding to bacteria
- Identified the critical domains of amylase binding protein in the binding to amylase
- Examined the impact of pre-operative magnetic resonance imaging on surgical outcomes for early stage breast cancer
- Found no racial disparities in elapsed time for completion of radiation therapy among breast cancer patients
- Found racial differences in chemotherapy dose modification in early stage breast cancer treatment
- Demonstrated a significant role of travel distance and travel time to the radiation facility in the choice of surgical treatment for breast cancer patients in New Jersey
- Described the increasing smoking behavior of “butting-out” and relighting cigarettes and its association with dependence and economic factors
- Examined the relative low-levels of cancer screening practices among South Asians living in New Jersey
- Described the relationships among depressive symptoms and self-schemas (Self-Esteem, HIV Symptom Management Self-Efficacy and Self-Compassion) in people living with HIV
- Helped persons with serious mental illness and metabolic syndrome lose weight and reduce BMI and waist circumference in Wellness for Life.
- Helped persons with serious mental illness in both reincarceration and rehospitalization in the prevention program at Union County Jail Diversion Program.
- Demonstrated that peer-delivered illness management has equivalent outcomes to that delivered by non-peers.
- Demonstrated that participating in illness management and recovery is associated with reduced recidivism in state and county hospitals.
- Continued 4 yr. multisite, NIH Phase IIb clinical trial to verify efficacy of optimal practical dose of Swedish massage therapy for OA of the knee, investigate duration of effect, maintenance dosing, and health care cost utilization
- Demonstrated positive effects of pressure treatment for pain in sciatica
- Continued pilot clinical trial comparing guided imagery and relaxation techniques to music listening, as adjuncts to preparing and recovering from orthognathic (jaw) surgery, in

- collaboration with UMDNJ Dental School
- Completed intervention and assessment phases of pilot clinical trial of integrated yoga intervention specifically designed for people with moderate disability due to multiple sclerosis
 - Obtained grant from APTA Oncology Section for a pilot study of the effects of a 4 week yoga program on persons with HIV-related distal sensory polyneuropathy.
 - Participated in planning grant study of interprofessional, interdepartmental study to provide "Actions at the Interface of Individual/Household and Community Food Security To Improve Maternal-Child Health Outcomes"
 - Began collaboration with NJMS department of Anesthesiology on two studies to reduce inflammation in surgery
 - Initiated design and organization of research for an interprofessional program for caregivers of people with Alzheimer's and other causes of dementia
 - Continued interdepartmental pilot study of hand, foot, and head massage for cancer patients undergoing outpatient treatment at NJMS UH Cancer Center
 - Began interdepartmental pilot study of aromatherapy, distress, and quality of sleep, for cancer patients undergoing outpatient treatment at NJMS UH Cancer Center
Identified optimal protein and energy needs of children in the ICU to prevent protein and energy wasting.
 - Described epidemiological parameters of vitamin B12 deficiency among vegetarian individuals.
 - Elucidated vitamin B12 metabolism and storage among individuals on low protein diets.
 - Identified predictors (both barriers and enablers) of standardized language use for assessment, diagnosis, and treatment among U.S. dietetics managers.
 - Identified methods of accurate body composition for use in field studies of U.S. school children.
 - Discovered that there was no relationship between the funding source of nutrition-related research and the methodological quality of research studies.
 - Published an article on the Effects of Spinal Manipulation in Subjects with Signs of Shoulder Impingement.
 - Presented a poster on the Biomechanical and Neuromotor Responses to Thoracic Spine Manipulation in People with Signs of Shoulder Impingements in Brisbane, Australia.
 - Determined the Effectiveness of manual therapy for pelvic girdle pain in pregnant and postpartum clients
 - Studied the effectiveness of orthotic devices for patients with lateral epicondylitis/epicondylalgia
 - Examined inspiratory muscle training as an adjunct to pulmonary rehabilitation in chronic obstructive pulmonary disease

- Studied the effects of spinal manipulation on pain processing
- Examined the effect of strength training on perceived fatigue in people with multiple sclerosis
- Determined the effectiveness of various treatment interventions of posterior shoulder capsule tightness and glenohumeral internal rotation deficit in overhead throwing.
- Determined the impact of feeding route on clinical outcomes in critically ill neurologically injured patients via a secondary analysis of an international multi-center observational study
- Explored the use of intravenous fat emulsions in critically ill patients through a secondary analysis of an international multi-center observational study
- Described the enteral nutrition support practices in the intensive care units at National University Hospital in Singapore
- Investigated the impact of trace element supplementation on wound healing among active duty soldiers in the US Army
- Explored the impact of standard feeding guidelines in a Level II neonatal intensive care unit on growth outcomes in premature infants
- Developed a predictive energy equation for chronic hemodialysis patients
- Determined knowledge of nutrition and oral health and oral screening practices of Dietitians in Nephrology Care
- Described the demographic and professional characteristics, knowledge and training regarding the International Dietetic and Nutrition Terminology (IDNT) and barriers and enablers to use of the IDNT among Pediatric Registered Dietitians
- Served as site PI in a double-blind study that showed davunetide, a nasally administered trophic factor, to have no benefit in slowing the course of progressive supranuclear palsy; PSP Rating Scale was used as the primary outcome measure
- Served as site PI in a double-blind study that showed tideglusib, a glycogen synthase kinase-3 β inhibitor, to have no benefit in slowing the course of progressive supranuclear palsy; PSP Rating Scale was used as the primary outcome measure
- Participated in a multi-center evaluation of clinical rating scales for progressive supranuclear palsy
- Collaborated with a biotechnology firm to create induced pluripotent stem cells from patients with progressive supranuclear palsy for use as a specific in vitro system for high-throughput testing of neuroprotective drugs
- Developed and implemented a progressive supranuclear palsy (PSP) rating scale in double-blind clinical trials
- Collaborated with a biotechnology firm to create induced pluripotent stem cells from patients with progressive supranuclear palsy for use as a specific in vitro system for high-throughput testing of neuroprotective drugs

- Recovered "lost" photographs of Albert Einstein's brain and described its exceptional neuroanatomy and reported the findings in *The cerebral cortex of Albert Einstein: a description and preliminary analysis of unpublished photographs*, and in *Nova Sciencenow: How Smart Can We Get?*
- Discovered that microRNA miR-320 is involved in the pathogenesis of multiple sclerosis and regulates B cell function
- Completed studies on microRNA expression profiling in monocytes from patients with multiple sclerosis
- Demonstrated the timing of seizures and their prognostic value after cardiac arrest in comatose patients treated with therapeutic hypothermia
- Demonstrated the reliability between neurophysiologist raters for using a standardized critical care EEG terminology. This system is being increasingly utilized and cited by critical care neurophysiologists
- Showed that longer outpatient EEG studies add more diagnostic value in a cohort of patients undergoing advanced outpatient video EEG
- Continued study on measurement of pro-angiogenic markers in patients with hepatic metastases undergoing Selective Internal Radiation Therapy (SIRT)
- Continued participation on Phase II trial of Capecitabine (Xeloda) and Lapatinib (Tykerb) as first-line therapy in patients with HER2-neu-Overexpressing advanced or metastatic breast cancer
- Continued participation on project studying effects of Enteral vs. Parenteral Feeding Preceding Endotoxin in Human Subjects
- Continued participation in writing groups analyzing NLST/ACRIN results
- Continued participation in Phase I/II Trial of Letrozole (Femara) and Sorafenib (Nexavar) in Post-menopausal Women with Hormone-Receptor Positive Locally Advanced Metastatic Breast Cancer
- Analyzed women participants in NLST
- Analyzed environmental factors affecting Lung Cancer Development
- Analyzed tumor morphology
- Continued participation in Phase 3 study to evaluate efficacy and safety of Ambrisentan in subjects with early idiopathic pulmonary fibrosis
- Continued participation in study to evaluate Mycophenolate vs. Oral Cyclophosphamide in Scleroderma Interstitial Lung Disease
- Participated in pilot study of Pazopanib in patients with operable breast cancer
- Participated in application of study for CINJ Network Lead Academic Participation in NCTN

- Participated in application of Phase 2 trial of Abiraterone with or without ABT-888 for patients with metastatic castration-resistant prostate cancer
- Collaborated on study evaluating outcomes in colorectal patients with liver metastases following surgery or hepatic arterial infusion
- Collaborated on Phase II trial of PET scan-directed combined mortality therapy in esophageal cancer
- Demonstrated that post traumatic stress symptoms in post acute coronary syndrome patients is mediated by disturbed sleep
- Demonstrated the effects of facilitated team meetings and learning collaboratives on colorectal cancer screening rates in primary care practices
- Developed and published a model of primary care physician recognition and management of depression in real-world primary care practices
- Described the mental models and practice culture driving the transformation process to Patient-Centered Medical Homes
- Identified and published how Electronic health records impact on work burden in small, unaffiliated, community-based primary care practices
- Identified four hurdles small primary care practices face in becoming medical homes, including a physician-centric mind-set
- Demonstrated the need for a role of a champion in primary care change efforts
- Described a typology of electronic health record workarounds used in primary care practices
- Convened a working conference of especially innovative primary care practices to discover strategies for developing and maintaining collaborative teams despite limited financial resources
- Developed a mixed methods research curriculum for training Japanese primary care residents and fellows
- Discovered that some cancer survivors are open to primary care management of cancer surveillance and monitoring for second cancers
- Discovered wide variation in cancer survivor patient activation behavior around follow up care seeking
- Demonstrated the need for self-care management tools targeted to patients and primary care providers for management of cancer survivor follow-up care in primary care settings
- Showed that community primary care clinicians are appropriately screening patients with familial risk factors for colorectal cancer at high rates
- Demonstrated that younger patients (aged 50-69) who are eligible for colorectal cancer screening receive physician recommendations for screening at lower rates than older patients (70+ years)

- Showed that women and smokers receive colorectal cancer screening recommendations from community primary care clinicians at lower rates than patients with a familial history of CRC
- Showed that to increase CRC screening rates further for all who are eligible that a systematically targeted, population registry approach to physician recommendation may be appropriate
- Demonstrated that when patients feel greater self-efficacy related to cancer clinical trials (CCTs) and have more knowledge about CCTs that they feel more prepared to make decisions about participation
- Showed that reduced decisional conflict was associated with increased CCT enrollment
- Demonstrated the need for interventions that target improved participation in CCTs to address decisional conflict as part of the preparation for decision-making
- Described the influence of family ties on men's prostate cancer screening, biopsy, and treatment decisions
- Discovered the association of higher utilization of primary care with lower colorectal cancer incidence among Medicare beneficiaries
- Showed that a brief intervention can improve attitudes and beliefs of medical students toward obese patients
- Described obese African-American and White women's perspectives on physician's roles in weight management
- Described how clinician attitudes toward performance data impact their practice's efforts with quality improvement
- Discovered a paucity of ambulatory and preventive care services outside of New Brunswick city for community members and stakeholders, with dental services and mental health service being the most difficult to access
- Described the difficulties and barriers for non-native English speakers when accessing local hospitals in the greater New Brunswick area
- Described maternal influences on daughters' sexual and contraceptive behavior
- Showed a decreased turnaround time with a Split ESI 3 Patient Flow Model
- Showed the impact of change in Intensive Care Unit Admission Policy
- Analyzed and prepared a manuscript reporting on test retest reliability of neurobehavioral tests for Thai children
- Analyzed health effects of pesticide exposure among Thai children
- Developed a neuropsychological assessment protocol for stroke patients to determine the effects of post-stroke inflammation on cognitive and psychiatric status
- Reported that lead exposure alters the hormonal response to stress

- Reported a risk assessment pertinent to agricultural pesticide management in Thailand
- Reported on post-traumatic stress disorder and cancer incidence among World Trade Center rescue and recovery workers
- Initiated a randomized controlled trial to study characteristics and treatment of sleep apnea among World Trade Center rescue and recovery workers
- Showed that World Trade Center dust exposure estimates predict pulmonary function decrements among rescue and recovery workers
- Showed that hexavalent chromium levels in the Columbia River do not pose a risk to salmon populations
- Evaluated the safety of dental amalgams and the need or desirability for safe removal practices
- Examined the willingness of World Trade Center public safety responders to follow-up on mental health referrals
- Completed recruitment and sample collection for a study of 100 shift workers to determine the effect of shift work on circadian rhythm and the ability of the chemopreventive agent, methylselenocysteine, to restore normal epigenetic regulation of circadian gene expression
- Investigated the role of volatile organic compounds in causing irritation and other symptoms among flight crews and passengers and studied the exposures of passengers and crews to pesticides used to control insects on international flights
- Demonstrated that urinary levels of zeranol, a powerful semi-synthetic estrogen introduced into livestock to enhance growth, and its metabolites are present in the urine of pre-pubescent girls and impact onset of puberty and body mass
- Demonstrated that urinary levels zeranol and zearalenone, a natural form produced by a fungus that grows on grain, are directly related to the consumption of beef and popcorn, respectively
- Described clinical characteristics observed in children with partial IgA deficiency
- Demonstrated the need for developing medical homes for sexual minority youth and enhanced training of providers
- Organized CME conference “Caring for South Asian Families: Maternal and Child Health Issues”
- Determined adherence to guidelines for prevention of neonatal pertussis by confirming the documentation of pertussis-containing immunization history at the time of the hospital admission for delivery
- Showed that the majority of surveyed youth are not provided time alone w/ their physicians; were not asked about sexual identity, sexual health, or emotional issues during well visits; and do not feel comfortable discussing personal matters w/ their doctors
- Showed that only 1/3 of surveyed pediatricians report asking youth about sexual identity/orientation during well visits, although the majority of pediatricians said they were comfortable discussing these issues

