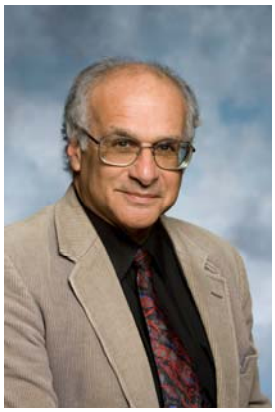
Paul J. Lioy, Ph.D. Curriculum Vitae



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EDUCATION

1969	B.A., Physics and Education, Montclair State College
1971	M.S., Physics and Applied Mathematics, Auburn University
1973	M.S., Environmental Science, Rutgers University
1975	Ph.D., Environmental Science, Rutgers University

UNIVERSITY APPOINTMENTS

1989-Present	Professor, Department of Environmental and Occupational Medicine, UMDNJ-Robert Wood Johnson Medical School, Piscataway, NJ
2000-Present	Professor, UMDNJ School of Public Health, Piscataway, NJ
1986-Present	Professor, Graduate Faculty of Rutgers University: Department of Environmental Science, Public Health Program, and Toxicology Program, New Brunswick, NJ
1985-1989	Associate Professor, Department of Environmental and Community Medicine, UMDNJ-Robert Wood Johnson Medical School, Piscataway, NJ
1982-1985	Associate Professor, Institute of Environmental Medicine, New York University Medical Center, New York City, NY
1978-1982	Assistant Professor, Institute of Environmental Medicine, New York University Medical Center, New York City, NY
1976- 1978	Lecturer, Department of Civil Environmental Engineering, Polytechnic Institute of New York, New York City, NY

MAJOR ADMINISTRATIVE RESPONSIBILITIES

2004-Present	Vice Chair, Department of Environmental and Occupational Medicine, UMDNJ-RWJMS
2003-Present	Deputy Director Government Relations, Environmental and Occupational Health Sciences Institute, UMDNJ-RWJMS, and Rutgers University
2001-2003	Acting Associate Director, Environmental and Occupational Health Sciences Institute and UMDNJ-RWJMS, and Rutgers University
1999-Present	Co-Director, Center for Exposure and Risk Modeling, UMDNJ/EOHSI
1995-2001	Deputy Director, Environmental and Occupational Health Sciences Institute, UMDNJ-RWJMS, and Rutgers University
1994-1995	Acting Deputy Director, Environmental and Occupational Health Sciences Institute - UMDNJ-RWJMS and Rutgers University
1992-Present	Director, Controlled Environmental Facility, EOHSI
1990-2002	Faculty Administrator, EOHSI Analytical Laboratories
1986-Present	Chief, Exposure Measurement and Assessment Division, DECM of UMDNJ-RWJMS
1986-Present	Director, Exposure Science Division, Environmental and Occupational Health Sciences Institute, (EOHSI) Sponsored by UMDNJ and Rutgers University
1984-1985	Associate Director, Laboratory of Aerosol and Inhalation Research, Institute of Environmental Medicine, NYU Medical Center

OTHER PROFESSIONAL POSITIONS

2006-2009	Adjunct Professor, (volunteer) Department of Environmental and Occupational Health University of Pittsburgh Graduate School Public Health
1996	Visiting Professor, Department of Biometry and Biostatistics, Medical University of South Carolina, Charleston, SC
1990	Visiting Scientist, RIVM, Bilthoven, The Netherlands
1975-1978	Senior Air Pollution Engineer, Interstate Sanitation Commission, New York City, NY
1973-1975	Physical Scientist (part-time) U.S. EPA, Region II, Surveillance and Analysis Division, NJ

AWARDS AND HONORS

- Recipient of the Daughters of the American Revolution Founders Award, The Ellen Hardin Walworth Medal for Patriotism, July 11, 2009, Washington, DC.
- Recipient of the National Medal for Conservation from The Daughters of the American Revolution, March 14, 2009: Chapter and State of New Jersey Medalist

- Recipient of the 2009-2011 Distinguished Lecturer Award from the International Society of Exposure Science, Pasadena, CA, 2008.

- Recipient of the 2008 Distinguished Alumnus Award from Physical Sciences, Mathematics and Engineering, Rutgers University Graduate School
- Recipient of the 2006 R. Walter Schesinger Basic Science Mentoring Award, RWJMS-UMDNJ
- Recipient of Frank A. Chambers Award for outstanding achievement in the science and art of air pollution control from the Air Waist Management Association, 2003
- ISI – Highly Cited Scientist – Environment and Ecology, 2003 - Present
- Member, International Academy of Indoor Air Sciences, (Elected) 1999-Present
- Fellow, Collegium Ramazzini, Environmental & Occupational Medicine and Health, Carpi, Italy (Elected) 1999-Present
- Extraordinary Citizen of Week, Union County, Star Ledger, September 1999
  also, Resolution for Honor Provided by Union County, Board of Freeholders
- Recipient of Jerome Wesolowski Award for Lifetime Excellence in Exposure Assessment Research, International Society of Exposure Analysis, 1998
- Robert Wood Johnson Medical School Nominee for UMDNJ Excellence Award, Biomedical Researcher 1992
- Fellow of New York Academy of Sciences, Elected 1979
- Member of Sigma XI, 1980-Present
- University Fellow, Rutgers University, 1973-1975
- Russell Scholar, Rutgers University, 1973-1974
- EPA Air Pollution Fellow, Rutgers University, 1971-1973
- First Year Physics Graduate Student Award for Academics, Auburn University, 1970
- National Defense Education Act, Title IV Fellow, Auburn University, 1969-1971

CERTIFICATIONS

- Secondary Education, Mathematics and Sciences, State of New Jersey, 1971

PATENTS

- Lioy/Fan PAH Air Sampler Patent No. Pending
- Lioy/Weisel Dust Wipe Sampler 08/101, 260
  December 20, 1994; 5, 373, 748
- Ming/Welsh/Georgopoulos/Lioy: Gaussian mixture based method for missing value estimation in microarray data. Pending

BOARD OF DIRECTORS/TRUSTEES

- Executive Committee, University Center for Disaster Preparedness and Emergency Response, 2007 – Present

- Member, Research Advisory Board, Office of the Vice President for Research, Auburn University, Auburn, Al. 2009 - Present
- Executive Committee, New Jersey Office of Homeland Security and Preparedness College, 2007-Present
- Co-Chair, New Jersey Universities Consortium on Homeland Security Research 2006-Present
- Member, The College of Science and Mathematics Advisory Council, Montclair University, 2005-Present
- Member, Executive Committee, Rutgers University Homeland Security Initiative, 2003-Present
- Member, Citizens Advisory Committee New York City DEP Brooklyn-Queens Aquifer Feasibility Study, 2002 - 2006
- Member, Douglass College, Rutgers University Academic Councilors, 1998-Present
- Council of Academic Policy Advisors to the New Jersey Legislature, 1998-2004
- Chair, USEPA Science Advisory Board, Committee on Health and Ecological Effects Valuation, Advisory Council on Clean Air Compliance Analysis, 1997-2002
- Member, Science Advisory Board, European - EXPOLIS (Air Pollution Exposure Distribution of Adult Population in Europe) 1997-2004
- Member, Technical Advisory Committee on Aggregate Exposure and Risk Hampshire Research Institute, 1999-2000
- Member, Dean's Advisory Council of the College of Science and Mathematics, Auburn University, 1996-1999 (Currently Member Dean's Associate)
- Member, Science Advisory Board, U.S. EPA, 1992- 2002
- Member, International Joint Commission: Board on Air Quality, 1992-2006
- Past President, International Society of Exposure Analysis, 1994-1995
- President, International Society of Exposure Analysis, 1993-1994
- Chair, Science Advisory Board, Pelham Bay Landfill, NY Remediation, 1990-1997
- Member, Board of Environmental Studies and Toxicology, National Academy of Sciences, 1989-1992
- Treasurer, International Society of Exposure Analysis, 1989-1991 (Co-Founder of Organization)
- Counselor, International Society for Environmental Epidemiology, 1988-1990 (Founding), Board of Directors
- Board Member, Mid-Atlantic States Section Air Pollution Control Association, 1978-1982

MAJOR COMMITTEE ASSIGNMENTS

International, National, and Regional

- Senior Technical Advisor, Pediatric Environmental Medicine Center, University of Pittsburg, Medical Center, Pittsburg, PA, 2009 – Present
- Member, EPA’s Science Advisory Board Asbestos Panel, 2008-Present

- Member, Advisory Board of University of Pittsburgh Academic Consortium for Excellence (UPACE) in Environmental Public Health Tracking (EPHT) (in collaboration with Drexel University), 2006-Present
- Member, EPA Science Advisory Board, Council on Homeland Security, 2005-Present.
- Member, Homeland Security Policy Committee, NJ 2005-2006
- Member, Executive Leadership Group of the New Jersey Chemical-Biological-Radiological-Nuclear-Explosive Center for Training and Research at UMDNJ, 2005-2006
- Member, University Committee for Environmental Affairs, Rutgers, 2005-2008
- Vice-Chair, US EPA, World Trade Center Expert Technical Panel – Indoor Clean-up Issues, 2004-2005
- Member, New Jersey Department of Health and Senior Services, Cancer Cluster Task Force, 2003-2005
- Member, Healthcare Issues Advisory Task Force of NJ, 2002-2004
- Member, Harvard University Particulate Matter Center Advisory Committee, 2000-2004
- Member, New Jersey Department of Health and Senior Services, Trenton/Hamilton Processing Center Environmental Clearance Committee (Anthrax), 2002-2004
- Member, Advisory Committee on NJ Southdown Quarry Exposure/Risk Characterization, 2000-2001
- Member, National Academy of Sciences, National Research Council Committee on Research Priorities for Airborne Particulate Matter, 1998-2005
- Member, USEPA-SAB Committee on the Particulate Matter Centers Research Program, Review Panel, 2001
- Temporary Councilor, World Health Organization, 1997
- Member, Air Pollution Guidelines Committee for Europe, 1993-1994
- Member, National Academy of Sciences, National Research Council Committee on Risk Management in DOE's Environmental Restoration Program, 1993-1994
- Chair, Particle Total Exposure Assessment Methodology Review Panel, EPA, Science Advisory Board, 1989-1994
- Member, NAS, National Research Council Committee on Tropospheric Ozone Formation and Measurement, 1989-1991
- Member, Scientific Advisory Committee, Center for Environmental Epidemiology, University of Pittsburgh, School of Public Health, 1988-1992
- Chairman, NAS, National Research Council Committee on Exposure Assessment, 1987-1990
- Member, Scientific Advisory Committee on Harvard Multi-City Acid Health Study, Harvard University, 1987-1993
- Member, National Academy of Sciences, Workshop Panel, Health Risks from Exposure to Common Indoor Household Products in Allergic or Diseased Persons, 1987
- Member, Canadian Royal Academy of Sciences Committee on Acid Aerosol Health Research, 1987
- Member or Consultant, Science Advisory Board Subcommittees, 1984-2001, U.S. EPA: 1. Risk Assessment; 2. Integrated Air Cancer; 3. Integrated Environmental Management Project; 4. Total Exposure Assessment; 5. Clean Air Science Advisory Committee

