

## INNOVATION PARTNERSHIP INSTITUTES

The Innovation Partnership Institutes are a cornerstone of Governor Corzine's Economic Growth Initiative to make New Jersey a better place to live and do business. The grants for Innovation Partnership Institutes in seven high growth areas have been awarded. The first round of grants funded the following three (3) sectors: Financial Services, Information Technology, Biotechnology/Pharmaceutical. The second round funded four additional sectors: Clean Energy Technology, Energy Efficient and Renewable Energy, Advanced Manufacturing, and Transportation and Logistics. Each grant is \$150,000. These grants fund consortia, which will create new curricula that respond to the emerging needs of businesses in the various industry sectors. Once developed, these new curricula will be available statewide for use by all New Jersey institutions. Copies of the curricula for the first round grants can be found at <http://www.njnextstop.org/> under the course materials icon. This program is a joint effort among the Departments of Education and Labor and Workforce Development and the NJ Commission on Higher Education.

### **Financial Services**

#### **Lead: New Jersey Institute of Technology**

In 2005, the Northeast Regional Economic Innovation Alliance (NREIA), comprised of educational partners, workforce investment boards and industry partners from eight northern New Jersey counties (Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union and Warren), was formed in response to a U.S. Department of Labor federal funding opportunity - Workforce Innovation in Regional Economic Development (WIRED) to address regional workforce development. NREIA received a \$100,000 planning grant from the federal government to further develop its initiative, which focuses on encouraging regional collaboration among public and private entities to develop a more highly skilled workforce in order to attract economic development and jobs in the region. Partners within NREIA from Bergen, Essex and Hudson counties leveraged these efforts to become the recipient of the Governor's award to establish the Financial Services Innovation Partnership Institute. Industry partners including Prudential Financial, Sovereign Bank and Mellon Financial will play a central role in defining the required basis of knowledge; industry based work-related standards and providing a cohesive set of recommendation to educators. Contact: Dr. Gale Spak, [Gale.Spak@NJIT.EDU](mailto:Gale.Spak@NJIT.EDU)

### **Information Technology**

#### **Lead: Camden County College**

Information Technology (IT) workers must be able to build the underlying networks, develop technologies to get devices to communicate, and create the hardware that can handle the digital data. To address these issues, Camden County College in partnership with NJIT will create an Information Technology Innovation Partnership Institute to unite the efforts of key industry, state workforce development agencies and academic partners. This IPI will serve to streamline the transition from NJ public IT education programs to real-world IT employment in the state. The design of the IPI educational ladder will be based on the industry needs as expressed by experts from local IT businesses, including Verizon and Comcast. By allowing industry representatives to determine the competencies needed by current and future workers, and using these competencies as learning outcomes in the curriculum development process, the IT IPI will build the nucleus of an industry-led workforce development system. Contact: Dr. Melvin Roberts, [mroberts@camdencc.edu](mailto:mroberts@camdencc.edu)

### **Biotechnology/Pharmaceutical**

#### **Lead: Rutgers University**

To be competitive in the international economy, the NJ Biotechnology/Pharmaceutical industry needs a pipeline leading towards careers in its companies. Under the Bio/pharma IPI Rutgers will lead representatives of more than 200 biopharma firms and 34 education and training organizations to align the education and training resources with the workforce development needs of the bio/pharma industries of the state. In addition, the Institute served as the basis for the successful application for a new Bio-1 regional partnership through the federal Workforce Innovation in Regional Economic Development (WIRED) program. The US Department of Labor awarded \$5.1 million to the Bio-1 partnership. Contact: Dr. David Finegold, [dfinegold@smlr.rutgers.edu](mailto:dfinegold@smlr.rutgers.edu)

**Clean Energy Technology****Lead: Stevens Institute of Technology**

Stevens' Institute of Technology has created a partnership with Bergen Community College, PSE&G, PJM Interconnection, and Erin Engineering Company to focus on nuclear power workforce development. The partnership is proposing a program that consists of four components: a "*Nuclear Power Engineering Concentration*" in the Mechanical Engineering program at Stevens; a "*Technician Certificate*" in nuclear power technology to be offered at Bergen CC; a *Clean Energy Technology Education* program for New Jersey high schools; and a continuing education program for working professionals in the industry. The intent of this program is "to provide participating students with the necessary fundamental knowledge, design experience, and "hands-on" practical skills needed to meet the next generation nuclear power workforce education and training needs." Contact Dr. Hamid Hadim, [ahadim@stevens.edu](mailto:ahadim@stevens.edu)

**Energy Efficient and Renewable Energy****Lead: Essex County College**

Essex County College (ECC) is taking on the challenge of upgrading New Jersey's workforce by providing the tools for the current and future workforce to progress up the career ladder in the energy efficiency and renewable energy sector. It is therefore proposing the creating of a new certificate program, *Energy Efficiency/Renewable Energy Technology* (EE/RET). The certificate program will focus on incorporating "green technology" into the building construction and facilities management industries, and on "developing renewable energy resources." The John J. Heldrich Center for Workforce Development and the Center for Energy, Economic & Environmental Policy will jointly facilitate the development of the curriculum. Contact: Mr. John Vadnais [director@ipigreencurriculum.org](mailto:director@ipigreencurriculum.org)

**Advanced Manufacturing****Lead: New Jersey Institute of Technology**

Led by NJIT, the partnership includes Camden, Newark, and Union counties' Workforce Investment Boards. The objective of the partnership is to develop courses that will prepare students for careers in advanced manufacturing and to assist educational institutions in keeping their curricula relevant and current to the needs of the manufacturing workforce. The plan is to analyze and evaluate the manufacturing education needs of NJ companies, modify existing curricula, improve the manufacturing industry's public image, and address recruitment strategies. Course materials, software, and laboratory and computer components developed by this partnership will be made available to the program participants. Contact: Dr. Ernest Geskin, [geskin@njit.edu](mailto:geskin@njit.edu)

**Transportation and Logistics****Lead: Rutgers University**

Rutgers' proposal creates a TLD Talent Network to "identify sector workforce needs, develop curricula to meet identified needs, and implement various workforce services." A team of nine educational institutions, four Workforce Investment Boards, and North Jersey WIRED would create the network, with the guidance of two additional WIRED regions. A number of employers from the TLD sector would be part of the network, including UPS, Wakefern Food Corp., and U.S. Foodservice, Inc., as well as a number of industry associations. The proposal contains four phases: identification of industry needs; identification of industry solutions; development of new curricula; and dissemination and implementation of curricula. Contact: Dr. Aaron Fichtner, [fichtner@rci.rutgers.edu](mailto:fichtner@rci.rutgers.edu)