- Showed that the majority of pediatricians in NJ are not aware of community resources for GLBT youth and would like more education regarding the health needs of GLBT youth
- Participated in a Chronic Kidney Disease in Children Prospective Cohort Study CKiD
- Participated in evaluation of the Safety, Efficacy and Pharmacokinetics of Daptomycin in Pediatric Subjects Aged Two to Seventeen Years with Complicated Skin and Skin Structure Infections Caused by Gram-Positive Pathogens
- Participated in study of Inhaled nitric oxide for the treatment of bronchopulmonary dysplasia (BPD) in preterm infants requiring mechanical ventilation or positive pressure support on days 5 to 14 after birth
- Participated in The CARRA Net Registry of pediatric rheumatologic diseases
- Participate in a Study to Evaluate the Safety and Tolerability of Pregabalin as Adjunctive Therapy in Pediatric Subjects 1 Month to 16 Years of Age with Partial Onset Seizures and Pediatric and Adult Subjects 5 to 65 Years of Age with Primary Generalized Tonic-Clonic Seizures
- Participated in a Dose-Titration Study to Assess the Efficacy, Safety and Pharmacokinetics of Intravenous Conivaptan (Vaprisol®) in Pediatric Subjects with Euvolemic or Hypervolemic Hyponatremia
- Participated in study of Unrecognized Mucopolysaccharidosis I, II, IVA, and VI in the Pediatric Rheumatology Population
- Participated in an Analysis of Pulmonary Disease in Pediatric Patients with Sickle Cell Disease
- Participated in a Multicenter, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Efficacy, Safety, Tolerability and Pharmacokinetics of Saxagliptin (BMS-477118) as Monotherapy in Pediatric Patients with Type 2 Diabetes
- Participated in a study of Airway and Systemic Inflammation in PreTerm Infants with Bronchopulmonary Dysplasia
- Participated in an Open-Label Study to Evaluate the Single-Dose Pharmacokinetics, Safety and Tolerability of Doripenem in Neonates and Infants, Less Than 12 Weeks Chronological Age (Term and Preterm)
- Participated in registry of Increlex® (mecasermin [rDNA origin] injection) Growth Forum Database- IGFD Registry: for Monitoring Long-Term Safety and Efficacy of Increlex®
- Participated in registry The ANSWER Program® American Norditropin® Studies: Web Enabled Research – An Observational Study (Registry) Assessing Treatment Outcomes and Safety for Children and Adults Who Are Prescribed Norditropin® (Human Growth Hormone)
- Participated in registry Pfizer International Growth Study (KIGS)
- Participated in registry The Genetics and Neuroendocrinology of Short Stature International Study (GeNeSIS)

- Found that the 2008 economic crisis in Iceland led to reductions in health-compromising behaviors--smoking, heavy drinking, soft drinks, sweets, and indoor tanning
- Found that the 2008 economics crisis in Iceland led to changes in health promoting behaviors--increases in use of fish oil and recommended sleep but decreases in consumption of fruits and vegetables
- Found that postpartum depression may reduce maternal social interactions
- Found that neighborhood and city characteristics, parenting behaviors, nutrition, occupational and residential exposures to toxins, and unintended childbearing are fruitful areas to further explore as underlying sources of socioeconomic disparities in child health
- Found that late preterm birth substantially increases the likelihood of neonatal respiratory conditions and hyperbilirubinemia, even when comparing births to the same mother and controlling for medical, socioeconomic, and behavioral differences across pregnancies
- Found that SIDS risk patterns varied by age of infant
- Found that premature infants who died of SIDS were more likely than term cases to have been found in the more endangering bed-sharing situation
- Found that maternal smoking in SIDS cases was predictive of the presence of other risk factors
- Found that complementary and alternative treatments were more likely to be used in cases of autism, where no definitive treatment is available, than in cases of ADD where traditional treatment options have efficacy
- Found that parents are not confident in the physician knowledge of alternative treatments to behavioral disorders
- Discovered that TLR ligands induce proteinuria partly through podocyte type I interferon (IFN) signaling
- Discovered that transient proteinuria induced by TLR ligands is a physiologic response that enhances urinary clearance of TLR ligands
- Demonstrated that TLR ligand induced proteinuria could be mediated by miRNA regulation of critical podocyte cytoskeletal genes that are associated with genetic forms of glomerular disease
- Discovered that eculizumab mediated inhibition of the terminal complement cascade alone cannot control C3 glomerulonephritis and persistent dysregulation of alternative pathway
- Investigated cytokine differences in adult and pediatric multiple sclerosis patients
- Investigated the rate of abnormalities found in children referred for sleep studies
- Investigated the long-term safety and tolerability of pregabalin for pediatric patients
- Maintained a clinical database for children with rheumatic diseases in an effort to improve future access to and treatment via research protocols managed by CARRA (Childhood Arthritis and Rheumatology Research Alliance)

- Participated in a study determining the incidence of previously unrecognized MPS I, II, IVA, and VI in children presenting to pediatric rheumatology clinic
- Performed cross-cultural adaptation of health related quality of life scale in children with lupus and systemic inflammatory diseases in different languages
- Performed validation of health related quality of life scale in Portuguese
- Examined distractibility, vigilance and delay in children attending the Pediatric Rheumatology clinic
- Examined age of onset of Systemic Lupus Erythematosus in children in an international cohort
- Examined the current state of mentoring Among Pediatric Rheumatology Fellows and Junior Faculty in the United States and Canada
- Showed prolonged improvement of systemic lupus erythematosus following systematic administration of rituximab and cyclophosphamide
- Showed how disease management in lupus could pose a burden for children and their families. Showed the patterns and influence of familial autoimmunity in pediatric systemic lupus erythematosus
- Evaluated the safety and efficacy of the Ligasure vessel sealing device in Pancreaticoduodenectomy
- Found that increased perioperative fluid administration in Pancreaticoduodenectomy correlates with worse perioperative outcomes
- Determined Sprafilm and Potency Following Robotic Prostatectomy
- Determined the Impact of Penile Rehabilitation on Post-Robotic Prostatectomy Potency
- Evaluated the Impact of Robotic Prostatectomy on Penile Length
- Evaluated Screening Patterns and Outcomes of Prostate Cancer Screening in the State of NJ
- Assessed the pathologic implication of prostate anterior fat pad lymph node metastasis in men with prostate cancer
- Evaluated the criteria for active surveillance in African-American men with low-risk prostate cancer
- Completed a review of functional outcomes of prolapse and incontinence surgery
- Completed a multi-center study of Risk Factors for Synthetic Mesh Extrusion Following Abdominal Sacral Colpopexy and Vaginal Mesh Procedures
- Demonstrated functional status and post-operative morbidity in older women with prolapse
- Demonstrated increased fluid intake is associated with bothersome bowel symptoms among women with urinary incontinence

- Showed the association between physical activity and lower limb lymphedema among uterine cancer survivors
- Evaluated the role of the gut microbiome and the development of antibiotic resistant bacterial wound infections in trauma patients
- Showed that continuous enteral and parenteral feeding influence heart rate variability and blood monocyte gene expression in humans
- Investigated the Use of Nutritional Support to Modulate Circadian Rhythms and Inflammation in Humans
- Studied Heart Rate Variability in critically ill patients
- Studied CVP Guidance in Goal-directed Resuscitation of the Critically Injured Trauma Patient
- Investigated the Efficacy of High Dose Vitamin C in Critically Ill Patients
- Investigated Rib Fracture fixation and deep dive of the NTDB
- Showed Rising Use of Social Media by Healthcare Professionals in caring for the Trauma Patient
- Found that HIDA Scans are Helpful in the Diagnosis of Gall Bladder Disease
- Evaluated SICU Transfer Notes and Antibiotic Length of Therapy
- Showed Decreased LOS Due to "Classed" Cholecystectomy for Acute Cholecystitis
- Showed Use of Thromboelastography as a Predictor of Duration of the Hypercoagulability of Trauma
- Showed Performance Improvement as a Result of Monthly SICU Safety Rounds
- Compared Functional Outcome Scoring Systems in Children With Trauma Brain Injury
- Evaluated Enhancing the Tissue and Organ Donor Pool Through Donation after Death in the Field
- Conducted a multi-center, open label, prospective, non-randomized clinical study to evaluate the safety of the INCRAFT™ stent graft system and its effectiveness in the treatment of subjects with abdominal aortic aneurysms requiring repair
- Participated in a randomized, double-blind, parallel group, multicenter phase IIIb study to compare ticagrelor with clopidogrel treatment on the risk of cardiovascular death, myocardial infarction and ischemic stroke in patients with established Peripheral Artery Disease
- Compared effectiveness of EVAR and open surgery on short and long-term outcomes after repair of non-ruptured and ruptured abdominal aortic aneurysms: A population-level evaluation in Medicare beneficiaries

- Discovered that adult patients after low extremity (LE) open surgery compared to those with percutaneous angioplasty (PTA) developed more adverse events and had greater mortality rates overall. However, postoperative hemorrhage occurred at a greater rate after percutaneous interventions, especially in women and the elderly, and increased the likelihood of death by almost three times
- Demonstrated that teaching hospitals had increased rates of adverse events after LE interventions, yet had lower mortality rates, perhaps secondary to improved “rescue” after complications occur
- Found that adverse events after LE interventions are extremely costly to the health system and more than \$222 million extra hospital expenses and 91,317 extra days of hospitalization were associated with these theoretically preventable complications in the study cohort
- Showed that 13.6% of Medicare beneficiaries undergoing elective open abdominal vascular procedures experienced postoperative infectious complications during their index hospitalization that significantly increased the mortality rate and were associated with a higher 30-day readmission rate
- Demonstrated that despite a significant increase in the utilization of endovascular repair of popliteal artery aneurysms, endovascular repair compared to open surgery was associated with greater reinterventions over time and did not offer mortality or cost benefit
- Found that patients undergoing tibioperoneal angioplasty alone compared to concomitant stenting or atherectomy for ulceration demonstrated no improvement in limb salvage
- Discovered that routine revascularization during the perioperative period of Thoracic Endovascular Aortic Repair after zone II coverage of left subclavian artery was associated with increased neurological and overall complications and higher rates of mortality that make it unnecessary
- Showed that implementation of the Leapfrog intensive care unit physician staffing standard significantly reduced intensive care unit length of stay and cost and lowered the prevalence of ventilator associated pneumonia and central venous access device infection.
- Obtained case reports of physician experience with the Zenith® Spiral-Z™ AAA Iliac Leg Graft under routine clinical care
- Compared effectiveness of EVAR and open surgery on short and long-term outcomes after repair of non-ruptured and ruptured abdominal aortic aneurysms: A population-level evaluation in Medicare beneficiaries
- Studied outcomes in patients undergoing cystectomy
- Participated in a Multicenter Double Blind, Randomized Study on the Use of Solifenacin for Achievement of Early Urinary Continence Following Robotic Assisted Laparoscopic Radical Prostatectomy
- Analyzed bladder cancer outcomes
- Conducted research on voiding dysfunction that is outcomes based
- Studied the effect of deep brain stimulation on voiding dysfunction

- Showed use of anticholinergic medication to prevent incontinence in patients undergoing robotic Prostatectomy
- Studied Sacral Neuromodulation in refractory Overactive Bladder
- Studied Optimal frequency of Self-Calibration of the Urethra to prevent recurrence of Urethral Strictures
- Studied the Role of Botulinum Toxin type A Neurogenic Detrusor Overactivity due to Parkinsonism
- Studied Cerebrovascular Accidents & Multiple System Atrophy
- Evaluated the Management of Voiding Dysfunction in Parkinsonism
- Participated in a Phase III study of Adjuvant Pazopanib in Metastatic Renal Cell Carcinoma after Metastatectomy
- Developed a Prostate Cancer Tissue Bank and Prospective Clinical Database
- Participated in a Phase One study of Stereotactic Hypofractionated Accelerated Radiation and Prostatectomy in Patients with Elevated Risk (The SHARPER Trial)
- Assessed the Biological Effect of Autophagic Inhibition with Hydroxychloroquine in Prostate Cancer
- Evaluated Intimacy-Enhancing Couples' Intervention for Localized Prostate Cancer
- Evaluated Ethical Dilemmas in Surgery and Utilization of Hospital Ethics
- Studied outcomes after treatment for urologic cancers utilizing large population-based datasets (i.e. SEER-Medicare linked database, National Cancer Database)
- Evaluated comparative effectiveness of different treatments for locally and/or regionally advanced, non-metastatic prostate cancer utilizing large population-based datasets
- Studied pediatric voiding dysfunction
- Initiated analyses of a dataset to investigate whether ultrasonography, history, and physical findings are equivalent to hepatobiliary imino-diacetic acid scintigraphy (HIDA scan) in diagnosing patients who require cholecystectomy
- Completed determinations of plasma cortisol concentrations on the vitamin C therapy in cardio-pulmonary bypass (CPB) patients
- Studied the effects of post-mastectomy radiation on patients with 1-3 positive lymph nodes
- Evaluated the success of neoadjuvant chemotherapy on breast cancer patients who present with lymph node metastases
- Examined the rate of lymph node involvement in microinvasive and early stage breast cancer

- Demonstrated Interagency Registry for Mechanically Assisted Circulatory Support (INTERMACS)
- Studied the used of the Endovent as a conduit for a pacing wire as patient is coming off bypass
- Identified no protective effect of High Dose Vitamin C on pulmonary morbidity in Cardiac Surgery Patients
- Continued studies into the identification of risk factors for wound healing complications and hernia recurrence after abdominal wall reconstruction
- Continued studies on long term outcomes in breast reconstructive surgery
- Continued studies for on-going project investigating the psychological and functional aspects of facial appearance
- Studied Neuroform Stent for wide neck brain aneurysm
- Studied wing span intracranial sent for intracranial arteriosclerotic disease
- Studied enterprise for stent assisted coiling of brain aneurysms
- Compared inpatient and outpatient thyroid operations with evaluation of patient outcomes
- Conducted retrospective analysis of 400 patients after minimal invasive parathyroidectomy for evaluation of recurrent hyperparathyroidism
- Studied Serum Monocyte Chemokine Protein-1 Levels Before and After Parathyroidectomy in Patients with Primary Hyperparathyroidism
- Evaluated Changes in Physical and Diet in Colorectal Cancer Survivors Health Behaviors Among Individuals Diagnosed with Colorectal Cancer Enhancing Colorectal Cancer Screening through Learning Teams
- Participated in a Randomized, Multicenter, Double-Blind, Placebo-Controlled Study of AC607 for the Treatment of Acute Kidney Injury in Cardiac Surgery Subjects
- Demonstrated Cardiac Valve Replacement Surgery Thromboembolic-Related Complications Randomized Trial of Previous and Current Generation Mechanical Prosthesis 9TRC-MP)
- Completed an Impella Database containing all the patients at RWJUH who had Impella heart devices placed after developing heart failure. We now have the largest database and experience with Impella in the country
- Participated in a Randomized, Double-Blind, Placebo-Controlled Phase 3 Study to Investigate the Efficacy and Safety of Progesterone in Patients with Severe Traumatic Brain Injury
- Participated in the Post Approval Study Protocol of the St. Jude Medical Biacor™ and Biacor™ Supra Valves, PMA P04021
- Conducted a Retrospective Chart Review of Subjects Requiring Cardiac Support with the Impella Pump at Robert Wood Johnson University Hospital