- Member, USEPA, Health Effects, Grant's Peer Review Committee, 1989-1992
- Chairman, Peer Review Panel, U.S. EPA Indoor Air Pollution Program, 1984
- Member, National Academy of Sciences Committee on Air Pollution Epidemiology, 1983-1985
- Chairman, New Jersey Clean Air Council, 1983-1985
- Member, New Jersey Clean Air Council, 1981-1994
- Member, Interstate Hazardous Spill Response Committee, NJ, 1977

Medical School

- Space Utilization Committee, RWJMS, 2002-2004
- Executive Committee, RWJMS, 2001-2003
- Member, Cancer Institute of New Jersey, 1997-Present
- Dean's Departmental Review Committees: 1) Environmental Community Medicine, and 2) Biochemistry, 1992-93 and 1998-99, respectively
- Executive Research Committee, 1988-1989
- Co-Director Joint Graduate (Ph.D) Degree Program in Exposure Assessment, Rutgers University, UMDNJ-Robert Wood Johnson Medical School, 1986-1994

Department

NYU	1. Computer Users Committee, and Manager of the Computer Center at the Institute of Environmental Medicine
RWJMS-DECM	1. Appointment & Promotions Committee
Rutgers University	1. Associate Director, Environment Science Graduate Program, 1998-1999 2. Admissions Chair, and Academic Standards Chair, Department of Environmental Science Graduate Program, 1994-Present 3. Graduate School - Biological Sciences Area Committee for Graduate Faculty Appointments, 1989-1991

NJ School of Public Health

- Member, Doctoral Committee
- Member, Executive Committee of the UMDNJ-SPH

TEACHING (C = Complete Course; L = Lectures)

<u>Undergraduate Courses</u>

• (C) Modern Physics	Auburn University	1971
• (C) Air Pollution: Principles and Engineering	Polytechnic Inst. of NY	1976-78

• (C) Air Pollution: Principles and Control	Rutgers U.	1990-2006
• (L) Air Pollution: Principles	Rutgers U.	2007-Pres.
• (L) Basic Environmental Sciences	Rutgers U.	1990-02

Graduate Courses

• (C) Air Sampling and Analysis	NYU-Med	1978-85
• (C) Air Pollution	NYU-Med	1983-85
• (C) Aerosol Sciences & Technology	NYU-Med	1980-85
• (C) Trophospheric Chemistry	Rutgers	1986-88
• (C) Aerosol Sciences	Rutgers/NJSPH/	1994-02
• (C) Exposure Assessment	RWJMS/UMDNJ	1988-95
• (L) Risk Assessment	RWJMS/UMDNJ	1986-94
• (L) EM-01 Small Group on Hg	RWJMS/UMDNJ	2005
• (L) Modules of Exposure Assessment (Medical Students)	RWJMS	1986-90
• (L) Ethics (In Principles of Env. Sci.)	Rutgers U.	1996-Pres.
• (C) Seminar Science: Nature of Scientific Revolutions	Rutgers U./UMDNJ	1999-01

EDITORIAL BOARDS

- Associate Editor for Feature Articles, Journal of Exposure Science and Environmental Epidemiology, 2006 - Present
- Associate Editor, Environmental Health Perspectives, 2002-Present
- Associate Editor, Environmental Research, 1994-Present
- Editor, Emeritus, Atmospheric Environment, 1994-Present
- Member, Editorial Review Board, Journal of the Air & Waste Management Association, 2002 – 2005
- Member, International Editorial Board, Applied Occupational and Environmental Hygiene, 1998-2004
- Executive Editor, Atmospheric Environment: Local Air Chemistry, 1989-1994
- Member, Editorial Board, Lewis Publishing Company, Chelsea, MI, 1989-1993
- Member, Editorial Review, Aerosol Science and Technology, 1988-1993
- Section Editor, Exposure Assessment, Journal of Toxicology & Industrial Health, 1988-1989
- Associate Editor, Atmospheric Environment, 1987-1989
- Chairman, Editorial Review Board, Air Pollution Control Association (APCA), 1986-1988
- Vice-Chairman, Editorial Review Board, Air Pollution Control Association, 1984-1986

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES

- Chair, Committee of Past Presidents of ISEA, 2003 - 2006
- Co-Chair, ISEA Action Committee on Biological Chemical Terrorism, 2001-2002
- Chair, 11th Annual Meeting of International Society of Exposure Analyses (ISEA), Charleston, SC, 2001-Present (600 Attendees)
- Registered Member, Association of Professional Industrial Hygienists, 1999-2004
- Chairman, 7th Annual Meeting of the International Society of Exposure Analysis, Research, Triangle Park, NC, November 1997 (450 Attendees)
- Co-Chair, 4th Annual Meeting of the International Society of Exposure Analysis (in conjunction with ISEE), Research Triangle Park, NC, November, 1994. (400 Attendees)
- Chairman, Ad Hoc Community Air Guidelines Committee, ACGIH, 1987-1989
- Chairman, Air Toxics Advisory Committee, APCA, 1986-1989
- Member, International Society of Exposure Analysis, 1990-Present
- Member, International Society for Environmental Epidemiology, 1988-Present
- Member, American Association for Aerosol Research, 1984-Present
- Chairman, Publications Critical Review Subcommittee, APCA, 1982-1984
- Member, ACGIH Committee on Air Sampling Procedures for Workplace Atmospheres, 1982-1997
- Chairman, ACGIH Air Sampling Instruments Committee, 1981-1987; Member 1981-Present
- Technical Program Chairman, 74th Annual International APCA Conference, Philadelphia, PA, June 1981 (5,500 Attendees)
- Chairman, APCA Annual Meeting Technical Program Committee, 1980-1982
- Member, Publications Committee of APCA, 1980-1988
- Co-Chairman, International Conference "Aerosols Anthropogenic and Natural-Source and Transport", NYAS, NYC, NY, January, 1979 (400 Attendees)
- Chairman, NYAS Atmospheric Sciences Section, 1978
- Member, American Conference of Governmental Industrial Hygienists (ACGIH), 1978-Present
- Member, New York Academy of Sciences (NYAS), 1976-1985
- Member, Air Pollution Control Association Committee, Air Pollution Slide Show for High School Students, 1976
- Member, Air Pollution Control Association (APCA), 1975-Present

MAJOR RESEARCH INTERESTS

1. Total Human Exposure Measurements using Chemical & Biological Monitoring for Community and Occupational Environment: Pesticides, Toxic Elements, and Organic Compounds

2. Characterization of Toxic and Irritant Air Pollutants, Indoors and Outdoors, within Urban and Rural Environments
3. Receptor Modeling of the Sources of Pollution
4. Development of Instrumentation for Measurement of Exposure to Air Pollutants
5. Strategies for Measuring Industrial and Community Exposures to Pollution
6. Ozone and PM2.5 Aerosol Health Effects and Exposure Field Studies
7. Hazardous Waste Characterization and Exposure/Dose Assessment
8. Theoretical Basis for Exposure and Dose Analysis
9. Bioavailability of Toxic Elements and Radionuclides
10. Pesticide Exposure and Health Effects to Children
11. Exposure/Dose Modeling for Environmental Toxicants for Inhalation, Dermal, Ingestion Pathways
12. Informatics
13. Controlled Exposure - Health Effects Studies to Irritants
14. Homeland Security Issues – Response, Mitigation, Preparedness

GRANT HISTORY

Sponsor	Title	Status	Funding (to nearest 1K)
Principal Investigator			
EPA	Haze-Ozone-Sulfate Transport Analyses	8/78-8/80	$178,000
New York State Council	Exposure of Humans to Acidic Health Research in Rural Area	3/80-3/81	$16,500
State of NJ, OSR	Airborne Toxic Elements and Substances Project (Multi-Institutional)	10/80-7/85	$2,700,000
ESEERCO	Source Apportionment for Urban Aerosols - Needs and Applications for New York City	1/84-12/84	$194,000
American Petroleum Institute	Analysis of Benzene and Other Compound Data Obtained During the ATEOS Project	3/84-9/85	$100,000
EPA	Soiling, Degradation, and Acidity of Aerosols in Urban-Industrial Area	3/84-9/88	$275,000
EPA	Air Pollution Exposure Modeling in China	1/86-12/88	$80,000
State of NJ, OSR	Total Human Exposure to B(a)P (THEES)	6/86-5/90	$594,700
State of NJ, DEQ	Exposure and Source Receptors Relationships	9/86-12/88	$100,000