- Conducted a clinical trial on Acute traumatic sternum fracture in a female college hockey player
- Conducted a clinical trial on Incidence of Hip Osteoarthritis in Former Male Wrestler
- Reported on Lung Dose Reduction from Patient Specific 4D Motion Based Non-Uniform Dose Prescription in Lung IMRT Treatment
- Collaborated in a research study on correlation of survival to CBCT-based tumor response during chemoradiation in patients with stage III non-small-cell lung cancer
- Conducted a research study on 3D Printing Technology for photon, electron and proton compensators
- Collaborated in a research study on retrospective analysis of inter-fraction prostate depth variations and its dosimetry consequence on prostate proton therapy
- Collaborated in a research study on Parameterization of the brachytherapy source phase space file for Monte Carlo based clinical brachytherapy dose calculation
- Completed the development of a parameterized brachytherapy source modeling
- Initiated a study on the dose perturbation of a novel gel marker in proton therapy
- Reported a study regarding Cancer-specific Survival After Metastasis Following Primary Radical Prostatectomy Compared with Radiation Therapy in Prostate Cancer Patients
- Reported a study regarding length of persistence of genitourinary side effects after radiation therapy for prostate cancer
- Completed a study on the importance of initial aggressive treatment for pineal parenchymal tumor of intermediate differentiation
- Collaborated with researchers at Madigan Army Medical Center and completed a study on the differences between beacon-localized and cone-beam CT (CBCT) – localized radiation therapy to the prostatic fossa
- Collaborated with researchers at Madigan Army Medical Center and completed a study on the inter-fraction displacement of electromagnetic beacons in patients receiving post-prostatectomy radiation therapy
- Investigated the effect of heterogeneity correction on calculated heart doses of patients receiving breast brachytherapy
- Investigated dose perturbation effects of different kinds of fiducial markers in a clinical electron beam
- Collaborated on a study of Antegrade Pampiniform Plexus Venography in recurrent varicocele
- Reported on a study of SPGR vs. Fast-SPGR in detection of brain metastasis for pre-gamma knife planning
- Continued participation on a project on impact of in-patient PET-CT utilization

- Collaborated on a study evaluating contrast-medium-induced acute kidney injury and comparison of intravenous and intra-arterial administration of iodinated contrast medium
- Collaborated on a study evaluating changes in liver and spleen volumes and liver function after radioembolization with Yttrium-90 resin microspheres
- Collaborated on a study evaluating hepatic tumor response to Yttrium-90 radioembolization using texture signatures generated from contrast-enhanced CT images
- Collaborated on a study evaluating patterns of failure in colorectal patients with liver metastases after Yttrium-90 radioembolization
- Reported on idiopathic granulomatous mastitis
- Collaborated on a report on neuroembolization of metastatic Merkel Cell cancer to the face for treatment of Kasabach-Merritt Syndrome
- Studied nuclear medicine vs. catheter angiography in gastrointestinal bleeding
- Demonstrated the effects of Anatomic Anterior Cruciate Ligament Reconstruction with a Flexible Reamer System and 70 degree Arthroscope
- Demonstrated Arthroscopic Transosseous Equivalent Rotator Cuff Repair
- Reported on Patellar Tendon Autograft for Anterior Cruciate Ligament Reconstruction Surgical Techniques of the Shoulder, Elbow, and Knee in Sports Medicine
- Reported on Articular Cartilage Injury
- Reported on Scheuermann Disease
- Reported on Lumbar Laparoscopy

EDUCATIONAL RESEARCH

- Initiated and validated novel multimedia solutions for resident education during telemedicine screening
- Implemented and designed new educational standards for continuing board recertification in orbit and neuroophthalmology through the American Academy of Ophthalmology
- Contributed updated chapters on common ocular diseases for Handbook for Pediatricians
- Co-supervised PhD thesis of one student from the National University of Singapore, who will defend in Singapore in August
- An Assessment of Undergraduate Orthodontic Education: Orthodontic Confidence versus Didactic Knowledge in Graduating Dental Students
- Evaluated satisfaction and Involvement of UMDNJ Orthodontic Alumni with UMDNJ Orthodontic Post Graduate Program

- Completed two focus groups to evaluate the Diabetic Education Program for Latinos and analyzed the qualitative data of the focus group.
- Identified the Key Components of an Effective Faculty Mentor-Student Protégé Relationship
- Developed and Validated a Short Form of the Clinical Research Assessment Inventory, a measure of undergraduate and first-year graduate students' perceived clinical research self-efficacy
- Completed a training program for unemployed veterans. The NJ Jobs for Vets program provided six weeks of environmental and occupational safety training. Fourteen veterans completed the program, with seven being employed because of the training. This program was funded by the National Institute of Environmental Health Sciences
- Completed Mold Awareness and General Safety training for residents in New York City. Provided training to over 1500 residents. Funded by the Mayors Fund to Advance New York City
- Provided hands-on training in quality improvement processes to staff of the New Jersey Department of Health (NJDOH). This training enabled NJDOH to enhance the skill and capacity of its workforce in the application of QI techniques to daily work activities; provided evidence of the development and implementation of QI processes which are integrated into organizational practice, programs and processes (a critical component of accreditation-readiness); contributed to completion of key deliverables of the department's 'Strengthening Public Health Infrastructure For Improved Health Outcomes' grant; and informed future NJDOH quality improvement training strategies. This program was funded by the New Jersey Department of Health
- Completed Mold Awareness and General Safety Training for over 500 public health and building code officials and for over 300 homeowners in New Jersey. This project was funded by the New Jersey Department of Health
- Published first paper documenting safety and health issues and personal protective equipment use among students with special health care needs in career and technical education programs
- Published first paper on educating allied health professionals and asthma educators about asthma triggers and allergens in cosmetology settings
- Demonstrated that training of wellness coaches has led to increased competencies for peers with serious mental illness and others working with adults and older adults with serious mental illness in congregate settings and supported housing
- Demonstrated that distance learning via Skype effectively taught basic psychiatric rehabilitation principles to mental health providers in Pakistan.
- Developed interdisciplinary program for integrative medicine in preventive medicine residency and designed survey for assessing knowledge levels and practice patterns in integrative medicine of Newark campus faculty.
- Studied comparison of Two Case Delivery Methods: Virtual and Live.
- Studied tracking changes in Critical Thinking Skills.

- Studied the usefulness of integrating fitness measures into physical education classes through the Passport to Fitness program: Impact of education on fitness indicators in high school students.
- Studied the changes in PT confidence and knowledge to develop clinical practice guidelines, before and after a workshop.
- Coordinated the completion of a physical therapy clinical practice guideline on management of congenital muscular torticollis.
- Investigated changes in patient-care practices of Israeli dietitians who participated in an oral health training program on nutrition focused physical assessment of the head, neck, and oral cavity from pre-training to three and six months post-training.
- Assessed the impact of an online education module on dietitian attitudes and knowledge regarding recommending and ordering multivitamin/multivitamin-mineral supplements in a Canadian hospital system.
- Measured the effect of a social cognitive career theory intervention on research involvement among practicing registered dietitians in clinical nutrition
- Reported on radiation risks from CT: from basic radiation biology, to understanding cancer risks, to CT dose reduction – an educational module for radiology residents
- Showed how Emergency Medicine Interns affect Medical Student Clerkship experience in the Emergency department
- Demonstrated Critical Care Resuscitation with Dummies
- Demonstrated Qpath, a web based image archival system and feedback loop
- Completed directing and teaching the Biochemistry course for the first year Physician Assistant students and the GI-Metabolism-Nutrition course for the first year RWJMS medical students using several new methodologies and approaches
- Completed revision of and successfully used a computer-based, highly specialized dietary analysis/energy expenditure program, tailor-made for the requirements of the nutrition course for medical students
- Completed creation of and successfully implemented a new active learning approach of teaching biochemistry to PA students
- Demonstrated the usefulness of guided e-journal exercises as a simple effective active teaching tool that integrate journal reading with their basic science knowledge for preclinical medical students
- Developed Jigsaws, a cooperative learning techniques that engages students in peer-teaching, sharing responsibility for each other's learning towards a common goal as they develop critical thinking and communication skills to discuss normal structure and function to clinical cases and pathologies
- Developed Patient-Oriented Problem Solving exercises in which students work in small groups without a facilitator to solve clinical problems in biomedical sciences

- Simulated vaginal hysterectomy using low cost models
- Provided RWJ surgical research education fellowship in the area of wound healing
- Developed ostomy marking curriculum to improve resident knowledge and understanding of stoma placement and care
- Studied health behaviors among individuals diagnosed with colorectal cancer
- Participated in the Training Program on Tissue Engineering and Biomaterials Sciences
- Redesigned a cooperative M.S./Ph.D. program for students who begin their training at the University of Puerto Rico (Mayaguez campus;"UPRM") and then transfer to Rutgers-New Brunswick for their Ph.D. training in biomedical sciences to more effectively support the educational and scientific workforce diversity goals shared between the NIH and Rutgers

OTHER RESEARCH

- Completed a review of the literature on the impact of health literacy on health outcomes of Latinos and specifically of migrant Latinos.
- Demonstrated the health outcomes of participants in a health literacy program for monolingual Latinos.
- Demonstrated that the NALC Pre-Nursing Program increased the odds, for students with lower academic skills, for successful completion of the ABSN program.
- Completed a linguistic analysis of the language of contemporary health care resulting in the publication of two dictionaries of medicine, nursing and allied health
- Demonstrated there is no public health "innovation crisis" in pharmaceutical research as defined by the pharmaceutical industry, but there is a real crisis in the lack of clinically superior new drugs
- Published: Light DW and Lexchin J, "Pharmaceutical R&D – What do we get for all that money?" BMJ (British Medical Journal) 2012: 344:e4348 doi
- Demonstrated there is a public health epidemic of harmful side effects from prescription drugs, due to the FDA approving scores of drugs with few offsetting benefits for their under-tested risks of harm
- Light DW, Lexchin J, and Darrow J, "Institutional Corruption of Pharmaceuticals and the Myth of Safe and Effective Drugs." Journal of Law, Medicine, & Ethics 2013: 41 (3); forthcoming
- Analyzed national convenience store market scanner data and explored the changing smokeless tobacco market, particularly the growth in sales of flavored moist snuff and value brands
- Demonstrated how direct e-mail is a potentially potent marketing option for the tobacco industry by linking consumers to its other marketing strategies.

- Described tobacco company marketing encouraging switching from cigarettes to smokeless tobacco
- Documented and described different messages used to compare the risks of smokeless tobacco and cigarettes in the news
- Implemented a postnatal survey on discrimination and access to maternal healthcare among Romani women in Serbia, Macedonia, and Kosovo, then distributed the findings to key stakeholders
- Assessed the knowledge and views of preterm birth disparities among maternal health care providers in Newark
- Identified Mexican women in New Jersey as at high risk of reoccurrence of gestational diabetes based on an analysis of New Jersey birth certificate and hospital data
- Described that men with a high risk of bone fracture who are undergoing long-term androgen deprivation therapy (ADT) for prostate cancer have a higher fracture incidence following treatment completion
- Provided a talk on the use of Intensity Modulated Radiation Therapy at the Genitourinary Cancers Symposium
- Published first paper providing an examination of personal attributes and risk factors for cuts-lacerations injuries among minors and young adults in school-sponsored work programs
- Partnered with Head Start early childhood education centers (Leaguer's Inc.) in the Newark, NJ area to conduct a needs assessment of nutrition and physical activity practices of 9 centers and 700 children ages 3-5
- Developed LIFT UP (Lifestyle Intervention for Total Health – a University Program), worksite wellness program for UMDNJ employees and explored changes in anthropometric data from baseline to 3-months in the first cohort of completers
- Examined the relationships between stage of change and changes in weight and waist circumference
- Examined the relationships between changes in Framingham Risk Score and changes in anthropometric measurements
- Examined the relationship between changes in anthropometric measures and health related quality of life
- Discovered that Hispanic adults do not routinely engage in skin cancer risk reduction behaviors; more acculturated Hispanics had high rates of sun bathing and indoor tanning
- Discovered that fear of recurrence is prevalent among women newly diagnosed with gynecological cancers and is associated with increased depression
- Discovered that early use of primary androgen deprivation therapy in men with low risk prostate cancer does not delay receipt of subsequent palliative therapies and is associated with increased use of chemotherapy
- Discovered that total antioxidant capacity and individual antioxidant intake is not

- associated with ovarian cancer risk
- Discovered that Black and Hispanic women do not receive chemotherapy for early stage breast cancer at lower rates
 - Discovered that sales of smokeless tobacco products in US convenience stores increased by 65% between 2005 and 2011
 - Discovered that poorer task persistence predicts poorer smoking cessation outcomes in smokers
 - Conducted descriptive analyses of findings from health screenings conducted through the Arc's project HealthMeet: Improving Health of People with Intellectual Disabilities
 - Evaluated risk factors for incontinence and pelvic floor disorders in uterine cancer survivors: the role of radiation therapy
 - Studied anatomic structures in the bladder identified using ultrasound
 - Completed a research project on the effects of methotrexate on the intracellular levels of adenine nucleotides, ATP, ADP, and AMP
 - Reported on Lumbar Hemangioma Masking a Plasma Cell Tumor
 - Reported on Decision Making in Spinal Care
 - Completed a study of Health System Factors and Patient Outcomes in Breast Cancer
 - Completed a study of Patterns and Correlates of Chemotherapy Delivery Quality
 - Completed a study of Breast Reconstruction Decision-Making & Outcomes in Latinas and African Americans

RESEARCH PROJECTS 2012-2013**FEDERAL FUNDING**

A RasGAP-microRNA Connection in Cardiac Hypertrophy; M. Abdellatif, NJMS; *National Heart, Lung and Blood Institute*

The Role of MicroRNA in Cardiac Cell Death; M. Abdellatif, NJMS; *National Heart, Lung and Blood Institute*

AIDS Clinical Trials Group Network; D. Alland, NJMS; *National Institute of Allergy and Infectious Diseases*

Development of a Second Generation MDR-XDR TB Assay; D. Alland, NJMS; *National Institute of Allergy and Infectious Diseases*

On Demand Blood Tests for Select Agent Diagnosis; D. Alland, NJMS; *National Institutes of Health*

Rapid Diagnosis of XDR Tuberculosis; D. Alland, NJMS; *National Institute of Allergy and Infectious Diseases*

Leukocyte Telomere Dynamics, Gender, Menopause, Insulin Resistance, and Survival; A. Aviv, NJMS; *National Institute on Aging*

NIH DNA Extraction Project; A. Aviv, NJMS; *National Heart, Lung and Blood Institute*

IGF-1, Oxidative Stress and Telomere Dynamics in Cultured Human Somatic Cells; A. Aviv, NJMS; *Ruth L. Kirschstein National Research Service Award*

Detection of Tumor Causing Chromosomal Translocations and Rearrangements by Single Molecule Imaging of Gene Fusion Transcripts; M. Batish, NJMS; *National Institutes of Health*

Mechanism for Reduced Adrenomedullary Epinephrine Release in Type 1 Diabetes; J. Berlin, NJMS; *Ruth L. Kirschstein National Research Service Award*