EPRI	Assessment of Exposures to Acidic Sulfate Species in the Chestnut Ridge Area of Western Pennsylvania	3/87-7/88	$137,000
EPA	Total Exposure Assessment Methodology II Data Analysis and Data Analysis and Receptor Sampling of VOC's for Outdoors	5/87-5/89	$150,000
NJ DEP	Monitoring VOC in Staten Island Air Toxics Project	4/97-3/90	$178,000
NJ DOH	Collaborative Research on Examining Air Pollution and Lung Function Capacity	5/88-4/89	$86,000
EPA	Cooperative Study of the Effects of Air Pollution on Children's Lung Function in Chinese Cities	12/88-2/95	$707,000
EPA	Exposure Assessment Research Program Project	10/89-9/92	$191,000
NJ DEP	Chromium Exposure Assessment	12/89-4/94	$480,000
NJ DEP	Ozone Research Center	6/89-12/94	$450,000
ATSDR	Exposure Characterization of Waste Sites	10/92-9/96	$712,000
EPA and NICHD	Exposure Assessment Research(Fuels) + (CLEARS)	10/92-9/96	$1,749,000
API	Microenvironmental Exposures to MTBE	2/93-1/94	$213,000
EPA	National Human Exposure Assessment RTI/EOHSI Consortium Survey (NHEXAS)	9/93-9/98	$964,000
CDC	Source Apportionment of Lead in Children's Blood	10/94-9/96	$212,000
NSF/HSMRC	Bioavailability and Bioaccessibility of Toxic Metals	7/96-6/98	$114,000
ARCO/DEP	Acute Health Effects of MTBE	8/96-12/98	$800,000
DOE	Bioavailability and Bioaccessibility of Radionuclides	8/96-7/99	$506,040
EPA	Children's Exposure to Pesticides	7/97-6/00	$100,000
NJ DEP	Fine Particulate Mass Measurements	1/98-6/01	$150,000
NJ DOH/ATSDR	Exposure Assessment and Childhood Cancer in Toms River, NJ	5/98-9/00	$454,000

Dow Agro Sciences	Pesticide Exposure/Dose Relationships in Children	Grant-in-Aid	$100,000
EPA (Center) *With P. Georgopoulos*	Integrated Probabilistic Modeling Environment For Reducing Uncertainty in Human Health (MENTOR)	10/98-2/04	$3,160,000
EPA	Analysis of NHEXAS Data Base	8/99-8/01	$100,000
NJ DEP	Southdown Tremolite Exposure Study	10/00-6/02	$552,000
NCI/NIEHS	Passive PAH and Micro-Camera Personal Monitoring System	9/01-9/04	$555,000
DOE, UMDNJ	Subcontract of CRESP from IRM	9/00-8/05	$6,700,000
QLI, ONR	Exp. Modeling & Assessments of Risk to Biological/Chemical Agents for Community Response	5/02-9/04	$410,000
NJDEP	Intercomparison of Continuous $PM_{2.5}$ Monitors	6/03-12/04	$54,000
HEI	Personal and Ambient Exposures to Air Toxics in Camden New Jersey	12/03-12/06	$864,347
CERM II *With P. Georgopoulos*	Center for Exposure and Risk Modeling: DEARS Air Exposure/Dose Emergency Events	4/04-4/11/10	$2,499,903
MEADOWLANDS	The Baseline Quality of Ambient and Personal Air Within the New Jersey Meadowlands District	6/04-12/07	$619,609
CINJ	Time Course Study of Human Exposure to Environmental Tobacco Smoke Personal Monitoring and Biomarker Measurements	5/04 – 12/06	$30,000
NJDEP	Chromium Exposure and Health Effects in Hudson County	5/06 – 5/08	$640,000
NJDEP	The Distribution of Chromium Species as a Function of Particle Size for Chromium Waste	5/06 – 5/08	$130,000
NJDEP	Study of the Contribution of Particulate Emissions from St. Lawrence Cement to Outdoor Dust in Camden New Jersey	1/07 – 1/08	$125,000
NICHD with MSSM	National Children's Study Queens Vanguard Center	10/07 – 9/14	$3,300,000

NICHD with MSSM	NY/NJ National Children's Study Center – 7 counties	10/09 – 10/16	$2,300,000
OHSP	Interpretation of Prospective Exposure Studies for Emergency Event Preparedness	3/09 –2/10	$82,500

Non-PI Projects and Centers		
Sponsor	**Title**	**Status**
Co-Principal Investigator		
EPA *with M. Lippmann, NYU*	Effects of Acute Exposure to Summertime Haze Episodes on the Health of Humans	5/84-4/87
EPA *with J. Waldman, UMDNJ*	Acid Sulfate Aerosol in the Netherlands: Its Measurement, Assessment, and Technology	5/87-10/88
EPA *with J. Waldman, UMDNJ*	Investigations of Acidic Sulfate Aerosols in Support of Air Pollution/Health Effects Studies in Europe	10/88-9/91
NJ DEP *with C. Weisel, UMDNJ*	Development of a Breath Analysis Apparatus for Volatile Organics	1/89-4/90
NICHD/ RWJ Foundation *with G. Rhoads, UMDNJ*	Childhood Lead Exposure Assessment and Reduction Study (CLEARS)	10/91-9/95
API *with N. Fiedler, UMDNJ*	Controlled Human Exposure to Environmental Levels of Hydrogen Sulfide in Normal Subjects	1/02-12/02
NIEHS *with M.Gallo, UMDNJ*	Analysis of Indoor WTC Dust/Smoke Samples	4/02-4/04
DHSS *with Georgopouolos*	Development of a Computer-Based Planning and Management Support System for Emergency Situations Involving Atmospheric Release of Hazardous Materials in NJ	1/05-6/10
NJDEP *with M. Gochfeld*	Chromium Exposure and Health Study in Hudson County: Phase II	2/2008-2/2010
Executive Committee		
EPA/NIEHS *Lambert*	Center for Neurotoxicology and Exposure Assessment: Autistic Children Health Studies	10/01-9/06

Non-PI Projects and Centers		
Sponsor	**Title**	**Status**
Core-Director		
NIEHS *Zarbl, PI*	CEEDS, Core Director Controlled Environmental Facility Internal Advisory Committee	4/09-3/14
NIEHS *Cory-Slechta, PI*	Center Grant - Exposure Analyses and Health Effect Core	9/88-4/08
NJ DEP *Georgopoulos, PI*	Ozone Research Center	1/95-12/99
DOE *Goldstein, PI*	Consortium for Risk Evaluation and Stakeholder Participation	4/96-10/00
Co-Investigator		
EPA	Effects of Exposure to Haze Episodes on the Health of Children	6/80-3/83
NIEHS	Lead Chelation Study	7/93-6/97
EPA	Children's Exposure to Pesticides	6/97-6/00
HUD	Cleaning of Homes for Lead Suppression	7/97-6/00
NIOSH	Health Effects of Exposure to VOC's Ozone and Stress	10/99-9/02
HUD	Lead in Residential Homes	2/03 – 1/05
ACC	Diagnostic Evaluation and Refinement of Procedures for Modeling Exposure to VOC's	8/03-11/06
API	Controlled Human Exposure to Environment Levels of Hydrogen Sulfide in Normal Subjects	12/01-1/07
DOD	The Effects of Diesel Exhaust and Stress in the Acute Phase Response and Symptoms in the Chemically Intolerant	1/03-7/06
STAR	Responses to Fresh Aerosols in Susceptible Subjects	9/04-8/08
NIOSH	Design/Advance Electrostatic Sampler for Total Bioaerosols	8/1/06-7/31/08
NIEHS	Characterization of Floor Level Aerosol (PM) Exposure and Childhood Asthma	6/1/07-5/31/2010

CONSULTANT (1985- Present)

- Environmental Health and Exposure to Single and Multi-Media Pollutants at Hazardous Waste Sites: and Other Environmental Situations (outdoors and residential): Litigation, Analysis, and Intervention and Mitigation

BIOGRAPHICAL LISTINGS

- 2002 – Present, Information Science Institute – Highly Cited Scientist category: Ecology/Environment
- 1996-Present, Who's Who in America
- 1993-Present, Who's Who in the East
- 1991-Present, American Men and Women in Science
- 1992, Who's Who in New Jersey

PEER REVIEWED PUBLICATIONS

1. P.J. Lioy, D. Rimberg and F.J. Haughey. A laser light scattering particle size spectrometer sensitive in the submicron diameter range. Journal of Aerosol Science, 6: 183-189, 1975.
2. G. T. Wolff, P.J. Lioy, R.E. Meyers, R.T. Cederwall, G.D. Wight, R.E. Pasceri and R.S. Taylor. Anatomy of two ozone across the midwestern and eastern United States. Environmental Science & Technology, 11: 506-511, 1977.
3. G.T. Wolff, P.J. Lioy, G.D. Wight, R.E. Meyers and R.T. Cederwall. An investigation of -long range transport of ozone across the midwestern and eastern United States. Atmospheric Environment, 11: 797-802, 1977.
4. P.J. Lioy, G.T. Wolff, P.E. Coffey, W.N. Stasiuk, D. Romano and J.C. Czachor. Evidence of high atmospheric concentrations of sulfates detected at rural sites in the northeast. Journal of Environmental Science and Health— Part A, 12: 1-14, 1977.
5. G.T. Wolff, P.J. Lioy, G.D. Wight and R.E. Pasceri. Aerosol investigation of the ozone plume phenomena. Journal of the Air Pollution Control Association, 27: 461-463, 1977.
6. G.T. Wolff and P.J. Lioy. Empirical model for forecasting maximum daily ozone levels in the northeastern U.S. Journal of the Air Pollution Control Association, 28: 1034-1038, 1978.
7. P.J. Lioy and G.T. Wolff. Ozone production and transport. Atmospheric Environment, 12: 968-969, 1978.
8. B.P. Leaderer, D.M. Bernstein, J.M. Daisey, M.T. Kleinman, T. J. Kneip, E.P. Knutson, M. Lippmann, P.J. Lioy, R.A. Rahn, D. Sinclair, R.L. Tanner and G.T. Wolff. Summary of the New York Summer Aerosol Study (NYSAS). Journal of the Air Pollution Control Association, 28: 321-327, 1978.

9. P.J. Lioy. Pollutants and meteorological conditions associated with acid precipitation - A review. Proceedings of the NY State Assembly Standing Committee on Environmental Conservation, and the Adirondack Park Agency Joint Meeting on the Acid Precipitation Problem, Lake Placid, New York. pp. 91-96, 1978.
10. P.J. Lioy, G.T. Wolff and T.J. Kneip. Toxic airborne elements in the New York Metropolitan Area. Journal of the Air Pollution Control Association, 28: 510-513, 1978.
11. P.J. Lioy, G.T. Wolff, K.A. Rahn, D.M. Bernstein, and J.J. Kleinman. Characterization of aerosols upwind of New York City. II. Aerosol composition. Annual N.Y. Academy of Sciences, 322: 73-86, 1979.
12. P.J. Lioy, G.T. Wolff and B.P. Leaderer. A discussion of the New York Summer Aerosol Study (NYSAS), 1976. Annual N.Y. Academy of Sciences, 322: 153-162, 1979.
13. G.T. Wolff, P.J. Lioy, V. Leaderer, D. Bernstein and M. Kleinman. Characterization of aerosols upwind of New York City. I. Transport. Annual N.Y. Academy of Sciences, 322: 57-71, 1979.
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Note: 6 Manuscripts Submitted.

OTHER PUBLICATIONS

1. P.J. Lioy, G.T. Wolff and R.M. Manganelli. Aerosol research at Rutgers University: behavior of soluble particle aerosols and the surface interaction of gases on solid particles. Proceedings of the 68th APCA Conference, 75.32.6, Boston, MA., June, 1975.

2. P.J. Lioy. Technical Advisor, Interstate Sanitation Commission: Final Report: Control of Suspended Particulates to U.S. EPA, pp. 1-262, Nov. 1978.
3. G.T. Wolff, P.J. Lioy, G.D. Wight and R.E. Pasceri. Aerial investigation of photochemical oxidants over New Jersey, Southeastern New York and Long Island, Western Connecticut, Northern Delaware, Southeastern Pennsylvania and Delaware Report to the U.S. EPA, November 1975. Also In: Proceedings of Symposium on 1975 Northeast Oxidant Transport Study, EPA-600/3-77-017, Feb. 1977.
4. P.J. Lioy and G. T. Wolff. A multiregional ozone quality assurance program. In: Proceedings of the 70th Annual APCA Conference, 77:48,1, Toronto, Canada, June 1977.
5. G.T. Wolff and P.J. Lioy. Transport of suspended particulates into the New York Metropolitan Area In: Proceedings of the Symposium on Environmental Effects on Sulfur Oxides and Related Particulates - 1978, Bulletin of New York Academy of Medicine, 54: 1032-1040, 1978.
6. M. Lippmann, P.J. Lioy, G. Leikauf, D. Fife and F. Speizer. Study of effects of summertime haze exposures on the health of children. In: Proceedings of the 74th Annual APCA Conference, Paper no. 81-11.7, June 21-26, 1981.
7. P.J. Lioy, R.P. Mallon, M. Lippmann, T.J. Kneip and P.J. Samson. The occurrence of ozone and sulfate in the northeastern U.S. under summertime conditions Paper No. 81-46.3. Proceedings of the 74th Annual International APCA Conference, June, 1981.
8. P.J. Lioy and J.M. Daisey. Annual Reports I and II and Final Report: The New Jersey Project on Airborne Toxic Elements and Organic Species, New York University Medical Center, pp. 1-600, April, 1982; pp. 1-350, December, 1982; pp. 1-200, February, 1984.
9. P.J. Lioy. Ambient measurements of sulfate species in the United States (83-8.3) Proceedings of the 76th Annual International APCA Conference, June, 1983.
10. M.M. Morandi, J.M. Daisey and P.J. Lioy. Receptor source apportionment modeling for inhalable particulate matter in Newark, NJ, 83-14.2. Proceedings of the 76th Annual International APCA Conference, June, 1983.
11. M.M. Morandi, P.J. Lioy and J.M. Daisey. Comparison of two modeling approaches for source apportionment of IPM and EOM in Newark, NJ 85-21.4. Proceedings of the 78th Annual APCA Conference, Detroit, MI, 1985.
12. P.J. Lioy. Discussion on guidelines for exposure assessment, 83-13.2. Proceedings of the 79th Annual International APCA Conference, June, 1986.
13. P.J. Lioy, J. Waldman, A. Greenberg, R. Harkov, and C. Pietarinen. The Total Human Environmental Exposure Study (THEES) to benzo(a)pyrene, 87-42.1. Proceedings of the 80th Annual APCA Conference, New York City, New York, June, 1987.
14. P.J. Lioy, M. Zelenka, M.D. Cheng, W. Wilson. The effect of sampling duration on the ability to resolve source types using factor analysis, 87-101.5. Proceedings of the 80th Annual APCA Conference, New York City, New York, June, 1987.
15. P.J. Lioy, T. Buckley, R. Tanner, K. Ito. Acid aerosol characterization and exposure. EPA Critical Issues paper on Acid Aerosol, Chapter 2,EPA-OAQPS, 1988.

16. P.J. Lioy and E. Panitz. Indoor air pollution: the problem and recognizing the patient, New Jersey Medicine, 85, 921-926, 1988.
17. B.D. Goldstein, A. Gotsch, P.J. Lioy. Environmental health in New Jersey, New Jersey Medicine, 85, 894-900, 1988.
18. N.C.G. Freeman, J.M. Waldman, P.J. Lioy. Evaluation of a daily activity diary designed to identify exposure sources. Paper #89-100.2. Proceedings of the 82nd Annual AWMA Conference, Anaheim, CA, June 25-29, 1989.
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24. P.J. Lioy. Indoor Air Quality Issues in Commercial and Residential Buildings, Only One Earth Forum, Rene Dubos Forum Program: The City as a Human Environment, N.Y.C., May 16-18, 1989.
25. P.J. Lioy. Science of risk assessment and national priorities. The EPA Journal, 17, 34, 1991.
26. P.J. Lioy. "Precis": human exposure to airborne pollutants. Environmental Science & Technology. 25, 1360, 1991.
27. P.J. Lioy. (Letter to Editor) Human exposure to benzo(a)pyrene: some more of the story. Toxicology Industrial Health, 8, 213-216, 1992.
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33. P.J. Lioy. Chapter: The Analysis of Human Exposure to Contaminants in the Environment, Oxford Textbook of Public Health, Vol 3, Chapter 32, 951-968, 1997.
34. P.J. Lioy. Chapter: Exposure Analysis and Its Assessment, Comprehensive Toxicology, Vol. 1, Chapter 2, 39-50, 1997.
35. P.J. Lioy. Editorial: Reductions in exposure to environmental pollutants: needs that can provide meaningful improvements beyond the millennium. Journal of Exposure Analysis and Environmental Epidemiology, 8, 1-2, 1998.
36. P.J. Lioy, G. Foley, J. Waldman. Exposure analysis: its place in the 21st century. Journal of Exposure Analysis and Environmental Epidemiology, 8, 3, 279-285, 1998
37. P.J. Lioy, Chapters: Exposure Assessment and Uncertainty Analysis, Encyclopedia of Public Health. Editor in Chief, Lester Breslow. Macmillan Reference USA, 2002.
38. P.G. Georgopoulos, A. Roy, M.J. Lioy, R.E. Opiekun, and P.J. Lioy. Environmental dynamics and human exposure to copper. Monograph, Vol. 1, 1-207, ICA, NYC, NY 2002.
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40. P.J. Lioy, A. Roy and N.C.G. Freeman, Chapter: The analysis of human exposure to contaminants in the environment, Oxford textbook of Public Health, Vol. 4, #3, Chapter 8, 1025-1044, 2002.
41. P.J. Lioy, Pollution in New Jersey, Rutgers University Encyclopedia, In Press.
42. A. Vette, S. Gavett, S. Perry, D. Heist, A. Huber, M. Lorber, P. Lioy, P. Georgopoulos, S.T. Rao, W. Petersen, B. Hicks, J. Irwin, G. Foley. Environmental Research in Response to 9/11 and Homeland Security. Environmental Management, 14-22. February 2004.
43. M. Lorber, H. Gibb, L. Grant, J. Pinto, P. Lioy. Assessment of Inhalation Exposures and Potential Health Risks that Resulted from the Collapse of the World Trade Center. Environmental Management, 27-30. February 2004.
44. P.J. Lioy. Editorial: Exposure utility and application within homeland or public security. Journal of Exposure Analysis & Environmental Epidemiology. 14:427-427, November 2004.
45. P.J. Lioy, B. Leaderer, J. Graham, E. Lebret, L. Sheldon, L. Needham, E. Pellizzari, M. Lebowitz – Editorial: The Application of Exposure assessment to Environmental Health Science and Public Policy, Journal of Exposure Analysis & Environmental Epidemiology. 15, 121-122, 2005.
46. P.J, Lioy, E. Lebret, J. Spengler, M. Brauer, T. Buckley, N. Freeman, M. Jantunen, J. Kissel, M. Lebowitz, M. Maroni, D. Moschandreas, M. Nieuwenhuijsen, B. Seifert, D. Zmirou-Navier. Editorial: Defining Exposure Science Research, Journal of Exposure Analysis & Environmental Epidemiology. 15, 463. doi:10.1038/sj.jea.7500463.

47. S. Garte, B.D. Bernstein, P.J. Lioy, M. Lippmann. Editorial: Norton Nelson' Legacy: The Science of Environmental Health. Environmental Health Perspectives. 114:2 A78-A79, 2006.
48. P.J. Lioy. Editorial: "Bernardino Ramazzini: thoughts on his Treatise and linking exposure science and environmental/occupational medicine for prevention or intervention within environmental health". European Journal of oncology, 12:69-73, 2007.
49. P.J. Lioy, Editorial: Time for a Change: From Exposure Assessment to Exposure Science, 116:A282-283, 2008.
50. P.J. Lioy and C.F. Weisel, Artificial Turf: Safe or out on ball fields around the world, Journal of Exposure Science and Environmental Epidemiology, 18, 533-534, 2008.

BOOKS

Paul J. Lioy (Forward By Tom Kean) ***DUST: The Inside Story of Its Role in the September 11th Aftermath,*** Publisher Roman and Littlefield, MD. In Press, February, 2010

PRESENTATIONS ONLY - 1986-Present

"Exposure Monitoring - A Tool in Risk Assessment", Presented at Conference: Risk Assessment - The Occupational Health Challenge, Princeton, NJ, December 5, 1986.

"Modern Methodological Advancements in Community Exposure Measurements", Presented at ACGIH Symposium - Advances in Air Sampling, Assilomar, CA, February 16-18, 1987.