Regulation of Soluble Guanylyl Cyclase the NO Receptor; A. Beuve, NJMS; *National Institutes of Health*

Intravitreal Injections of Sirolimus in the Treatment of Central Geographic Atrophy Associated with Age Related Macular Degeneration; N. Bhagat, NJMS; *National Eye Institute*

A Comparative Effectiveness Study of Intravitreal Aflibercept, Bevacizumab and Ranibizumab for Diabetic Macular Edema; N. Bhagat, NJMS; *National Eye Institute*

Genes in Diabetic Retinopathy; N. Bhagat, NJMS; *National Eye Institute*

CGMP Signaling in Plasmodium, Intracellular Development; P. Bhanot, NJMS; *National Science Foundation*

Identification of the of a Compound that Inhibits Plasmodium Sporozoites; P. Bhanot, NJMS; *National Institutes of Health*

Non Canonical Signal Pathway for Crk in Breast Cancer; R. Birge, NJMS; *National Cancer Institute*

Carotid Revascularization Endarterectomy vs. Stent Trials; T. Brott, NJMS; *National Institute of Neurological Disorders and Stroke*

Rapid Analysis of Single T Cell Immunity Signatures in Tuberculosis [Dr. Bushkin Dr. Gennaro and Dr. Tyagi]; Y. Bushkin, NJMS; *National Institutes of Health*

Defensins in STI Mediated Enhanced HIV Infectivity; L. Chang, NJMS; *National Institutes of Health and National Institute of Allergy and Infectious Diseases*

Vitamin D and the Immune System; S. Christakos, NJMS; *National Institute of Allergy and Infectious Diseases*

Vitamin D Hormone: Function and Mechanism of Action - includes Minority Supplement; S. Christakos, NJMS; *National Institute of Diabetes and Digestive and Kidney Diseases*

Vitamin D and Innate Immunity in Respiratory [Gill Diamond]; S. Christakos, NJMS; *National Institute of Allergy and Infectious Diseases*

The Role of mTORC2 in Oligodendrocyte Differentiation; S. Cifelli, NJMS; *National Institutes of Health*

Therapeutics for Drug Resistant Bacteria Pseudouridimycins; N. Connell, NJMS; *National Institute of Allergy and Infectious Diseases*

Therapeutics for Drug-Resistant Bacteria: Myzopyronins; N. Connell, NJMS; *National Institute of Allergy and Infectious Diseases*

Gating and Regulation of Connexin Hemichannels; J. Contreras, NJMS; *National Institute of General Medical Sciences*

Novel Approaches to Shock Induced Acute MODS; E. Deitch, NJMS; *United States Army Medical Research and Materiel Command*

Frequency Comb Spectroscopy Biomarkers for Hemorrhage Induced ARDS; E. Deitch, NJMS; *United States Army Medical Research Acquisition Activity*

Mitochondrial Determinants of Metabolic Disease in HIV-infected Children; A. Dieudonne, NJMS; *National Institute of Nursing Research*

Novel Fluoroquinolones for Killing Dormant Mycobacterium Tuberculosis Xilin Zhao; K. Drlica, NJMS; *National Institutes of Health*

Synthetic Lethality of Bicyclomycin Mechanism and Application; K. Drlica, NJMS; *National Institutes of Health*

Antibacterial Agents that Restrict the Emergence of Resistance; K. Drlica, NJMS; *National Institute of Allergy and Infectious Diseases*

Genetic Competence Apparatus of Bacillus Subtilis; D. Dubnau, NJMS; *National Institutes of Health*

Regulation of Genetic Competence in Bacillus Subtilis; D. Dubnau, NJMS; *National Institute of General Medical Sciences*

Control of Microcirculatory Exchange Function; W. Duran, NJMS; *National Heart, Lung and Blood Institute*

Inactivation of Hyperpermeability after Ischemia-Reperfusion Induced Inflammation; W. Duran, NJMS; *National Heart, Lung and Blood Institute*

Immune Regulatory Mechanisms and Fungus Specific Memory T Cell Responses; V. Espinosa, NJMS; *Individual National Research Service Award*

Astrocyte connexin43 containing channels amplify CNS dysfunction in NeuroAIDS; E. Eugenin, NJMS; *National Institutes of Health*

Nutrient: Nutrient Interactions in the Small Intestine; R. Ferraris, NJMS; *National Science Foundation*

Plasmacytoid Dendritic Cells in HIV Pathogenesis; P. Fitzgerald-Bocarsly, NJMS; *National Institute of Allergy and Infectious Diseases*

Dynamic Analysis of Bone Tissue Biopsies after Treatment with Bisphosphonates; J. Fritton, NJMS; *National Institutes of Health*

Pharmaceutical Countermeasure Effects on Tissue Level Quality of Immobilized Bone; J. Fritton, NJMS; *National Aeronautics and Space Administration*

The Role of Hormone-Evoked Mitochondrial Calcium Increases in the Pathogenesis of Alcoholic Liver Disease; L. Gaspers, NJMS; *National Institute on Alcohol Abuse and Alcoholism*

Cytokine Gene Expression During in Vivo Immune Response; W. Gause, NJMS; *National Institute of Allergy and Infectious Diseases*

Mapping and Modeling Host Pathogen Interactions in TB Latency and Reactivation; M. Gennaro, NJMS; *National Heart, Lung and Blood Institute and National Institutes of Health*

Feedback Regulation and Transcriptional Coupling in Bacterial Stress Response; M. Gennaro, NJMS; *National Institute of General Medical Sciences*

Sigma Factor Networks of M. Tuberculosis; M. Gennaro, NJMS; *National Institute of Allergy and Infectious Diseases*

Regulation of Cx26 and Cx32 Channels by Cytosolic Interdomain Interactions; A. Harris, NJMS; *National Institutes of Health*

Tumor Suppression by Telomere Dysfunction Induced Senescence; U. Herbig, NJMS; *National Cancer Institute*

AIDS Clinical Trials Network; S. Hodder, NJMS; *National Institute of Allergy and Infectious Diseases*

AIDS Clinical Trials Group Network (AEC PI Support Year 7); S. Hodder, NJMS; *National Institute of Allergy and Infectious Diseases*

Terry Bein Community Programs for Clinical Research on AIDS Clinical Trial Unit; S. Hodder, NJMS; *National Institute of Allergy and Infectious Diseases*

Ryan White Part C Outpatient EIS Program (Title III) - Integrated Testing and Primary Care of Persons Living with HIV in Newark, NJ; S. Hodder, NJMS; *Health Resources and Services Administration*

Analysis of XDR-TB and MDR-TB Strains: Safety, Diagnosis and Pathogenesis - Training Grant; G. Kaplan, NJMS; *John E. Fogarty International Center*

Environmental Cues and Responses in Tuberculosis; G. Kaplan, NJMS; *National Institute of Allergy and Infectious Diseases*

Emerging XDR-TB: Host and Pathogen Contributions; G. Kaplan, NJMS; *National Institute of Allergy and Infectious Diseases*

A Multidisciplinary Approach to Understanding TB Latency and Reactivation; G. Kaplan, NJMS; *National Heart, Lung and Blood Institute*

Role of Autotoxin in HCV Associated Hepatocellular Carcinoma; N. Kaushik-Basu, NJMS; *National Cancer Institute*

Incidence of TB in cohort of children enrolled in a TB prevention trial; S. Kim, NJMS; *National Institute of Allergy and Infectious Diseases*

Remote Ischemic Preconditioning in Neurological Death Donors (ISO); B. Koneru, NJMS; *Health Resources and Services Administration*

Development of IFN lambda3 for the Prevention and Treatment of Virus Infection; S. Kotenko, NJMS; *National Institute of Allergy and Infectious Diseases*

Extensively Drug-Resistant Tuberculosis Among Gold Miners in South Africa; B. Kreiswirth, NJMS; *National Institute of Allergy and Infectious Diseases*

The Molecular Basis of the Epidemic blaKPC Gene Klebsiella; B. Kreiswirth, NJMS; *National Institute of Allergy and Infectious Diseases*

Early agr Activation is a Key Pathogenic Signature in Persistent MRSA Bacteremia; B. Kreiswirth, NJMS; *National Institute of Allergy and Infectious Diseases*

Role of Nuclear Gangliosides in Neuronal Function; R. Ledeen, NJMS; *National Institute of Neurological Disorders and Stroke*

A Role for miRNAs in Adenosine-dependent Alternative Macrophage Activation; S. Leibovich, NJMS; *National Institute of Allergy and Infectious Diseases*

Adenosine, Toll-Like Receptors and Angiogenesis; S. Leibovich, NJMS; *National Institute of General Medical Sciences*

Glial Dysgenesis in the Injured Developing Brain; S. Levison, NJMS; *National Institute of Child Health and Human Development*

Engineered Envelope Glycoprotein Trimers for HIV 1 Vaccine Immunogens; M. Lu, NJMS; *National Institute of Allergy and Infectious Diseases*

Small Molecule Inhibitors of GP41-Mediated Fusion as HIV-1 Topical Microbicides; M. Lu, NJMS; *National Institute of Allergy and Infectious Diseases*

Re-Specification of the Notch Response by the HHV-8 Lytic Switch Protein; D. Lukac, NJMS; *National Institute of Allergy and Infectious Diseases*

Modulation of Human Immunity of Mycobacterium Leprae; C. Manca, NJMS; *National Institutes of Health*

Investigation of the role of Mind bomb in epithelial morphogenesis; M. Matsuda, NJMS; *National Institute of Child Health and Human Development*

Structured RNA Binding to Proteins Containing the DSRBD (MPI); M. Mathews, NJMS; *National Human Genome Research Institute*

PDGF Responsive Glial Progenitors of the SVZ in Glioma; L. Moore, NJMS; *National Institute of Neurological Disorders and Stroke*

Reporter Mice for APP Processing and Transport; Z. Muresan, NJMS; *National Institute on Aging*

Regulation of the P.aeruginosa Type III Secretion System by the Multifaceted Transcription Factor ExsD; A. Mustaev, NJMS; *National Institute of Allergy and Infectious Diseases*

Structural Biology of Multifunctional Bacterial Phosphatases; M. Neiditch, NJMS; *National Institute of Allergy and Infectious Diseases*

Local Modulation of Inflammation to Heal Cranial-Facial Bone Defects; P. O'Connor, NJMS; *National Institute of Dental and Craniofacial Research*

Diabetic Fracture Healing; P. O'Connor, NJMS; *National Institute of Arthritis and Musculoskeletal and Skin*

NJMS Clinical Trials Unit: Targeting Pediatric, Adolescent, and Maternal HIV Infection; J. Oleske, NJMS; *National Institute of Allergy and Infectious Diseases*

Effect of Typical Antipsychotics on Fructose Metabolism and its Implications for Weight Gain; C. Palavicino-Maggio, NJMS; *National Institute of Mental Health*

Fuse Binding Protein as a Cellular Effector of HCV Replication; V. Pandey, NJMS; *National Institute of Diabetes and Digestive and Kidney Disease*

Roles of Non-Coding RNA, roX, in Global Chromatin Organization; Y. Park, NJMS; *National Science Foundation*

Borrelia Burgdorferi Glycosaminoglycan Interactions and Lyme Disease Pathogenesis; N. Parveen, NJMS; *National Institute of Allergy and Infectious Diseases*

Evaluation of Carbohydrate Derived Fulvic Acid as a Topical Broad Spectrum Antimicrobial for Drug Resistant Wound Infections; D. Perlin, NJMS; *United States Army Medical Research Acquisition Activity*

Linking Triazole Resistance and Fitness in Aspergillus Fumigatus; D. Perlin, NJMS; *National Institutes of Health*

Production of V1V2 Fusion Proteins for Vaccine Analysis; A. Pinter, NJMS; *National Institutes of Health*

Optimizing Protective Vaccine Targets in the V1 V2 Domain of HIV - 1 GP120; A. Pinter, NJMS; *National Institutes of Health*

Strategies for Eliciting BnAbs Against Conserved HIV-1 Quaternary Epitopes; A. Pinter, NJMS; *National Institute of Allergy and Infectious Diseases*

Intrinsic Stiffness of Aortic Vascular Smooth Muscle Cell in the Development of Hypertension; H. Qiu, NJMS; *National Heart, Lung and Blood Institute*

Reprogramming Aging Stem Cells; P. Rameshwar, NJMS; *ReGen Medical Technologies*

Isolation of Cancer Stem Cells by Flow Cytometric Techniques; E. Raveche, NJMS; *National Science Foundation*

Role CCR2 + Monocytes and Mo-DCs in Defense Against IA and GVHD; A. Rivera-Medina, NJMS; *National Institutes of Health*

CD4+T Cells in Invasive Aspergillosis; A. Rivera-Medina, NJMS; *National Cancer Institute*

Mechanisms and Regulation of Mycobacterium Tuberculosis Iron Acquisition; G. Rodriguez, NJMS; *National Institute of Allergy and Infectious Diseases*

BMP2 Gene Regulation in Calcific Aortic Valve Disease; M. Rogers, NJMS; *National Heart, Lung and Blood Institute*

Functional Analysis of Pirt and Pirt2 Novel Regulators of TRP Channels; T. Rohacs, NJMS; *National Institute of General Medical Sciences*

Regulation of the Intestinal Ca²⁺ Channels: TRPV6; T. Rohacs, NJMS; *National Institute of General Medical Sciences*

Hypoglycemia-Induced NO in Glucose Sensing Neurons and Counterregulation; V. Routh, NJMS; *National Institute of Diabetes and Digestive and Kidney Disease*

Vitamin D and Innate Immunity in Respiratory Infections; L. Ryan, NJMS; *National Institute of Allergy and Infectious Diseases*

Vitamin D and Periodontal Disease; L. Ryan, NJMS; *National Institute of Dental and Craniofacial Research*

Immunopathogenesis of Spinal TB; J. Sacks, NJMS; *Ruth L. Kirschstein National Research Service Award*

Cardioprotective Effects of Thioredoxin 1; J. Sadoshima, NJMS; *National Heart, Lung and Blood Institute*

Redox Regulation in Aging and Failing Heart; J. Sadoshima, NJMS; *National Institute on Aging*

Regulation of Myocardial Growth and Death by Autophagy; J. Sadoshima, NJMS; *National Heart, Lung and Blood Institute*

Regulation of Myocardial Growth and Death by GSK-3; J. Sadoshima, NJMS; *National Heart, Lung and Blood Institute*

Regulation of Myocardial Growth and Death by the Hippo Pathway; J. Sadoshima, NJMS; *National Heart, Lung and Blood Institute*

US Brazil Collaboration on Immunity & Biomarkers in TB; P. Salgame, NJMS; *National Institute of Allergy and Infectious Diseases*

TLR2 and the Tubercle Granuloma; P. Salgame, NJMS; *National Institute of Allergy and Infectious Diseases*

Perisomatic Inhibitory Network Dysfunction in Neurological Disease; V. Santhakumar, NJMS; *National Institute of Neurological Disorders and Stroke*

Molecular Mechanism of hTERT Function in Mitochondria; J. Santos, NJMS; *United States Army*

Central Cardiovascular Regulation: Role of Urocortin III; H. Sapru, NJMS; *National Heart, Lung and Blood Institute*

Central Cardiovascular Regulation and Proangiogenesis-12; H. Sapru, NJMS; *National Heart, Lung and Blood Institute*

NJMS Request for Autoclave and Tunnel Washer; B. Scharf, NJMS; *National Center for Research Resources*

Infectious Triggers in Chronic Fatigue Syndrome; S. Schutzer, NJMS; *National Institute of Allergy and Infectious Diseases*

T Cell Depletion in Older HIV - Infected Patients by Plasmacytoid; V. Serei, NJMS; *National Institutes of Health*

Assessment of Multiple Intrauterine Gestations from Ovarian Stimulation; A. Seungdamrong, NJMS; *National Institute of Child Health and Human Development*

Triacylglycerol Metabolism and Mtb Virulence; L. Shi, NJMS; *National Institute of Allergy and Infectious Diseases*

Cardiac Dystrophy Cellular Mechanisms; N. Shirokova, NJMS; *National Heart, Lung and Blood Institute*

Mitochondria and Calcium Signaling in Skeletal Muscle; N. Shirokova, NJMS; *National Institute of Arthritis and Musculoskeletal and Skin*

Cost-effectiveness analysis of a potential group B streptococcal vaccine in a resource-constrained setting; A. Sinha, NJMS; *Centers for Disease Control and Prevention*

Vitamin D Analogs as Adjuvants in Chemotherapy of Cancer; G. Studzinski, NJMS; *National Institutes of Health*

Regulatory Networks in DNA Damage Checkpoint Response; K. Sugimoto, NJMS; *National Institute of General Medical Sciences*

Surveillance and Maintenance of DNA Ends; K. Sugimoto, NJMS; *National Cancer Institute*

Roles of the Mitochondrial Chaperones Mortalin and Tid1 in Protein Degradation and Disaggregation; C. Suzuki, NJMS; *National Institutes of Health*

A Novel Ryanodine Receptor in the Hormonal Regulation of Hepatic Metabolism; A. Thomas, NJMS; *National Institute of Diabetes and Digestive and Kidney Disease*

Malaria Melatonin Receptor Signaling as a Novel Drug Target; A. Thomas, NJMS; *National Institutes of Health*

The Role of cAMP Signaling Changes in Alcoholic Liver Disease; A. Thomas, NJMS; *Ruth L. Kirschstein National Research Service Award*

Long Non Coding RNAs in Adipogenesis; B. Tian, NJMS; *National Institute of Diabetes and Digestive and Kidney Disease*

Regulation of Alternative Cleavage and Polyadenylation; B. Tian, NJMS; *National Institute of General Medical Sciences*

Neural Stability After Retinol Detachment; E. Townes-Anderson, NJMS; *National Eye Institute*

Imaging the Transport of Individual mRNA Molecules to the Active Synapses; S. Tyagi, NJMS; *National Institute of Mental Health*

Cholinergic Regulation of NF- κ B in Sepsis; L. Ulloa, NJMS; *National Institute of General Medical Sciences*

Mechanisms of Myocardial Ischemia and Reperfusion; D. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Pre-Emptive Conditioning of the Ischemic Heart; D. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Adenylyl Cyclase Isoforms in Hypertrophy and Heart Failure; S. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Cardiovascular Control in Normal and Disease States; S. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Integrative Mechanism in Cardiovascular Disease; S. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Intrinsic Vascular Smooth Muscle Cell Stiffness; S. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Skeletal Muscle Basis for Improved Exercise Endurance in AC5 KO; S. Vatner, NJMS; *National Heart, Lung and Blood Institute*

Novel Pathways for Bcr-Abl Transformation; I. Whitehead, NJMS; *National Cancer Institute*

Label Free Multivariate Cancer Diagnosis Based on Cell Surface Biomarker Proteins; R. Wieder, NJMS; *National Institutes of Health*

IGF and IGF Receptor Function in Mammary Development; T. Wood, NJMS; *National Institute of Diabetes and Digestive and Kidney Disease*

The Role of MTOR Signaling in Oligodendrocyte Differentiation and CNS Myelination; T. Wood, NJMS; *National Institute of Neurological Disorders and Stroke*

Antiarrhythmic Mechanisms in the Hearts of Hibernating Mammals; L. Xie, NJMS; *National Institutes of Health*

Mechanism of Intrinsic Cardioprotection in Marmota Moxax; L. Yan, NJMS; *National Heart, Lung and Blood Institute*

Pathogenic and Protective T Cells in Toxoplasmosis; G. Yap, NJMS; *National Institute of Allergy and Infectious Diseases*

A Murine Model for Placental Metabolic Reprogramming; G. Yehia, NJMS; *National Institute of Child Health and Human Development*

Enhancing Autism Surveillance in New Jersey; W. Zahorodny, NJMS; *Centers for Disease Control and Prevention*

The Role of Phosphorylation of Ulk1 by GSK 3B in Myocardial Autophagy and Aging; P. Zhai, NJMS; *National Institute on Aging*

Anaerobic Shock as a Novel Treatment for Tuberculosis; X. Zhao, NJMS; *National Institutes of Health*

Illness Management and recovery skill development; T. Bartholomew, SHRP; *National Institute of Mental Health* (through IUPUI).

Cognitive Remediation among Post-Secondary Students with Serious Mental Illness; M. Mullen, SHRP; *National Institute of Disability and Rehabilitation Research (NIDRR)*

A Study of Age-Associated Need, Services, and Outcomes of Participants enrolled in Supported Education; K. Gill, SHRP; *National Institute of Disability and Rehabilitation Research (NIDRR)*

Effectiveness of Educational Supports on Retention of Postsecondary Students with Psychiatric Disabilities; K. Gill, SHRP; *National Institute of Disability and Rehabilitation Research (NIDRR)*

EMBARC: Exploring Massage Benefits for Osteoarthritis of the Knee NIH Grant R01_(Duke University-primary site); A. Perlman, (UMDNJ site) S. Gould Fogerite, G. M. Mahon, SHRP; *National Institutes of Health*

Preventive Medicine Integrative Medicine Program; P. Thomas, G. Mahon, SHRP; *Health Resources and Services Administration (HRSA)*

Validation of Predictive Energy Equations in Hemodialysis Patients 2013-2015 NIH Grant, R15; L. Byham-Gray, J. Scott Parrott, SHRP; *National Institutes of Health*

Visual Augmentation Through Virtual Reality to Rehabilitate the Hand after Stroke Federal NIH Grant #: 1 K01; E. Tunik, SHRP; *National Institutes of Health*

Optimizing Hand Function Post Stroke Utilizing Interactive Virtual Environments Subcontract Federal NIH Grant # R01; A. Merians, SHRP; *National Institutes of Health*

Development and Validation of a Predictive Energy Equation in Patients Diagnosed Stage 5 Chronic Kidney Disease on Maintenance Hemodialysis (R-15); L. Byham-Gray, SHRP; *National Institute of Diabetes and Digestive and Kidney Diseases*

Lessons Learned from Care Coordinators in Patient-Centered Medical Homes; J. Ferrante, RWJMS; *Agency for Healthcare Research and Quality*

Translating Research Into Action for Diabetes (TRIAD) Legacy Study (Collaborating and Coordinating Center); S. Lu, RWJMS; *Centers for Disease Control and Prevention*

Public Health Surveillance for the Prevention of Complications of Bleeding and Clotting Disorders to HTCs; C. Philipp, RWJMS; *Centers for Disease Control and Prevention*

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The Effects of a Four Week Yoga Program on Persons with HIV-related Distal Sensory Polyneuropathy; D. Kietrys, SHRP; *American Physical Therapy Association Oncology Section*

An International Demonstration Study Using a Train-the-Trainer Program on Nutrition Focused Physical Assessment of the Head, Neck and Oral Cavity for Dietetic Educators and Preceptors; R. Brody, SHRP; *The Academy of Nutrition and Dietetics (formerly American Dietetic Association) Colgate Palmolive Fellowship to Support Research in Nutrition and Oral Health/Dental Education Grant*

Impact of Oral Health Assessment Training of RDs on Implementing New Knowledge in Their Practice; N. Trostler, SHRP; *The Academy of Nutrition and Dietetics (formerly American Dietetic Association) Colgate Palmolive Fellowship to Support Research in Nutrition and Oral Health/Dental Education Grant*

Simply Being Human: Expressive Arts for Healthcare Students and Providers. D. Kaufman, NJMS, Co-PI: V. Cowen, SHRP; *Arnold P. Gold Foundation*

Actions at the Interface of Individual/Household and Community Food Security To Improve Maternal-Child Health Outcomes; R. Hindin, SHRP; *Merck Foundation*

Neuropeptides, Processing Enzymes, and Drug Abuse; J. Pintar, RWJMS; *Albert Einstein College of Medicine*

Pre-Clinical Studies of an Allele Specific p53 Mutant Reactivating Compound in Pancreatic Cancer; D. Carpizo, RWJMS; *American Association for Cancer Research*

Autophagy and HER2 Interactions in Breast Cancer Progeression and Treatment; V. Karantza-Wadsworth, RWJMS; *American Association for Cancer Research*

Transforming Growth Factor Beta Signaling and Melanoma Development; K. Cohen-Solal, RWJMS; *American Cancer Society of New Jersey*

Leukemia Inhibitory Factor Negatively Regulates p53 in Colorectal Cancer; W. Hu, RWJMS; *American Cancer Society*

The Nematode C. Elegans as a Pharmacological Tool; F. Sesti, RWJMS; *American Heart Association*

Assembly and Maintenance of the Contractile Cytoskeleton of Cardiomyocytes by a Myosin Specific Chaperone Complex; D. Winkelmann, RWJMS; *American Heart Association*

Rescuing Ca²⁺ Deregulation and Contractile Function in Muscle Aging; X. Zhao, RWJMS; *American Heart Association*

Understanding the Role of TRIM24 in DNA Damage Response and the Implication of this Pathway for Treatment of Neoplastic Disease; V. Mewani, RWJMS; *American Medical Association Foundation*

Cross-Cultural Adaptation and Preliminary Validation of SMILEY; L. Moorthy, RWJMS; *Arthritis Foundation*

A Phase II Trial of STA 9090 Patients w/Metastatic Castration Resistant Prostate Cancer (CRPC) Pretreated with Docetaxel Based Chemotherapy; M. Stein, RWJMS; *Barbara Ann Karmanos Cancer Center*

Enzyme Replacement Therapy for Late Infantile Batten Disease; P. Lobel, RWJMS; *Batten Disease Support and Research Association*

Mechanistic and Physiological Analysis of Transcriptions - Dependant Gene Loops; J. Karijovich, RWJMS; *Damon Runyon Cancer Research Foundation*

Epidemiology of Ovarian Cancer in African American Women; E. Bandera, RWJMS; *Duke University*

Informatics for Integrative Brain Tumor Whole Slide Analysis; D. Foran, RWJMS; *Emory University*

RCT of an Online Multimedia Program to Boost Coping and Function for PCS Survivors; S. Hudson, RWJMS; *Fox Chase Cancer Center*

A Web Based Multimedia Intervention for Head and Neck Cancer Patients; S. Manne, RWJMS; *Fox Chase Cancer Center*

A Tailored Internet Intervention for Skin Cancer Risk Reduction in Young Adults; S. Manne, RWJMS; *Fox Chase Cancer Center*

Gene Environmental Risk Assessment and CRC Screening; S. Manne, RWJMS; *Fox Chase Cancer Center*

The Natural History and Outcome of Patients with Scleroderma at High Risk for or with Early Pulmonary Hypertension; V. Hsu, RWJMS; *Georgetown University*

The Primary Care Team: Learning from Effective Practices; B. Crabtree, RWJMS; *Group Health Cooperative*

Early Therapeutics Development with Phase II Emphasis/Southeast Phase II Consortium (SEP2C); R. Strair, RWJMS; *H. Lee Moffitt Cancer Center and Research Institute*

Function Based Problem Solving for Students with Behavioral Support Needs; S. Lohrmann, RWJMS; *Knowledge is Power Program (KIPP) NYC*

A Phase II Study of the Novel Proteasome Inhibitor Bortezomib in Combination w/Rituxim Cyclophosphamide and Prednisone in Patients w/Relapsed Refractory Follicular Lymphoma; K. David, RWJMS; *Memorial Sloan-Kettering Cancer Center*

Inhalation, Dietary & Non-Dietary Exposures to PBDEs and Blood Levels in the Older Adults Living in Brooklyn, NY - A Pilot Study; Z. Fan, RWJMS; *Mount Sinai School of Medicine*

Cancer Among WTC Responders; P. Georgopoulos, RWJMS; *Mount Sinai School of Medicine*

National Institute of Child Health & Human Development National Children's Study (NCS) Centers; P. Liroy, RWJMS; *Mount Sinai School of Medicine*

Expanding Analytical Analysis of SVOC in Environmental Dust; C. Weisel, RWJMS; *Mount Sinai School of Medicine*

MMS Real Time Collectional of Environmental Dust; C. Weisel, RWJMS; *Mount Sinai School of Medicine*

The Role of Glial Cell-Derived Factors in a Cuprizone Model of MS; C. Dreyfus, RWJMS; *National Multiple Sclerosis Society*

The Cancer Insulin Resistance and Lifestyle (CIRCLE) Study in the F.H.S. Population; G. Lu-Yao, RWJMS; *New York University*

Communication - Participation Behavior During Delivery of Breast Cancer Care; T. Kearney, RWJMS; *Portland State University*

A Phase II Study of Single Agent Tesetaxal in Chemotherapy Naive and Chemotherapy Exposed Patients who have Progressive Castration Resistant Prostate Cancer; T. Mayer, RWJMS; *Prostate Cancer Clinical Trials Consortium*

Contouring in Radiation Oncology Education (CORE) - A Self-Assessment (SAM) for Radiation Oncologists; S. Goyal, RWJMS; *Radiological Society of North America*

Epidemiology of Breast Cancer Subtypes in African American Women: A Consortium Core B; E. Bandera, RWJMS; *Roswell Park Cancer Institute*

Walking with Prospect Theory; E. Coups, RWJMS; *Rutgers, The State University of New Jersey*