"Ozone - Health Effects: Active Children in Summer Camp Studies", Clean Air Council Public Hearing, New Brunswick, NJ, April 27, 1987.

Development of Questionnaires and Survey Instruments, ASTM Symposium - Design and Protocol for Monitoring Indoor Air Quality, Cincinnati, OH, April 26-29, 1987.

"Human Exposure: B(a)P as a Case Study", Presented at RIVM, Bilthoven, The Netherlands, May 11, 1987.

"Ozone: Its Chemistry and Health Effects", Presented at Princeton University, Department of Chemistry, May 19, 1987.

"The Total Human Environmental Exposure Study (THEES)", Presented at the First International Symposium on Environmental Epidemiology, Pittsburgh, PA, June 3-5, 1987.

"The Effects of Sampling Duration on the Ability to Resolve Source Types Using Factor Analysis", 80th APCA Conference, New York City, NY, June 22-26, 1987.

"Acid Aerosol: Exposure and Characterization", NIEHS Symposium, Research Triangle Park, NC, October 20-21, 1987.

"Acid Aerosol Exposure and Health Effects", Institute of Environmental Chemistry, Beijing, Peoples Republic of China, November 18, 1988.

"Modern Methods for Exposure Measurement and Assessment", Seminar, University of Cincinnati, Cincinnati, OH, March 9, 1988.

"Total Human Exposure to Benzo(a)pyrene", Third International Symposium on Toxic Substances, Montreal, CA, April 6, 1988.

"Dynamics of Human Exposure to Tropospheric Ozone", International Ozone Symposium, Nimegen, Netherlands, May 8-13, 1988.

"Airborne Toxic Elements and Organic Species", International Workshop on Toxic Substances, Amersfoort, Netherlands, May 15-16, 1988.

National Academy of Sciences Exposure Workshop, Chairman, New Haven, CT, October 19-20, 1988.

"Human Exposure to Polycyclic Aromatic Hydrocarbons", Indoor Air Exposure Assessment Workshop. Kennedy School of Government, Harvard University, Boston, MA, December, 6-8, 1988.

"Acidic Aerosol Exposure and Health Research Program at UMDNJ-RWJMS", U.S. EPA Workshop on Acidic Particulate Measurements, Research Triangle Park, NC, February 1-3 1989.

"Acidic Aerosol: Exposure Near a Mine Mouth Power Plant: Chestnut Ridge, PA", Acidic Aerosol Research Program Review, Electric Power Research Institute, Palo Alto, CA, February 6-8 1989.

"Total Human Environmental Exposure Study (THEES): Progress and Prognosis", Division of Science and Research, NJ DEP, Trenton, NJ, March 16, 1989.

"Ozone and Acidic Particulate Matter: Summertime Smog", Bellcore, Holmdel, NJ, March 17, 1989.

"Indoor Air Quality Issues in Commercial and Residential Buildings, Only One Earth Forum", New York City, NY, May 16, 1989.

"Exposure Assessment and Study Design Considerations for the NJDOH and UMDNJ Ozone - Health Effects Field Study of Counselors and Children At Day Camps in New Jersey", AWMA meeting, Anaheim, CA, June 26-29, 1989.

"Design of A Total Exposure Study for Benzo(a)pyrene," 12th International PAH Symposium, Washington, D.C., September 10, 1989.

"Total Exposure Assessment: Progress and Prognosis", Symposium on Total Exposure Assessment, Las Vegas, NV, November 28-30, 1989. (**Featured Address**)

"Indoor/Outdoor and Personal Monitoring Relationships for Selected VOC in Three Homes" - NJ TEAM - 1987 Symposium on Total Exposure Assessment, Las Vegas, NV, November 28-30, 1989.

"Ozone Exposure and Health Effects", Princeton University Seminar, Princeton, NJ, April 2, 1990.

"Policy & Scientific Issues in Indoor Air Quality", Workshop on Methodology for Assessing Health Risks from Complex Mixtures in Indoor Air, Arlington, VA, April 17-19, 1990.

"Personal Monitors: Progress and Prognosis", Symposium on Analytical Chemistry, 199th Annual American Chemical Society Meeting, Boston, MA., April 22-27, 1990.

"Assessment of Human Exposure to Oxidants", 7th Annual Conference of the Health Effects Institute, Scottsdale, AZ, April 30-May 2, 1990.

"Exposure Assessment in Occupational and Environmental Epidemiology", Seminar, University of Texas Medical Center, TX, May 1, 1990.

"Results from the 1988 Summer Ozone Health Study of Counselors and Children", Seminar, NYU Medical Center, Tuxedo, NY, May 9, 1990.

"Frontiers in Exposure Assessment and Detection: The Fruits of Collaboration", National Academy of Sciences Symposium, Washington, DC, May 16-17, 1990. (**Opening Address**)

"Exposure Assessment for Superfund Sites", NIEHS Symposium at Michigan State University, Lansing, MI, June 4-6, 1990.

"Exposure Assessment: Advances and Opportunities"; "The Total Human Environmental Exposure Study (THEES): Personal and Biological Monitoring"; "The 1988 Heat Wave, Ozone Health Effects Study", at The Netherlands RIVM, Bilthoven, Netherlands, June 14-23, 1990.

"Gasoline Exposure Workshop", Chairman and Discussion Leader, at Annapolis, MD, Dec. 12-14, 1990.

"The National Academy of Sciences Report on Human Exposure", at the AREAL Laboratories of EPA, Research Triangle Park, NC, February 27, 1991.

"Metrics of Human Exposure Assessment and their Convergence with Metrics of Health Effects related to Air Pollution", Vancouver, B.C., The 84th Annual AWMA Meeting, June 20, 1991. (**Invited Speaker**)

"The Relationship of Summertime Ozone Episodes with Hospital Visits by Asthmatics", U.S. EPA, Research Triangle Park, NC, April 10, 1991 and at the New Jersey DEP, Trenton, NJ, July 17, 1991.

"Air Pollution Exposures in the United States", 3rd Inhalation Symposium, Advances in Controlled Inhalation Studies, Hanover, Germany, October 9-11, 1991. **(Invited Speaker)**

"Ozone Health Effects", ANJEC Annual Meeting, Freehold, NJ, October 26, 1991.

"Relationship Between Hospital Visits for Asthma and Summertime Ozone", Symposium on Ozone - Air Waste Management Association, Atlanta, GA, November 6, 1991.

"Exposure to Gasoline in the General Public and Occupational Settings", International Symposium on the Health Effects of Gasoline, (Chair of Session, Discussion Leader on Panel), Miami, FL, November 5-8, 1991.

"Exposure Analysis and the Biological Response to a Toxic Agent: A Melding Necessary for Environmental Health", International Conference on Exposure Analysis, ISEA 1st Annual Meeting: "Measuring, Understanding and Predicting Exposures in the 21st Century", Atlanta, GA, November 18-21, 1991. (**Plenary Address**)

"Exposure in Risk Assessment: The Guidance from the NAS Exposure Report", Annual Meeting of the Society for Risk Analysis, Baltimore, MD, December 9, 1991.

"Air Pollution in Northern Cities", 5th International Winter Cities Biennial, Montreal, Canada, January, 17-21, 1992. **(Invited Plenary Speaker)**

"Exposure Assessment for Use in Risk Assessment Process", National Academy of Sciences: CRAM Workshop, Washington, D.C., February, 10-11, 1992. (**Opening Address**)

"Microenvironmental Exposures to Chromium Wastes and the Bioavailability of Chromium Species", Agency for Toxic Substances and Disease Registry, Atlanta, GA, May 15, 1992.

"Human Exposure to Chromium Waste, Jersey City, NJ", New Jersey Hazardous Waste Research Symposium, NJ DEPE, Trenton, NJ, October 21, 1992.

"Ozone Exposure and Health Effects, Grand Rounds: Pulmonary Medicine Seminar", RWJMS, New Brunswick, NJ, December 11, 1992.

"Re-examining the National Ambient Air Quality Standard for Ozone", Urban and Regional Ozone Symposium, American Association for the Advancement of Science, Boston, MA, February 12, 1993.

"Exposure Assessment at EOHSI", NJ DEPE, Trenton, NJ, February 17, 1993.

"Exposure Assessment for Risk Assessment", NJ DEPE, Trenton, NJ, February 24, 1993.

"Impact of Methanol Fuels on Human Exposure to Air Toxics and Criteria Pollutants, Symposium on Emerging Perspective on New Transportation Fuels: Methanol", Society of Toxicology, New Orleans, LA, March 16, 1993.

"Fundamental Aspects of External Markers for Exposure Analysis", Human Tissue Monitoring and Specimen Banking, Research Triangle Park, NC, March 30- 31, 1993.

"Frontiers of Exposure Assessment for Hazardous Wastes", International Congress on the Health Effects of Hazardous Wastes, Atlanta, GA., May 3-8, 1993. **(Plenary Address)**

"Volatile Organics in Indoor Air", Workshop on Indoor Air Exposure Issues in 21st Century, Indoor Air '93, Helsinki, Finland, July 2-8, 1993.

"Microenvironmental and Commuter Exposures to Oxygenated Gasoline with Methyl-Tertiary Butyl Ether", Symposium on MTBE, Falls Church, VA., July 26-28, 1993.

"Exposure Monitoring in Humans", Society of Risk Analysis, Savannah, GA, December 6-8, 1993. (Invited Talk)

"Advances in Exposure Assessment: Dietary Influence on Total Exposure to Chemicals", International Life Sciences Institute Annual Meeting, Cable Beach, Bahamas, January 21-26, 1994. **(Invited Talk)**

"The Effect of Multiple Route Exposure Patterns on the Use of External Markers and Internal Markers to Determine Dose", Conference on Temporal Aspects in Risk Assessment for Non-Cancer Endpoints, Hope Hotel, Wright Patterson, Air Force Base, OH, April 18-20, 1994. **(Invited Talk)**

"Overview of Exposure Assessment", Annual Meeting, NJ Academy of Sciences, Monmouth College, NJ, April 30, 1994.

"How Should Exposure Assessment at Hazardous Waste Sites be Improved for Risk Assessment", Seminar, University of Delaware, Newark, DE, May 11, 1994.