Studies of Impacts of Climate Change on Allergic Airway Disease; P. Georgopoulos, RWJMS; *Rutgers, The State University of New Jersey*

Using the Default Effect to Promote Healthy Behavior; E. Leventhal, RWJMS; *Rutgers, The State University of New Jersey*

Methods to Evaluate Radiation Exposures (UCDPER); P. Liou, RWJMS; *Rutgers, The State University of New Jersey*

Effect of Caffeine on UVB Induced Skin Cancer; M. Magliocco, RWJMS; *Rutgers, The State University of New Jersey*

Elucidating the Role of miRNA Dysregulation in Schizophrenia and Bipolar Disorder; J. Millonig, RWJMS; *Rutgers, The State University of New Jersey*

Elucidating the Disease Path of Parkinson's Disease Through the Molecular Study of the Role of Gene DJ-1 in Mitochondrial Function and Biogenesis; M. Mouradian, RWJMS; *Rutgers, The State University of New Jersey*

The Role of Autophagy Regulator BECN1 in Mammary Differentiation; R. Nahar, RWJMS; *Rutgers, The State University of New Jersey*

Hospital Community Assessment; M. Pellerano, RWJMS; *Rutgers, The State University of New Jersey*

Multifunctional Nanotherapeutics for Cancer Treatment and Imaging; L. Rodriguez-Rust, RWJMS; *Rutgers, The State University of New Jersey*

Visual Clinical Problem Threading for Case Summarization; F. Sonnenberg, RWJMS; *Rutgers, The State University of New Jersey*

Disposition of Environmental Chemicals During Pregnancy (Outstanding New Environmental/Scientist Award); A. Vetrano, RWJMS; *Rutgers, The State University of New Jersey*

Synthetic Counter-Ligands for Inhibition of Atherosclerosis; W. Welsh, RWJMS; *Rutgers, The State University of New Jersey*

Testing CBT Models and Change Mechanisms of Alcohol Dependent Women; J. Williams, RWJMS; *Rutgers, The State University of New Jersey*

NJ Integrated Community Systems Project--Autism Spectrum Disorders & Other Developmental Disabilities (ISG-ASD/DD); D. Spitalnik, RWJMS; *Statewide Parent Advocacy Network*

Single Nucleotide Polymorphisms in the p53, 63 and 73 Pathways; K. Hirshfield, RWJMS; *The Breast Cancer Research Foundation*

The Relationship between Breast Cancer Stem Cells and p53 Mutations; A. Levine, RWJMS; *The Breast Cancer Research Foundation*

Workload Intensity Model for Support for Administrative Duties at Participating Sites; R. Drachtman, RWJMS; *The Children's Hospital of Philadelphia*

Chronic Kidney Disease in Children (cKids); L. Weiss, RWJMS; *The Children's Hospital of Philadelphia*

Study of Nuclear Factor-Kappa B (NF-kB) Inhibition During Induction Chemotherapy for Patients with Acute Myelogenous Leukemia; R. Strair, RWJMS; *The Leukemia and Lymphoma Society*

Unrecognized Mucopolysaccharidosis I, II, IVA, VI in the Pediatrics Rheumatology Population; L. Moorthy, RWJMS; *The National MPS Society*

Roles and Regulations of p53; A. Levine, RWJMS; *The Trustees of Columbia University in the City of New York*

Developing Tools to Promote Personalized Therapy for Prostate Cancer; G. Lu-Yao, RWJMS; *The University of Iowa*

Prevention of Prostate Cancer Progression by Atorvastatin and Celecoxib; S. Goodin, RWJMS; *The V Foundation for Cancer Research*

Examining the Role of Autophagy in Melanoma Tumorigenesis; J. Mehnert, RWJMS; *The V Foundation for Cancer Research*

Abnormalities in the S3BP1 Pathway in Triple Negative Breast Cancer; S. Ganesan, RWJMS; *Triple Negative Breast Cancer Foundation*

The Coupling of mRNA Transcription and 3' End Formation; M. Hampsey, RWJMS; *Tufts University*

Thymectomy Trial on Non Thymomatous Myasthenia Gravis Patients Receiving Prednisone Therapy ARRA Supplemental Study; J. Belsh, RWJMS; *University of Alabama at Birmingham*

Systolic Blood Pressure Intervention Trial (SPRINT); J. Kostis, RWJMS; *University of Alabama at Birmingham*

A Combination Trial of Copaxone Plus Estrial in RRMS; S. Dhib-Jalbut, RWJMS; *University of California, Los Angeles*

The Combined Approach to Lysis Utilizing Eptifibatid and rt-PA in Acute Ischemic Stroke Enhance Regime; J. McKinney, RWJMS; *University of Cincinnati*

Epidemiologic Study of Hepatocellular Carcinoma in the US; E. Lattime, RWJMS; *University of Hawaii*

Mechano-Visual Phenotyping of Cancer: From Onset Through Disease Progression; D. Foran, RWJMS; *University of Maryland*

Treatment of Melanoma with Wild Type P53 and Detectable S100B Using Pentamidine: A Phase II Trial with Correlative Biomarker Endpoints; J. Mehnert, RWJMS; *University of Maryland*

Videos Supplement Traditional Assessment (VISTA) Protocol for Systemic Lupus Erythematosus Phase III Trial IM 101237 Observational Study; N. Schlesinger, RWJMS; *University of Michigan*

Immune Regulation by Thymocyte-Selected CD4 T Cells; D. Sant'Angelo, RWJMS; *University of Michigan - Board of Regents*

Developmental Ah Receptor Activity in the CNS: Neurogenesis and Neurotoxicity; E. DiCicco-Bloom, RWJMS; *University of Rochester*

A Genome Wide Admixture Scan of Multiple Myeloma in African Americans; J. Graff, RWJMS; *University of Southern California*

Comparative Effectiveness of Treatments of Localized Prostate Cancer; J. Graff, RWJMS; *Vanderbilt University*

Pathophysiology of Basement Membrane Zone Collagens; F. Ramirez, RWJMS; *Vanderbilt University*

PRIVATE INDUSTRY

Evaluation of Sponsor's proprietary compounds directed to TBK1 (compounds) in primary human monocytes and B cells stimulated with SLW-relevant triggers and assayed for IRF 3/5 cellular localization; B. Barnes, NJMS, *Takeda California*

Effect of IV Ibuprofen on inflammatory response in Patients undergoing surgery and general anesthesia; A. Bekker, NJMS, *Cumberland Pharmaceutical*

Vitamin D: Mechanism of Action – Fellowship; S. Christakos, NJMS, *Merck Sharp and Dohme Research Laboratories*

Basic and Applied Studies on Tuberculosis; N. Connell, NJMS, *Jacobus Pharmaceutical*

Oseltamivir versus Placebo for Treatment of Influenza in low-Risk Adults; N. Dharan, NJMS, *Social and Scientific Systems*

Trial Comparing Cervical Arthroplasty to Anterior Cervical Diskectomy and Fusion for the Treatment of Cervical Degenerative Disc Disease; R. Heary, NJMS, *DePuy*

Study to Evaluate the Efficacy Safety and Pharmacokinetics of SUN13837 Injection in Adult Subjects with Acute Spinal Cord Injury; R. Heary, NJMS, *Asubio Pharmaceuticals*

The Healthy FACE Food Accessible In the Community for Everyone Project; R. Hindin, NJMS, *Merck and Company*

Study to evaluate TMC435 as part of a treatment regimen including Peginterferon a-2a (Pegasys) and ribavirin (Copegus) in hepatitis C; S. Hodder, NJMS, *Tibotec Pharmaceuticals*

Elvitegravir/Cobicistate/Emtricitabine/Tenofovir Disproprux Fumarate Versus Ritonavir-Boosted Atazanavir; S. Hodder, NJMS, *Gilead Sciences*

ACTG Protocol A5260s: Cardiovascular Effects of (ART) and Metabolic Substudy of A5257 ("A5260s); S. Hodder, NJMS, *Social and Scientific Systems*

Study to compare the efficacy and safety of fingolimod 0.25 mg and 0.5 mg administered orally once daily with glatiramer acetate 20 mg; S. Kamin, NJMS, *Novartis Pharmaceuticals*

JCV Antibody Program in Patients with Relapsing Multiple Sclerosis Receiving or Considering Treatment with Tysabri; S. Kamin, NJMS, *Biogen Idec*

MTA - Repeat Experiment: Acute Rabbit Tuberculosis Model; G. Kaplan, NJMS, *Eli Lilly and Company*

Study Evaluating the Safety and Efficacy of Intracoronary Administration of MYDICAR (AAV1/SeRCA2a); M. Klapholz, NJMS, *Celladon Corporation*

Study to Evaluate the Long-Term Efficacy and Safety of Concentration-Controlled Everolimus in Liver Transplant; B. Koneru, NJMS, *Novartis Pharmaceuticals*

Mobilization of Stem Cells with GSF and Mobizil in Patients with Cirrhosis - A Phase I Study; B. Koneru, NJMS, *Proteonomix*

Construct Comparative DNA sequence database of a group of bacterial species selected by sponsor; B. Kreiswirth, NJMS, *Medimmune*

DST Testing in isolates, DNA fingerprinting and additional tasks; B. Kreiswirth, NJMS, *Otsuka Pharmaceutical Dev.*

SCCmec Type Testing for Eurofins Medinet; B. Kreiswirth, NJMS, *EuroFins Medinet, Inc*

Experimental Compound Testing Against Clinical Isolates of Mycobacterium Tuberculosis; B. Kreiswirth, NJMS, *Merck Sharp and Dohme Research Laboratories*

Screening of NITD Compounds against M. tuberculosis clinical isolates; B. Kreiswirth, NJMS, *Novartis Pharmaceuticals*

Trial to Evaluate the Safety and Effectiveness of Augment Injectable Bone Graft Compared to Autologous Bone Graft; S. Lin, NJMS, *Biomimetic Therapeutics*

Left Atrial Pressure Monitoring to Optimize Heart Failure Therapy (LAPTOP-HF IDE Study); J. Maher, NJMS, *St. Jude Medical Company*

Study of everolimus in combination with exemestane versus everolimus alone versus capecitabine in the treatment of postmenopausal women; S. Maingi, NJMS, *Novartis Pharmaceuticals*

Strengthening Tuberculosis Control in the Ukraine; B. Mangura, NJMS, *Chemonics International*

Assessing isavuconazole-induced resistance in *Aspergillus fumigatus*; D. Perlin, NJMS, *Astellas Pharma US*

Framing Eighteen cois in cerebral Aneurysms Trial (FEAT); C. Prestigiacomo, NJMS, *Stryker Corp.*

Economic Burden of Acute Lower Respiratory Infection Among Children in South Africa; A. Sinha, NJMS, *Wyeth*

Study of Ramucirumab IMC 1121B Drug Product and Best Supportive Care vs Placebo and BSC as 2nd Line Treatment in Patients with Hepatocellular Carcinoma; R. Wieder, NJMS, *Imclone Systems*

Generation and Evaluation of a Varicella Zoster Virus with an ORF7 Deletion (v7D); H. Zhu, NJMS, *Beijing Wantai Biological Pharmacy*

Construction of a conditional inactivate VZV vaccine candidate; H. Zhu, NJMS, *ViroLabs*

The Effects of Pressure on Lower Back Pain in Sciatica; A. Perlman, G.M. Mahon, SHRP; *Johnson and Johnson Consumer and Personal Products Worldwide*

Study of ABT-263 in Combination with Carbotaxel (Carboplatin/Paclitaxel) in the Treatment of Subjects with Solid Tumors; V. Karantza-Wadsworth, RWJMS; *Abbott Laboratories*

Study of Veliparib in Combination w/Temozolomide or Veliparib in Combination w/Carboplatin and Paditaxel vs Placebo Plus Carboplatin; D. Toppmeyer, RWJMS; *Abbott Laboratories*

Study to Assess the Efficacy, Safety and Tolerability of Macitentan in Patients with Ischemic digital ulcers associated with systemic sclerosis; V. Hsu, RWJMS; *Actelion Clinical Research*

Randomized Evaluation of Recurrent Stroke Comparing PFO Closure to Established Current Standard of Care Treatment (RESPECT); J. McKinney, RWJMS; *AGA Medical Corporation*

Targeting T Cell Lymphoma Lacking Methylthioadenosine Phosphorylase (MTAP) with Pralatrexate and 6 Thioguanine; J. Bertino, RWJMS; *Allos Therapeutics*

ALERTS (Angelmed for Early Recognition and Treatment of STEMI); T. Vagaonescu, RWJMS; *ANGEL Medical Systems*

Production, Testing and Supply of IGFBP-2,3,4,5 and 6 KO and Preliminary Characterization of Anti-IGFBP Antisera; J. Pintar, RWJMS; *Anshlabs, LLC*

An Extension Trial of Deforolimus, an mTOR Inhibitor for Patients w/Advanced Cancer; E. Poplin, RWJMS; *Ariad Pharmaceuticals*

Non-Invasive Chromosomal Examination of Trisomy Study (NEXT Study); T. Rosen, RWJMS; *Ariosa Diagnostics*

Study to assess whether Regular Administration of Advate in the Absence of Immunological Danger Signals Reduces the Incidence Rate of Inhibitors in Previously Untreated Patients With Hemophilia A; C. Philipp, RWJMS; *Baxter Healthcare Corporation*

Evaluation of Bleeding Symptoms in Reproductive Age Female Family Members of VWD Patients; C. Philipp, RWJMS; *Baxter Healthcare Corporation*

Sequential Evaluation of the BDBACTEC New Resin Blend Blood Culture Medium and BACTEC Plastic Blood Culture Bottles for the Detection of Bacteremia & Fungemia; M. Weinstein, RWJMS; *Becton Dickinson*

Immune Regulation in Multiple Sclerosis: MicroRNA and Antigen Presenting Cells; K. Balashov, RWJMS; *Biogen Idec*

Analysis of Biomarkers in Canine LINC; P. Lobel, RWJMS; *BioMarin Pharmaceutical, Inc*

Clinical Trial Assessing Safety and Efficacy of MF101 for Hot Flushes and Menopausal Symptoms in Postmenopausal Women; G. Bachmann, RWJMS; *Bionovo*

Trial Evaluating the Effect of Oral BIBF 1120 150 mg Twice Daily on Annual Forced Vital Capacity Decline in Patients with Idiopathic Pulmonary Fibrosis; D. Riley, RWJMS; *Boehringer Ingelheim Pharmaceuticals*

Equivalent Level of Safety - Define the Air Quality Provided by 0.55lb/min Occupant; N. Fiedler, RWJMS; *Boeing Corp.*

Equivalent Level of Safety - Defining what 0.55lb/min/Occupant Provides in Terms of Air Quality; N. Fiedler, RWJMS; *Boeing Corp.*