"Design of the "Region V" NHEXAS Pilot Study", US EPA Seminar, Research Triangle Park, NC, June 8, 1994.

"Status of the Childhood Lead Exposure Assessment and Reduction Study - CLEARS", US EPA Seminar, Research Triangle Park, NC, June 9, 1994.

"Can Remedial Investigation Data be Used to Assess Exposure at Hazardous Waste Sites?", Seminar, Medical University of South Carolina, Charleston, SC, June 14, 1994.

"Air Pollution Exposure", Discussant- Annual Meeting of the International Society of Environmental Epidemiology and International Society of Exposure Analysis, Research Triangle Park, NC, September 18-21, 1994.

"The Linkage of External Markers of Exposure with Internal Markers of Exposure for Risk Assessment", North Carolina Chapter of the Society of Risk Analysis, September 21, 1994.

"Automobile Cabin Exposures to Volatile Organic Compounds, Including Methyl-Tertiary Butyl Ether", Annual Meeting of the International Society of Exposure Analysis, September 18-21, 1994.

"How to Determine Actual or Potential Human Exposure at Superfund Sites: What Value is the Remedial Investigation", Illinois Institute of Technology, Chicago, IL, February 21, 1995.

"The MTBE Issue: Science, Policy and The Clean Air Act", Princeton University, Princeton, NJ, April 4, 1995.

"Analyses of the Particle Size Distribution of Household Dust Collected by Indirect Dermal Sampling Techniques in Comparison to Hand Rinses and Environmental Factors Influencing the Adhesion of Particles to Human Skin", R Edwards, P.J. Lioy, American Industrial Hygiene Conference and Exposition, May 22, 1995.

"Exposure Characterization at Hazardous Waste Sites: Data, Uncertainties and Modeling Framework", International Congress on Hazardous Wastes, Atlanta, GA, June 6-8, 1995.

"Exposure Assessment", Session Chair, Discussion Leader, Title of Presentation: "Estimation of the Bioavailability of Metals using Artificial Human fluids to Sequentially Extract Soils", S. Hamel, B. Buckley and P.J. Lioy. Annual Meeting International Society of Environmental Epidemiology and International Society of Exposure Analysis, Noordwijkerhout, Netherlands, August 20 - September 1, 1995.

"Experimental Design and Key Parameters for Exposure Studies", Discussant, Conference on Chemical Sensitivity, Princeton, NJ, September 20-22, 1995.

"Environmental Variables and Triggers of Asthma", Conference on Asthma, Edison, NJ, November 9, 1995.

"Opportunities for Exposure Analysis in the 21st Century", Meeting, Agency for Toxic Substance and Disease Registry", Atlanta, GA, November 29-30,1995.

"Scientific Ethics: Moral and Legal Issues", Rutgers University, Cook College, New Brunswick, NJ, March 23, 1996. **(Special Seminar)**

"Ozone Health Effects and Regulatory Standards", New Jersey Journalists Annual Meeting, EOHSI, June 14-15, 1996.

"Case Studies in Exposure Assessment", Seminar, Medical University of South Carolina, Charleston, SC, July 23, 1996.

"Introduction to Exposure Analysis", Workshop on Improving Exposure Analysis for DOE Sites, San Francisco, CA, September 4-5, 1996.

"Exposure Assessment: Advances and Opportunities for use of Science in the 21st Century", University of South Carolina, October 16, 1996.

"The Use of Basic Research to Reduce Uncertainties in Environmental Health Issues: The Application of Exposure Analysis", Auburn University Colloquium, Auburn, AL, October 18, 1996.

"Exposure Assessment Techniques and Results for the Childhood Lead Exposure Assessment and Reduction Study (CLEARS)", 124th Annual Meeting of the American Public Health Association, NYC, NY, November 19, 1996.

"Comparison of the Techniques for House Dust Lead Source Apportionment", Annual Meeting of Society of Risk Analysis and International Society of Exposure Analysis, Session Chair for NHEXAS Studies and Bioavailability Studies, New Orleans, LA, December 8-12, 1996.

"The Exposure and Dose Modeling and Analysis System: Its Components and Utility", National Exposure Research Laboratory, Research Triangle Park, NC, January 28, 1997. **(Invited Seminar Presentation)**

"Particulate Matter Standards: Issues of Exposure", Symposium on NAAQS, American Enterprise Institute, Washington, DC. February 10, 1997.

"What Kinds of Particles? Size? Shape?", Meeting on Controlled Exposure of Humans to PM, Alexandria, VA, April 30-May 1, 1997.

"The E.L. Press Sampling Technique, and Accumulation of Pesticides in Toys: NHEXAS Activities", Dermal Workshop, EPA, Washington, DC, August 28, 1997.

"Exposure to Particulate Matter: The Uncertainty and Research Needs", Gordon Conference, Vantaa, Finland, September 18-21, 1997. **(Invited Speaker - Plenary Address)**

"Dust: It is not Just Dirt", 7th Annual Meeting, ISEA, Research Triangle Park, NC, November 2-5, 1997.

"Exposure Assessment in the 21st Century", 50th Anniversary of the Committee on Toxicology, National Academy of Sciences, Washington, DC, December 5, 1997. **(Invited Plenary Speaker)**

"Exposure Analysis: Observations on its Growth and Aspirations for the Future", 8th Annual Meeting, International Society of Exposure Analysis, Boston, MA, August 17, 1998. **(Wesolowski Award Lecture)**

"National Human Exposure Assessment Survey (NHEXAS): Past Present, Future", 9th Annual Meeting, International Society of Exposure Analysis, Athens, Greece, September 4-8, 1999. (**Plenary Symposium**)

"Exposure Analysis and Assessment: Progress and Challenges to Achieving Growth in Research and Application's", NIEHS Workshop on the Role of Human Exposure Assessment in the Prevention of Environmental Disease, Rockville, MD, September 22-24, 1999. **(Keynote Address**)

"Relationship Between Exposure Assessment Process in Transport and Fate of POP's", Workshop on Persistent Organic Pollutants in the Environment, Durham, NC, October 5, 1999.

"Exposure Analysis Research and its Place in Environmental Health Sciences in the 21st Century", Collegium Ramazzini Symposium, Carpi, Italy, October 30, 1999.

"Air Pollution Issues Beyond 2000", Environmental Health 21st Century, EOHSI, Piscataway, NJ, January 12-13,2000.

"Particulate Matter Exposure: What Do We Really Breath", Society of Toxicology Annual Meeting, Philadelphia, PA, March 22, 2000. (**Invited Speaker**)

"Copper Research Needs and Assessment", International Copper Association Meeting, Montebello, Canada, May 1-4, 2000. (**Invited Speaker)**

"How Exposure Analysis Techniques Help Validate or Demonstrate Effectiveness of Risk Prevention or Elimination Strategies", 10th Annual Meeting, International Society of Exposure Analysis, Asilomar, CA, October 24-27, 2000. (**Invited Speaker**)

"Data and Models for Characterizing Aerosol Exposure and Dose: Advancements, Needs and Non-Directions", 10th Annual Meeting, International Society of Exposure Analysis, Asilomar, CA, October 24-27, 2000.

"MENTOR Framework: For Simulation of Source-to-Dose Environmental Toxicants in Individuals and Populations at Risks", Seminar, Center for Disease Control, Atlanta, GA, June 11, 2001.

"The Modification of Bioaccessibility Methods for Radionuclide Measurement and Human Exposure/Dose Modeling for Relevant (non-occupational) Savannah River Site Exposure Scenarios", 11th Annual Meeting, International Society of Exposure Analysis, Charleston, SC, November 4-8, 2001.

"Indoor Dynamics of Chemically Reactive/Secondary Aerosols: New Data, Case Studies, and Implications for Human Exposure", 11th Annual Meeting, International Society of Exposure Analysis, Charleston, SC, November 4-8, 2001.

"Residential Dust: A Forensic Tool for Exposure Characterization", 11th Annual Meeting, International Society of Exposure Analysis, Charleston, SC, November 4-8, 2001. **(Invited Speaker)**

"What Was In The Dust and Smoke Caused by the Collapse of WTC?", **Seminar**, EOHSI, Piscataway, NJ, February 15, 2002.

"The Dirt on Dust: Analysis of Dust Obtained in Residential or Occupational Locations, Examples from World Trade Center Collapse", (**Invited Speaker)** SC Johnson, Racine, WI, February 27, 2002.

"Analysis of the Fallout of the WTC Disaster", National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances, EOHSI, Piscataway, NJ, June 17-19, 2002. **(Invited Speaker)**

"Environmental Health and Emergency Response: WTC – Lessons Learned", Annual Meeting, Air and Waste Management Association, Baltimore, MD, June 24-26, 2002. **(Invited Opening Plenary Panel Speaker)**

"Health and Environmental Effects: Attack on the WTC – The Aftermath", Annual Meeting, Air and Waste Management Association, Baltimore, MD, June 24-26, 2002. **(Invited Session Chair)**

"Exposure Assessment: Its Use In The Study Of Environmental Aspect Of Autism", (**Invited Speaker)** EOHSI Center On Childhood Neurotoxicology and Exposure Assessment, Oct 3-4, 2002

"Comparisons of the Composition of Settled Dust/Smoke Outdoors and Indoors from the WTC", American Association of Aerosol Research, Charlotte, NC, October 8, 2002. **(Invited Speaker)**

"What was in the Dust and Smoke Released from the Collapse and Fire at the WTC", Ramazzine Fellows Annual Conference, Carpi, Italy, Oct 23-28, 2002.

"The Characterization of the Settled Dust/Smoke That Settled Outdoors/Indoors from WTC Collapse & Fire", American Public Health Association, Philadelphia, PA, November 11, 2002. **(Invited Speaker)**

"Consequences of the Collapse of the WTC and Subsequent Fires on Population Exposure", American College of Toxicology, Hershey, PA, November 13, 2002 **(Invited Speaker)**

"Characterization of Indoor/Outdoor Dust and Smoke from the WTC", meeting of AWMA chapter, East Brunswick, NJ, February 3, 2003.

"Exposure and Dose Modeling Using the Mentor system: Application for Arsenic", (**Invited Speaker)** USEPA- NERL **Seminar**, Cincinnati, OH, April 22, 2003.

" Homeland Security – Role of prospective Modeling and Monitoring for Rapid risk and Response Assessment", Seminar, USEPA REGION II, Edison, NJ, April, 10, 2003. (**Invited Speaker**)

"Arsenic – A Multimedia and Multi Exposure Pathway Exposure and Dose Assessment" (**Invited Speaker**), USEPA – National Exposure Research Laboratory, Cincinnati, OH, April 22, 2003.

"Lessons Learned From the attack on the WTC" (**Invited Speaker**) Harvard University Boston Mass., Seminar May 29, 2003.

" Rapid Risk Assessment For Home Land Security" (**Invited Speaker**) National Academy of Sciences, Washington, DC June 19, 2003. **(With Panos Georgopoulos)**

An Overview of the Environmental and Occupational Exposure Issues in the Aftermath of the Attack on the WTC. (**Symposium Opening Speaker**) American Chemical Society, NYC, NY September 10, 2003

"Public Security: The Role of Exposure Analysis", 13th Annual Meeting of the International Society of Exposure Analysis, Stresa, Italy, September 21-25, 2003(**Plenary Speaker)**

"Impact of WTC Collapse on Worker and Residential Exposure and Lessons Learned," 3rd National AERIAS Symposium, Atlanta, GA, October 22, 2003.

"A Summary of Exposure Assessment Research on the Aftermath of the Attack on the WTC Being Conducted by EOHSI," (**Invited Speaker)** Seminar Series EPA Region II, NYC, NY, October 23, 2003.

"EOHSI Research Directions for Rapid Risk Assessment on Homeland Defense Issues," (**Invited Speaker)** Rutgers University Symposium on Homeland Defense, October 29, 2003.

"Health Impacts of Environmental Disasters" (**Invited Speaker and Session Chair**) International Experts Meeting 2003, health Impact Assessment of Disasters, He Hague, The Netherlands, November 3-4, 2003.

"Quasi Real Time/Mobile Personal Monitoring Data Collection and Modeling for Emergency Management," (**Invited Speaker and Session Chair**) Urban Air Observatory Workshop, Goddard Institute, NYC, NY, February 23-24, 2004.

"US EPA Response to the World Trade Center Disaster" (**Invited Speaker**) WTC Panel Briefing March 18, 2004.

"Bioterrorism and Informatics, (**Panelist**) NJPAC, Newark, NJ, May 12 2004.

"Exposure Assessment and Disease" (**Invited Speaker)** NIEHS Leadership Retreat, Greensboro, NC, May 19, 2004.

"Exposure Assessment and Homeland Security" (**Panelist)** NJ Homeland Security Conference, US Army Fort Monmouth, June 7, 2004

""Polycyclic Aromatic Hydrocarbons in Dust that Settled at Indoor and Outdoor Locations in Lower Manhattan after 11 September 2001" (**Panelist)** WTC Expert Technical Panel Meeting, June 22, 2004.

"Overview of the Camden New Jersey Air Toxics Project" Clean Air Council Meeting at EOHSI on September 8, 2004.

"Analysis of the WTC Dust Plume" (**Invited Speaker)** at the 9/11 World Trade Center Dust Health Effects Conference held on September 12, 2004 at New York University entitled.

Co Chaired - 6th meeting of the EPA - WTC Expert Technical Panel in NYC on September 13, 2004

Co-Chaired EPA/EOHSI meeting in Washington on Homeland Security and Computational Toxicology on September 27-28, 2004.

Organized and **Co-Chaired** a Plenary Panel at the 14th Annual International Society of Exposure Analysis entitled: The application of exposure assessment to environmental health science and public policy – what has been accomplished and what needs to happen before our 25th anniversary in 2014, held in Philadelphia, PA October 17-21, 2004

Mainelis G., An., H.R., Yao, M., and Lioy, P. (2004) A Low Power Collector for Concurrent Measurement of Viable and Total Bioaerosols, Abstracts of the 14th annual conference of International Society for Exposure Analysis, Philadelphia, Pennsylvania, October 17-21, 2004.

As a Fellow of the Collegium Ramazzini attended The Annual Ramazzini Days 2004 held in Carpi, Italy. **Chair and Discussant** of session On lessons learned and intervention and response at the International meeting on the 20th Anniversary of the Chemical Accident in Bophal, India on October 28-31, 2004.

RTI Fellows Program "Distinguished Scientist Lecture" (**Invited Speaker**) Approaches to characterizing Exposure: 9-11 and Beyond. November 11, 2004.

DEARS workshop on the Exposure Modeling Aspects of the Detroit Human Exposure Study on Air Pollution (**Invited Speaker**) RTP, NC, January 11, 2005.

Expert testimony Public Hearing on Airborne Particulate Matter Emissions and Health Effects (**Invited Speaker**) State House, Trenton February 7, 2005.

New Jersey American Industrial Hygiene Association on *EXPOSURE ANALYSIS AND ASSESSMENT: The Science and its Application to the Aftermath of the WTC Collapse* (**Invited Speaker**) February 17, 2005.

Monmouth University presentation on Homeland Security **(Invited Speaker)** West Long Branch, NJ, May 23, 2005.

Pittsburg University Conference entitled *Developing Policies to Improve Indoor Environmental Quality: Trans-Atlantic Viewpoints* (**Invited Speaker**) Pittsburg, PA, June 8-10, 2005.

As a Fellow and invited speaker he presented at the Collegium Ramazzini Symposium Living in a Chemical World, in Bologna, Italy (**Invited Speaker**) September 18 – 21, 2005 entitled *Semi-volatile and volatile mixtures emitted and deposited indoors: dynamics, chemistry and implications for human exposure and health.*

Keynote address at the Collegium Ramazzini Symposium Living in a Chemical World, in Bologna, Italy entitled *Human exposure during the World Trade center aftermath: what we could and could not conclude and goals for the future.* (**Invited Speaker**) September 20, 2005

Montclair State University, Montclair, New Jersey presentation entitled *Human Air Contaminant Exposures During the WTC Aftermath: What We Learned and Need To Improve* . (**Invited Speaker**) October 6, 2005.

Institute of Medicine, Washington, DC Workshop on Environmental Public Health Impacts of Disaster: Hurricane Katrina Presentation entitled: *Clean-up, Exposure Guidelines and Environmental Policy During Disasters: Lessons Taken from the Aftermath of WTC.* (**Invited Speaker and Panelist**) October 20, 2005.

MSG05: A Prospective Exposure Study to Simulate Emergency Responders and the Publics Exposure in Harm's Way of a Toxin (**Invited Speaker**) at the 15th Annual ISEA Conference in Tucson, Arizona, November 1, 2005.

Camden community meeting on *Status of the Study: Personal and Ambient Exposures to Air Toxics in Camden* at the Camden County Municipal Utility Authority, January 18, 2006.

City Hall of Jersey City (**Invited Speaker**) *The Design of the Chromium Exposure and Health Effects in Hudson County* Jersey City, New Jersey, February 15, 2006.

American Association for the Advancement of Science Annual Meeting, (**Organizer and Speaker**) symposium entitled *Exposure Science: A Requirement for Reducing Human Environmental Health Risks*, St. Louis, Missouri, February 16-20, 2006.

New Jersey Institute of Technology, Environmental Health and Policy, (**Invited Panelist**), *Public and Private Rights and Remedies,* Newark, New Jersey February 28, 2006.

Fifteenth International Conference: Health and Environment: Global Partners for Global Solutions (**Invited Speaker**) "*Sources of Radiation Exposure in Community Environments: An Example – Wildfires"* United Nations, New York, NY. April 19, 2006

World Trade Center Medical Monitoring & Treatment Program Expert Advisors Conference on (**Invited Speaker and Panelist**) "*Particles and Chemical Components of WTC Exposures*", New York City, May 25, 2006.

Scientist-to-Scientist Collaboration Planning Meeting between the Environmental and Occupational Health Sciences Institute and the National Exposure Research Laboratory (**Invited Speaker**) "*Thoughts on the Future of Exposure Science and Areas for Applications of Modeling Environment for Total Risk (MENTOR) Studies*" held at NERL, Research Triangle Park, North Carolina, June 6, 2006.

Environmental Mutagen National Society Meeting (**Invited Speaker**) held in Vancouver, Canada on "*Principles of Human Exposure Science used to Assess 9-11 Health Outcomes and Future Terrorists Attacks*" September 18, 2006
Harvard University (**Invited Speaker**) *Personal Exposures to and Spatial Variations of Air Toxics in a "Hot Spot" in Camden, NJ*, Boston, MA, December 18, 2006.

International Joint Commission for Air Quality Board (**Invited Speaker**) "*Spatial Variations and Personal Exposures to Air Toxics in Camden New Jersey*" in Washington, DC., January 10, 2007.

Office of Emergency Management and the United States Environmental Protection Agency (**Invited Speaker**) Madison *Square Garden Prospective Exposure Experiment,* Brooklyn, New York, January 31, 2007

The Italian Hours Faculty Lecture (**Invited Speaker**) *Bernardino Ramazzini and his Legacy in Occupational and Environmental Medicine* for at Geology Hall, Rutgers University, March 8, 2007.

AA for Research at EPA and senior staff (**Invited Speaker**) *Emergency Response Exposure Study completed at Madison Square Garden*, Washington, DC, April 11, 2007

Auburn University Research Symposium (**Invited Speaker**) *Human Exposure to Environmental Contaminants during the 21st Century: Old and New Issues, and Policy Implications*, May 1, 2007.

Meadowlands Symposium, (**Invited Speaker**) *Air Concentrations of Volatile Organic Compounds Along the Trails*, May 17, 2007.

Intelligence and Security Informatics Symposium (**Chair Plenary Panel**) *Preparedness for and Response to High-Consequence Events*, May 23, 2007.

Air Waste & Management Association National Meeting (**Invited Speaker**) *Air Accountability – Measuring Air Quality Management Outcomes,* June 28, 2007.

Air Waste & Management Association National Meeting (**Invited Speaker**) *Multi-Pollutant Air Quality Management*, June 29, 2007.

Department of Homeland Security, Washington, DC (**Invited Speaker**) *Urban Dispersion Program (UDP) – MSG05 and Subways: Results from the Prospective Exposure Studies,* September 26, 2007.