Study to Evaluate Apixaban in Pediatrics Subjects with an Indwelling Central Venous Catheter; S. Das, RWJMS; *Bristol-Myers Squibb Company*

Study of Saxagliptin (BMS-47718) as Monotherapy in Pediatric Patients w/Type 2 Diabetes; I. Marshall, RWJMS; *Bristol-Myers Squibb Company*

mTOR Targets in T Lymphocyte Development; E. Jacinto, RWJMS; *Cancer Research Institute*

Effect of PDACs on Initiation & Progression of EAE; Y. Ron, RWJMS; *Celgene Cellular Therapeutics*

Clinical Trials for Red Cells; J. Carson, RWJMS; *Cerus Corporation*

Evaluation of the E Test and the Micoscan Pos Combo Panel Type 33 MIC Micro Titer Plate Methods for Staphylococcus Aureus and Enterococcus spp Daptomycin Susceptibility Testing; T. Kirn, RWJMS; *Cubist Pharmaceuticals*

Establishing a Drug screening System for a Human Calcium Channel Protein, Cav1.3; M. Inouye, RWJMS; *Dainippon Sumitomo Pharmaceuticals Co., Ltd*

Study of Halaven in Subjects w/Cancer who also have Impaired Renal Function; A. Tan, RWJMS; *Eisai*

ProSAAS System and Metabolism; J. Pintar, RWJMS; *Eli Lilly and Company*

TRANSLATE-ACS: Treatment with ADP Receptor Inhibitors: Longitudinal Assessment of Treatment Patterns and Events after Acute Coronary Syndrome; T. Vagaonescu, RWJMS; *Eli Lilly and Company*

The Impact of SNPs in the p53 Pathway Upon Aging Longevity; W. Hu, RWJMS; *Ellison Medical Foundation*

Increased Cancer Susceptibility in Aging Tissue- an Embronic Stem Cell Approach; C. Lu, RWJMS; *Ellison Medical Foundation*

Trial of T-DMI Compared w/Treatment of Physician's Choice in Patients w/HER2 Positive metastatic or unresectable locally advanced/recurrent HER2-positive breast cancer; A. Tan, RWJMS; *Genentech*

Study of CAL-101 in Patients with Indolent B-Cell Non-Hodgkin Lymphoma Refractory to Rituximab and Alkylating Agents; K. David, RWJMS; *Gilead Sciences*

Trial Evaluating Repeated Courses of Aztreonam for Inhalation Solution Aztreonam 75 mg Powder and Solvent for Nebuliser Solution Subjects; S. Hussain, RWJMS; *Gilead Sciences*

Study of the Effects of Ketoconazole and Esomeprazole on the Pharmacokinetics of Orally Administered Repeat Doses of Pazopanib in Subjects with Solid Tumor Malignancies; A. Tan, RWJMS; *GlaxoSmithKline*

Study to Assess the Efficacy and Safety of Tocilizumab vs Placebo in Patients with Systemic Sclerosis; V. Hsu, RWJMS; *Hoffman La Roche*

Evaluation of HHI's Patient-Centered Medical Home Pilots and Transformation Coaches; J. Ferrante, RWJMS; *Horizon Healthcare Innovations*

A Study to Evaluate the Potential of Concomitant Ramucirumab to Affect the Pharmacokinetics of Docetaxel in Patients w/Advanced Malignant Solid Tumors; M. Stein, RWJMS; *Imclone Systems*

Study of ICT-107 in Newly Resection and Chemoradiation; T. Mayer, RWJMS; *ImmunoCellular Therapeutics, Ltd.*

Dose Ranging Trial to Evaluate CNTO 1959 for the Treatment of Subjects with Moderate to Severe Plaque Type Psoriasis (XPLORE); M. Magliocco, RWJMS; *Janssen Biotech*

Comprehensive Evaluation of Antimicrobial Resistance Patterns for 2007: a Phased Investigation of Bacterial Pathogens and Testing Methods; M. Weinstein, RWJMS; *JMI Laboratories*

Targeting Tripeptidyl Peptidase 1 Across the Blood-Brain Barrier Using the Peptide Transporter, K16ApoE; P. Lobel, RWJMS; *Johnson and Johnson*

Efficacy and Safety of Oral Kanlaite (KLTc) Gelcap in Men w/Prostate Cancer: Study of the Effects of KLTc Gelcap (3 or 6 capsules four times/day on Prostate Specific Antigen; R. DiPaola, RWJMS; *KangLaiTe USA*

Study Evaluating MK-1775 in Combination with Paclitaxel and Carboplatin vs Paclitaxel and Carboplatin Alone in Adult Patients w/Platinum Sensitive p53 Mutant Ovarian Cancer; D. Gibbon, RWJMS; *Merck Sharp and Dohme Research Laboratories*

Trial of the Combination of Ridaforolimus and Exemestane Compared to Ridaforolimus Dalotuzumab and Exemestane (CTA); A. Tan, RWJMS; *Merck Sharp and Dohme Research Laboratories*

Effects of Resistant Starch on Insulin Sensitivity in Women; V. Hsu, RWJMS; *National Starch LLC*

Effects of Soluble Fiber on Human Gut Microbiota, Formation of Bioactive Metabolites Inflammation and Blood Glucose Control Consultant Agreement; V. Hsu, RWJMS; *National Starch LLC*

Trial to Assess the Gastrointestinal Tolerability of a Dietary Fiber Ingredient in Healthy Men and Women; V. Hsu, RWJMS; *National Starch LLC*

Assessing Fermentability of a Novel Carbohydrate Fiber in Healthy Non-Obese Men and Women; V. Hsu, RWJMS; *National Starch LLC*

Characterization of Synuclein Antibodies and Examination of the Role of Truncated Synuclein in Neurodegenerative Diseases (IHC for Truncated Synuclein in Postmortem Human Tissue); E. Richfield, RWJMS; *Neotope Biosciences Limited*

A Pilot Study of a Hedgehog Pathway Inhibitor (LDE 225) in Surgically Resectable Pancreas Cancer; D. Carpizo, RWJMS; *Novartis Pharmaceuticals*

Study to Assess the Effect of TKT258 on the Pharmacokinetics of Caffeine Diclofenac & Omeprazole; R. Moss, RWJMS; *Novartis Pharmaceuticals*

Assessment of Gouty Arthritis Patients Quality of Life and Beliefs Regarding Gouty Arthritis; N. Schlesinger, RWJMS; *Novartis Pharmaceuticals*

The Treatment of Acute Gouty Arthritis at a University Hospital Emergency Room; N. Schlesinger, RWJMS; *Novartis Pharmaceuticals*

Safety, efficacy and Pharmacokinetics of NNC-0156-0000-0009 in Previously Treated Children with Hemophilia B; C. Philipp, RWJMS; *Novo Nordisk Inc. (Novo Nordisk)*

Study to Assess the Safety of ADXS11-001 for the Treatment of Cervical Intraepithelial Neoplasia Grade 2/3; C. Ayers, RWJMS; *Numoda Corporation*

Study Evaluating the Neuropsychiatric Safety and Efficacy of 12 Weeks Varenicline Tartrate 1 mg BID for Smoking Cessation; J. Williams, RWJMS; *Pfizer*

Trial of Pregabalin CR as Adjunctive Therapy in Adult Patients w/ Partial Onset Seizures; B. Wu, RWJMS; *Pfizer*

Study of SAR245409 in Combination w/Bendamustine and/or Rituximab in Patients w/Relapsed or Refractory Indolent B-cell Non-Hodgkin Lymphoma, Mantle Cell Lymphoma or Chronic Lymphocytic Leukemia; K. David, RWJMS; *Sanofi-Aventis*

Evaluation of Lixisenatide in Acute Coronary Syndrome (ELIXA); J. Kostis, RWJMS; *Sanofi-Aventis*

Study for Subjects who Completed a Phase I or Phase II Parental Study to Continue Receiving Teratment w/SAR245408; J. Mehnert, RWJMS; *Sanofi-Aventis*

Dose Escalation Study of a Tablet Formulation of SAR245409 Administered Daily to Patients with Solid Tumors or Lymphoma; J. Mehnert, RWJMS; *Sanofi-Aventis*

Validation of Antimicrobial Susceptibility Testing Results for Microscan Susceptibility Testing Panels versus Gram Negative Bacteria (AQ-14); M. Weinstein, RWJMS; *Siemens Healthcare Diagnostics*

Post Approval Study Protocol of the St. Jude Medical Biocor and Biocor Supra Valves: PMA PO4002; M. Anderson, RWJMS; *St. Jude Medical Company*

IL 27 Mediated Glatiramer Acetate (GA) Therapeutic Effect in MS and EAE; K. Ito, RWJMS; *TEVA Pharmaceuticals Industries, Ltd.*

Assessment of Content Validity and Other Quantitative Measurement Properties of the Cochin Hand Functional Scale (CHFS) for use in a Scleroderma Patient Population with Digital Ulcers (DUs); V. Hsu, RWJMS; *United BioSource Corporation*

Potential Accuracy Improvement in Patient Positioning for the Moving Target Volumes Based on Dynamic Image Registration Between 4DCT and Fluoroscopy; N. Yue, RWJMS; *Varian Medical Systems*

Integrative Physiology of Gulf War Illness: Role of Autonomic Function Central Neural Processing and Sleep; P. Lehrer, RWJMS; *Veterans Biomedical Research Institute*

Study of VT122 in Comb w/Sorafenib Compared to Sorafenib w/Placebo in Patients w/Hepatocellular Carcinoma Systemic Inflammation; R. Moss, RWJMS; *VICUS Therapeutics, LLC*

Molecular Expression Testing on Blood Samples (Allomap Testing in Cardiac Transplant Patients); V. Hsu, RWJMS; *XDx*

Darinaparsin in Vitro Studies; J. Bertino, RWJMS; *ZIOPHARM Oncology*

FOUNDATION OF UMDNJ

Exploring Bystander Effects in Thermal Radiosensitization of Cancer Cells; E. Azzam, NJMS

Mechanisms of Breast Cancer Immune Evasion; R. Birge, NJMS

Vitamin D and immunity against Mycobacterium Tuberculosis Infection; S. Christakos, NJMS

Molecular Basis and Modulation of Cardiac Intercellular Communication; J. Contreras, NJMS

Multiple Sclerosis Research at UMDNJ; S. Cook, NJMS

Insulin Like Growth factor 1 Mediates Cardiac Defects Triggered by Id Deficient Bone Marrow; D. Fraidenraich, NJMS

Hoffman LaRoche - Innate Immune Mechanisms Controlling Inflammation and Infection; W. Gause, NJMS

Positron Emission Tomography with F-18 Flourodeoxyglucose to Identify Early Events in Latent Infection with Mycobacterium Tuberculosis; N. Ghesani, NJMS

Exploring Bystander Effects in Thermal Radiosensitization of Cancer Cells; A. Harris, NJMS

The Role of EMS in Acute Stroke Management at UMDNJ-New Jersey Medical School; A. Hidalgo, NJMS

Effects of Nonuniform Distributions of Radioactivity; R. Howell, NJMS

Moringa Bioactives as Novel Anti HCV Agents; N. Kaushik-Basu, NJMS

Exploring a Role for Tumor Suppressor Nore in HCV Pathogenesis; N. Kaushik-Basu, NJMS

Using Bacterial Genomics to Unravel the NYC MRSA Epidemic; B. Kreiswirth, NJMS

Evaluating the Role of Dopamine D3 Receptor in Levodopa Induced Dyskinesia; E. Kuzhikandathil, NJMS

Investigation of the Role of AbLIM3 in Coronary Capillary Development; M. Matsuda, NJMS

NJ State Council Knights of Columbus - Autism Research at UMDNJ-NJMS; X. Ming, NJMS

Anemia and the Chronic Hyperadrenergic State Following Major Trauma; A. Mohr, NJMS

Kinesin-1 Mediated Phosphorylation of Cargo Proteins; Z. Muresan, NJMS

Function of Loco in Longevity Regulation; Y. Park, NJMS

BMP2 Repression and Embryogenesis and Adult Physiology; M. Rogers, NJMS

Regulation of the Novel Mechanosensitive Piezo Ion Channels; T. Rohacs, NJMS

Role For Glucose Inhibited Orexin Neurons in the Tendency for Weight Regain Following Dieting; V. Routh, NJMS

Vitamin D and Immunity Against Mycobacterium Tuberculosis Infection; P. Salgame, NJMS

X-Linked Immune Cell Mosaicism and Inflammation; Z. Spolarics, NJMS

Regulating mitochondrial genome dynamics by TFAM phosphorylation; C. Suzuki, NJMS

The Mitochondrial ATP Dependent Lon Protease in Cardiac Ischemia and Hypertrophy; C. Suzuki, NJMS

Image Based Biomechanical Analysis of Elbow Dislocation; V. Tan, NJMS

Long Non Coding RNAs in Cardiac Hypertrophy; B. Tian, NJMS

Neuro-ophthalmology research at IOVS for FY13; R. Turbin, NJMS

IGF/Insulin receptor signaling in mammary epithelial cell fate; T. Wood, NJMS

Role of Lateral Habenula in Alcohol Addiction; J. Ye, NJMS

AMD Research (Dr. Christopher Seery); M. Zarkin, NJMS

Macular Degeneration Research; M. Zarkin, NJMS

Gas-based Therapy for Tuberculosis; X. Zhao, NJMS

Evaluating Patterns in Cases of Homicide/Suicide, vs. Homicide Only, and Suicide Only; C. Carretta, SN

Guided Imagery and Relaxation Techniques as an Adjunct to Preparing and Recovering from Orthognathic Surgery; S. Gould Fogerite, SHRP, S. Aziz, NJDS

Development of Extra Cellular Matrix; D. Banerjee, RWJMS

Post-Transcriptional Control of Anti-Inflammatory IL10 Gene Expression; G. Brewer

Posttranscriptional Regulation of Oncogene Messenger RNA; G. Brewer, RWJMS

Development of a High Fidelity Recording System and Quantitative Visual Activity Map for Online Functional Localization of Targets During DBS Surgery; S. Danish, RWJMS

Disruptions of Circadian Rhythm and Breast Cancer Metastasis; M. Fang, RWJMS

The Regulation of p53 and Its Pathway by MicroRNAs in Colorectal Cancers; Z. Feng, RWJMS

TLR Signaling as a Mediator of Prodcocyte B7-1 Induction in Childhood Nephrotic Syndrome; S. Gurkan, RWJMS

Intervention for Carotid Stenosis; P. Haser, RWJMS

Development of Encephalitogenic T Cells in the Gut; K. Ito, RWJMS

Comparative Effectiveness of Different Treatments for Locally Advanced CaP; T. Jang, RWJMS