25th Anniversary Meeting of the Collegium Ramazzini, in Carpi, Italy (**Invited Speaker**) *Characterization of Exposure in a "hot spot" for Air Toxics: a measurement and modeling approach that can improve epidemiological and other health investigations with locally high levels of air pollution* on October 26, 2007**.**

25th Annual Northeast Industrial Hygiene Conference and Exposition New Brunswick, New Jersey (**Invited Speaker**) *Bernardino Ramazzini: and his legacy in Occupational and Environmental Medicine* at the 25th Annual Northeast Industrial Hygiene Conference and Exposition on December 7, 2007.

Briefing held at the Transportation and Safety Laboratory in Pomona, NJ (**Invited Speaker**) "The Homeland Security Preparedness College of the NJ-OHSP" for the Security and Safety on February 22, 2008.

Annual Health Effects Institute Conference (**Invited Speaker**) *Human Exposure to Air Toxics at a "Hotspot" within Camden, New Jersey* in Philadelphia, PA, April 29, 2008.

Johns Hopkins University, (**Invited Speaker**) *Exposure Sciences in the 21st Century: Challenges and Direction*, Baltimore, MD, October 7, 2008.

Joint Annual Meeting of the ISEE/ISEA, *Extant Data Acquisition Needs for the National Children's Study*, Special Session, Pasadena, CA, October 13, 2008.

Joint Annual Meeting of the ISEE/ISEA, *Exposure Science*, Pasadena, CA, October 15, 2008

Health Effects Institute in Boston, MA, (**Invited Speaker**) *Health Effects of Exposure to Low Concentrations of Air Toxics: A Toxic Air Pollution Hot Spot Exposures and Design Issues for future health Studies*, October 30, 2008.

CRC Mobile Source Air Toxics Workshop in Phoenix , Az. (**Invited Speaker**) *Characterization of "Hot Spots" for Unban Cancer Risk*, December 1-3, 2008.

Department of Environmental and Occupational Health, University of Pittsburgh School of Public Health, (**Invited Speaker**) EXPOSURE SCIENCE: *in the 21st Century and its linkage to Public and Environmental Health, Part I and Part II,* Pittsburgh, PA**,** January 22, 2009 and February 5, 2009.

Department of Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA, (**Invited Speaker**) "*Exposure Science: Its Foundation and Applications within Environmental and Occupational Health, Today"* February 13, 2009.

NNI Environmental Exposure Assessment of Nanomaterials conference, (**Invited Speaker and Session Chair)** *Human Exposure to Nanoparticles Released from Consumer Products: Identification of Issues and Research Needs,* Bethesda, MD, February 24-25, 2009.

National Research Council (**Plenary Address**) *Exposure Science21st and its Evolution: But how does it Grow and will it be Effectively Used in the 21st Century,* Workshop on Exposure Science in the 21st Century, Washington, D.C. June 18-19, 2009

OTHER CIVIC AND PROFESSIONAL ACTIVITIES (1976-Present)

- Chair, Cranford, NJ, Environmental Commission, 1976-78., Member of Board of the Cranford Chamber of Commerce
- Program Advisor, Italian American Commission of New Jersey, and Member of Italian Higher Education Committee
- Chaired or Testified at Public Hearings in Environmental Issues in Tri-state Area and Local Communities
- Presentations to State/Local Organizations and Community Groups on Environmental Health
- Participated in Numerous Media Forums and Interviews on Environmental Health Issues: TV, Radio, Newspapers, Popular Magazine Articles
- Ten-minute Short Subject Documentary on Chromium Clean-up in Jersey City, NJ, CNBC, 1996
- New Jersey Historical Society: Contributor to Archives on the Attack on the WTC – Interview and Artifacts. Transcript to be archived and exhibited at NJ Historical Society and Columbia University Library
- Ten-minute Short Subject Documentary on Dust and Smoke from Collapse of the WTC – Discovery Channel, January 2002.
- Testimony on Environmental Health Issues before U.S. Congress and NJ State Legislature

Ph.D. STUDENTS ADVISED AND COMPLETED DEGREE

1. Maria Marandi, NYU Medical Center, 1985, Development of Source Apportionment Models for Inhalable Particulate Matter and Its Extractable Organic Fractions in Urban Area of NJ.
2. Won-Kuen Jo, Rutgers, The State University of New Jersey, 1990, Chloroform Body Burden Resulting From Inhalation and Dermal Exposure While Showering with Municipal Tap Water.
3. Timothy Buckley, Rutgers University, 1991, Benzo (Benzo(a) pyrene (BaP) Metabolites and 1-Hydroxypyrene in Urinary Metabolites for Human Environmental Exposure to BaP.
4. Peter Creighton, Rutgers, The State University of New Jersey, 1992, Effects of Cooking Methodology on Benzo(a)pyrene Exposure from Sampled Diets, Fast Food Hamburgers and Cooked Meats.

5. Michael Zelenka, Rutgers University, 1992, A Multivariate Mass Balance Model for Air Pollution in China: A Hybrid Methodology.
6. Vasiliki Kitsa, Rutgers, The State University of New Jersey and Robert Wood Johnson Medical School, 1994, Resuspension and Dispersion of Chromium Contaminated Soil in New Jersey: An Exposure Assessment Study for Near Field Residents.*
7. Yeonjing E. Wang, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 1994, The Effect of Vacuum Collection Efficiency and Physical - Chemical Properties of Household Dust on Lead Exposure Measurements.*
8. Junfeng Zhang, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 1994, Indoor Air Chemistry and the Identification of Sources of Organic Acids Indoors.*
9. Hongjee Liao, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 1996, A Computer Model for Estimating the Effect of Volatile Substances From Contaminated Groundwater on Indoor Air Quality.*
10. John Adgate, Graduate Program in Public Health - Rutgers, The State University of New Jersey and UMDNJ Robert Wood Johnson Medical School, 1996, House Dust Lead: Relationships Between Exposure Metrics and Determination of Source Contributors.
11. Karyn Reed, Rutgers, The State University of New Jersey and UMDNJ - Robert Wood Johnson Medical School, 1997, Quantification of Children's Hand and Mouthing Activities Through Video Taping Methodology.*
12. Somia Gurunathan, Rutgers, The State University of New Jersey and UMDNJ - Robert Wood Johnson Medical School, 1998, Measurement and Accumulation of Chylorpyrifos on Residential Surfaces and Toys Accessible to Children.*
13. Stephanie Hamel, Rutgers, The State University of New Jersey and UMDNJ - Robert Wood Johnson Medical School, 1998, The Estimation of Bioaccessibility of Heavy Metals in Soils Using Artificial Biofluids.*
14. Lih-Ming Yiin, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 1999, Childhood Lead Exposure: Effectiveness of Cleaning Intervention and Influences of Seasonality and Home Floor-Surfacing Types.*
15. Thomas Wainman, Rutgers, The State University of New Jersey and UMDNJ- Robert Wood Johnson Medical School, 1999, Use of a Two Tiered Dynamic Chamber to Investigate Indoor Air Chemistry.
16. Rufus Edwards, Rutgers, The State University of New Jersey, UMDNJ- Robert Wood Johnson Medical School, 1999, Development of an Indirect Sampler for the Estimation of Dermal Exposure to Pesticides in Housedust.*
17. Richard Opiekun, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 1999, The Effects of Methyl Tertiary-Butyl Either (MTBE) Exposure on Nasal Inflammatory Response in Human Subjects Under Controlled Conditions.*
18. Linda Bonano, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 2000, Household Characteristics, Activities, and Contamination: Exposure Assessment for Children in the NHEXAS Population.*

19. Kristie Ellickson, Rutgers, The State University of New Jersey and UMDNJ-Robert Wood Johnson Medical School, 2001, The Modification of Bioaccessibility Methods for Radionuclide Measurement and Human Exposure/Dose Modeling for Relevant (non-occupational) Savannah River Site Exposure Scenarios.*
20. Vito Ilacqua, Rutgers, The State University of New Jersey, 2002, Evidence of Air Pollution in Attic Dust.
21. Paromita Hore, New Jersey School of Public Health, UMDNJ 2003, Chlorpyrifos Accumulation Patterns for Child Accessible Surfaces and Objects and Urinary Metabolite Excretion by Children for Two Weeks After Professional Crack and Crevice Application.
22. Chang Ho Yu, Rutgers, The State University of New Jersey and UMDNJ Graduate Program in Biomedical Sciences 2005, In Vitro Methodology for Measuring Bioaccessible Cesium-137, Strontium-90, Lead, and Mercury Associated with Dietary or Non-dietary Ingestion.
23. Kunning Zhu, Rutgers, The State University of New Jersey and UMDNJ Graduate Program in Biomedical Sciences 2006, Evaluation and Comparison of Continuous $Pm_{2.5}$ Monitors for Measurement of Ambient Aerosol, Fresh Diesel Aerosol, and Fresh Secondary Organic Aerosol.
24. Kyung Hwa Jung, The State University of New Jersey and UMDNJ Graduate Program in Biomedical Sciences 2006, Development and Application of a Sensitive Passive Sampling Methodology for the Measurement and Assessment of Personal Exposure to Gaseous PAHs.
25. Carl Schopfer, Rutgers-The State University of New Jersey, 2008, Radon Adsorption on an Aerogel.

Ph.D. STUDENTS ADVISING – IN PROGRESS, PASSED PRELIMINARY EXAM†

- Stephanie Einstein*

*Joint Graduate Program in Exposure Assessment

POST DOCTORAL STUDENTS TRAINED

- Meng Dawn Cheng (2 years)
- Qing-ci He (2 years)
- Katherine Gelprin (5 months)
- Pong L. Law (2 years)
- Richard Opiekun (2 years)
- Xu Xu (1 year)
- Chang-Ho Yu (2 years)
- Kunning Zhu (4 years)
- Kyung Hwa Jung (1 year)

Non Doctoral Masters Degree Students (Research)	Total = 7
Undergraduate Interns and Cooperative Students, SEEDS - ACS (Rutgers University and Robert Wood Johnson Medical Students)	Total =10
Doctoral Committee Membership only (not Advisor)	Total =18

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