Intensity Modulated Radiation Therapy for Prostate Cancer and the Effect of Certificate of Need; T. Mayer, RWJMS

Inflammation and Post-Stroke Depression; J. McKinney, RWJMS

Functional Analysis of the Bifunctional Ion Channel and Kinase TRPM7; L. Runnels, RWJMS

Development of a Zebrafish Model for Spinal Cord Injury Repair; H. Sabaawy, RWJMS

Adenosine and Neurodegeneration; P. Sonsalla, RWJMS

Two-Component Regulation of Virulence in Staphylococcus Aureus; A. Stock, RWJMS

Mechanism of Transcript Elongation in Chromatin by RNA Polymerase II; V. Studitsky, RWJMS

Metabolically Stable Oligoamines for siRNA Nanoparticle Preparation; T. Thomas, RWJMS

Atrophin Proteins in Development and Diseases; C. Tsai, RWJMS

Effects of Beta-Blockage on Bone Metabolism in Thyroid Cancer Patients Receiving Thyroid Suppressive Therapy.; X. Wang, RWJMS

NJ Health foundation:

Non-invasive cortical stimulation to improve attention and language function in high functioning children with autism spectrum disorder; E. Tunik, SHRP

Effects of an Eight-week yoga program on people with moderate disability due to Multiple Sclerosis; E. Cohen, SHRP

Defining and Validating Advanced-Level Practice in Clinical Nutrition Among Registered Dietitians; R. Brody, SHRP

The Biological Effects of an Eight-week Yoga Program on Persons with Multiple Sclerosis; D. Kietrys, SHRP

Patient-centered massage comparison study for cancer patients undergoing outpatient treatment; V. Cowen, SHRP

Comparison of Standard Patient Cases and Virtual Patient Cases for Interdisciplinary Education; K. Huhn, SHRP

Multi-disciplinary Pilot Program to Address Metabolic Syndrome for Persons with Mental Illness; K. Gill, SHRP

Effect of Self-efficacy and Outcome Expectations on Work Seeking Behavior Among People with Psychiatric Disabilities; A. Spagnolo, SHRP

Integrated yoga intervention specifically designed for people with Multiple Sclerosis; S. Gould Fogerite, SHRP

INTERNAL UMDNJ FUNDING

Mechanisms of Radiation Induced Bystander Effects Profiling of the Protein Content of Exosomes; E. Azzam, NJMS, *Core Facilities Matching Funds*

ChIP Seq of IRF5 Target in Human B Cells; B. Barnes, NJMS, *Core Facilities Matching Funds*

Non Canonical Role for Crk Protein in Cancer; R. Birge, NJMS, *Core Facilities Matching Funds*

Real Time FRET to Study Tyrosine Kinases; R. Birge, NJMS, *Core Facilities Matching Funds*

Reporter cell lines to study TAM (Tyro-3, Axl and Mer) receptors; R. Birge, NJMS, *Office of Technology Transfer and Business Development*

Identification of Soluble Guanylyl Cyclase Trans Nitrosation Targets in Cardiomyocytes; A. Beuve, NJMS, *Core Facilities Matching Funds*

17B estradiol Inhibits HIV Infection of Primary Macrophages Through Induction of Interferon Alpha; L. Chang, NJMS, *Core Facilities Matching Funds*

Estradiol Inhibits HIV Infection of Primary Macrophages Through Induction of Interferon Alpha; L. Chang, NJMS, *Core Facilities Matching Funds*

17B Estradiol Inhibits HIV Infection of Primary Macrophages Through Induction of Interferon Alpha; L. Chang, NJMS, *Core Facilities Matching Funds*

Acetylome of Candida Albicans; N. Chauhan, NJMS, *Core Facilities Matching Funds*

Confocal Microscopy to Localize Calbindin in Intestine of TRPV6 KO Mice; S. Christakos, NJMS, *Core Facilities Matching Funds*

Generation of Transgenic Mice Overexpressing HVDR in the Duodenum; S. Christakos, NJMS, *Core Facilities Matching Funds*

Microarray Analysis of VDR Dependent Genes in the Distal Intestines; S. Christakos, NJMS, *Core Facilities Matching Funds*

NF2 Merlin Mediated Gene Expression During Myocardial Ischemia Reperfusion; D. Del Re, NJMS, *Core Facilities Matching Funds*

Localizing Fructose Responsive Genes in the Kidney, Intestine and Bone; R. Ferraris, NJMS, *Core Facilities Matching Funds*

Using Next Gen Sequencing to Probe Pdc Activation; P. Fitzgerald-Bocarsly, NJMS, *Core Facilities Matching Funds*

Identification of Adenosine 2A and 2B Receptor Associated Proteins by Mass Spectrometry; G. Hasko, NJMS, *Core Facilities Matching Funds*

The Novel Discovery that Naltrindole Inhibits the Proliferation of Human; R. Howell, NJMS, *Office of Technology Transfer and Business Development*

Identification of Mitochondrial DNA Sequences in Chromosomes by Next Generation Sequencing; A. Ivessa, NJMS, *Core Facilities Matching Funds*

Improvement of Interferon (IFN) Therapy; S. Kotenko, NJMS, *Office of Technology Transfer and Business Development*

Reporter cell lines to study TAM (Tyro-3, Axl and Mer) receptors; S. Kotenko, NJMS, *Office of Technology Transfer and Business Development*

Novel Atypical D3 Dopamine Receptor Agonists to Treat Levodopa-induced Dyskinesia in Parkinson's Disease; E. Kuzhikandathil, NJMS, *Office of Technology Transfer and Business Development*

Functions of LIF in Cell Replacement After Traumatic Brain Injury; S. Levison, NJMS, *Core Facilities Matching Funds*

Highly Selective Nucleic Acid amplification Primers; S. Marras, NJMS, *Office of Technology Transfer and Business Development*

Ablation of Hepatitis C Virus (HCV) infected Cell; M. Mathews, NJMS, *Office of Technology Transfer and Business Development*

Use of Non-Sense Mediated Inhibitors; M. Mathews, NJMS, *UMDNJ Office of Technology Transfer and Business Development*

Investigation of the Role Dusp6 in Cancer Metastasis; M. Matsuda, NJMS, *Core Facilities Matching Funds*

Next-Gen Sequencing of Lineage Differentiation in Mesenchymal Stem Cell Models; E. Moran, NJMS, *Core Facilities Matching Funds*

Novel Antibacterial for Targeting and Damaging Mycobacteria; A. Mustae, NJMS, *Office of Technology Transfer and Business Development*

Engineered Ligand-Switchable Affinity Reagents; M. Neiditch, NJMS, *Office of Technology Transfer and Business Development*

Identification of the RXR Isoform as a Major PPARalpha Dimerization Partner in the Heart; S. Oka, NJMS, *Core Facilities Matching Funds*

Identification of Proteins that Regulate the Cysteine Desulfurase Activity in Mitochondria; D. Pain, NJMS, *Core Facilities Matching Funds*

Targeting HCV RNA by a Novel Class of PNA Glucosamine Conjugate: Effect on Gene Expression; V. Pandey, NJMS, *Core Facilities Matching Funds*

HCV Host cell Interaction; V. Pandey, NJMS, *Core Facilities Matching Funds*

Biomarker Discovery for Aspergillus Infections; D. Perlin, NJMS, *Core Facilities Matching Funds*

Transcriptional Response of Iron Depleted Persistent Mycobacterium Tuberculosis; G. Rodriguez, NJMS, *Core Facilities Matching Funds*

Mst1 - Induced Phosphorylation of C/EBP Beta Promotes Cell Survival During Myocardial Ischemia; J. Sadoshima, NJMS, *Core Facilities Matching Funds*

Extracellular Signaling-Regulated Kinase; P. Salgame, NJMS, *Office of Technology Transfer and Business Development*

Vitamin D Analogs as Adjuvants in Chemotherapy of Cancer; G. Studzinski, NJMS, *Dean's Biomedical Research Support*

Identification of Phosphoproteins Up Regulated in Mitochondria Knocked Down for the ATP Dependent Lon Protease; C. Suzuki, NJMS, *Core Facilities Matching Funds*

3'READS to Gene Expression Analysis; B. Tian, NJMS, *Office of Technology Transfer and Business Development*

Phospho- Tyrosine and Phospho - Serine / Threonine Kinase Profiles of Tumor Initiating Pancreatic Cancer Cells; R. Wieder, NJMS, *Core Facilities Matching Funds*

Multiplexed Single Cell surface Protein Analysis using a Tagless Microfluidic technology; R. Wieder, NJMS, *Office of Technology Transfer and Business Development*

Phospho Proteomic Screen to Identify Novel Signaling Targets in Oligodendrocytes; T. Wood, NJMS, *Core Facilities Matching Funds*

Flow Sorting Mammary Epithelia Lineage Population with Genetic Alterations; T. Wood, NJMS, *Core Facilities Matching Funds*

Mechanisms of the Synergy Between Rb and E2f8 to Promote Erythropoiesis; L. Wu, NJMS, *Core Facilities Matching Funds*

Phosphorylation of TGFB and Latency Associated Peptide by GSK 3a; P. Zhai, NJMS, *Core Facilities Matching Funds*

Addressing Cervical Cancer Disparities among Hispanic Women: Knowledge, Beliefs, and Attitudes about Pap Screening and HPV Vaccination; R. Wilson, SN; *The Cancer Institute of New Jersey*

Novel Psychosocial Influences on Successful Tobacco Cessation Among Treatment Seekers; MB Steinberg, SPH, *CINJ Internal Pilot Funding*

The Role of Self-efficacy in Employment Tenure for Persons with Serious Mental Illness in Supported Employment; W. Waynor, SHRP; *Departmental funding*

Evaluated a practical training model relating outcomes of clinician training in CBT techniques to treat PTSD among adults with serious mental illnesses in order to disseminate evidence-based practice of CBT treatments; W. Lu, SHRP; *Departmental funding*

Evaluated the level of trauma exposure and commonly reported most distressing trauma among persons with serious mental illness; W. Lu, SHRP; *Departmental funding*

Characterization of Hedgehog Pathway Signaling in Human Pancreatic Cancer; D. Carpizo, RWJMS; *Cancer Institute of New Jersey Foundation (CINJF)*

Development of an Antitumor Humanized Antibody to Active Matipose Conjugated to Doxorubicin; J. Bertino, RWJMS; *Office of Technology Transfer and Business Development*

Planning for the Primary Care Workforce Initiative: Exploring Potential Exemplars to Study; B. Crabtree, RWJMS; *Robert Wood Johnson Foundation*

Predictors of Follow Up Care Seeking Among Breast and Prostate Cancer Survivors; S. Hudson, RWJMS; *Robert Wood Johnson Foundation*

Circadian Genes and Their Expression During Inflammation; B. Haimovich, RWJMS; *UMDNJ Office of Technology Transfer and Business Development*

Production of mAb Against FRY; H. Zarbl, RWJMS; *UMDNJ Office of Technology Transfer and Business Development*



APPENDIX

University Facilities and Capital Planning	291
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UNIVERSITY FACILITIES & CAPITAL PLANNING

NEWARK CAMPUS – Existing Facility Upgrades

NJMS Central Research Animal Facility Renovation

Using approximately \$15 million in American Recovery and Reinvestment Act of 2009 funding, this project will provide for a reconstruction of the existing animal research facility in the Medical Science Building. The project will allow the New Jersey Medical School to enhance its research mission.

NJDS Pediatric / Special Care Dental Clinic Renovation

This \$4.5 million project funded by NJDS will reconstruct a dental clinic on C-Level of the Bergen Street Pavilion. Twenty-eight Pediatric original, beyond useful life operatories will be replaced with twenty-four modern Pediatric operatories and seven Special Care Operatories with chairs and two without that conform to today's preferred dental practices.

SN Classroom and Administrative Renovations

This \$12.7 million project funded by the School of Nursing will provide much needed classroom space and offices on the GA, 6th, 10th and 11th floors of the Stanley S. Bergen Building. Six new state-of-the-art classrooms, a nursing simulation lab, a nursing skills lab, an expanded computer laboratory and faculty / IT offices will be created with this project. The Project includes new mechanical systems for GA Level and the 6th floor as well as the necessary Fire Protection systems for the 6th floor.

SHRP HVAC Upgrade in Scotch Plains

This \$1.5 million project funded by the School of Health Related Professions will provide much needed mechanical ventilation, cooling and heating upgrades to the SHRP building on the Scotch Plains Campus. The building's educational, research and clinical components demand ventilation well in excess of what the original mechanical system can provide. New state-of-the-art efficient mechanical equipment will be installed and replace existing equipment which are well beyond its useful life.

SHRP Clinical Science and Interprofessional Health Laboratories

This \$4 million project funded by the New Jersey HEFT Bond (Building our Future Bond Act) consists of the renovation of existing laboratory and office space on the GB level of the Stanley S. Bergen Building. The newly renovated space will feature a large training laboratory for 24 students and additional new laboratory space to accommodate a broad array of assays including tissue culture, polymerase chain reaction, microscopy, microbiology, and wellness testing. This space will be reconstructed for better safety, flexibility, usability and traffic flow.

NJDS Oral Health Pavilion C-Level Fit-Out

This \$13.5 million project funded by the New Jersey GO Bond (Building our Future Bond Act) and NJDS will completely build out the C Level of the Oral Health Pavilion. The newly renovated space will contain 96 operatories, with clean supply and soiled return rooms, lab, administrative, reception and a waiting space included. This project will enable NJDS to ensure that all current students have functioning clinical learning space that is state-of-the-art, thereby advancing and improving quality of education.

NJDS Oral Health Sciences Laboratory Renovation

This \$16 million project funded by the New Jersey HEFT Bond (Building our Future Bond Act) consists of reconstruction and improvement of instructional laboratory and research facilities at NJDS. The newly reconstructed laboratories will include state-of-the-art open laboratories with a full complement of utilities as well as space for tissue/cell culture, equipment, fume hoods, biosafety cabinets, glass washing, environmental rooms, work stations and administration. The reconstruction will consolidate students and investigators working in complementary fields and create laboratories with maximum flexibility for evolving research trends and educational program needs.

PISCATAWAY CAMPUS – Existing Facility Upgrades**UBHC Seclusion Room Improvements**

This \$550,000 project funded by University Behavioral HealthCare (UBHC) will renovate and update two seclusion rooms and surrounding areas in the inpatient areas of UBHC's Piscataway campus. The project will enhance the behavioral program, update the configuration and aging infrastructure serving these rooms, and bring the space up to current hospital and health care facility construction guidelines.

UBHC 151 Centennial Envelope Repair and Restoration

This \$780,000 project will allow for repairs to the exterior stone façade of the building. Repairs and restoration will alleviate deteriorated conditions and water infiltration around the exterior.