



## State of New Jersey

COMMISSION ON SCIENCE AND TECHNOLOGY

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### New Jersey Commission on Science and Technology Grant Awardees June 24, 2008

#### Edison Innovation R&D Fund

- **Carbozyme, Inc** of Monmouth Junction, NJ partnering with Princeton University  
Carbozyme is in the process of developing biomimetic technology for CO2 capture and will create prototype enzyme-catalyzed systems for the DOE.
- **Lightening Energy, Inc** of Dover, NJ  
Lightening Energy plans to develop and manufacture cost effective and more efficient battery modules for hybrid electric motor vehicles.
- **Niiki Pharma, Inc** of Hoboken, NJ  
Niiki Pharma will conduct pre-clinical trial studies of its lead compound in the treatment of cancer tumor cells.

#### New Jersey Technology Fellowships

- **3D Biotek, LLC of North Brunswick with Marika Bergenstock of Rutgers University**  
3D Biotek is a leader in the research and development of novel 3-dimensional cell culture devices for stem cell/tissue engineering, and drug discovery applications. The fellow will aid in the development and use of these devices.
- **Alfagene Biosciences, Inc of Somerset with David Harrison of UMDNJ**  
Alfagene will take advantage of an innovative and proprietary human adult stem cell based technology platform to derive epithelial cells from tissue isolated from the gastrointestinal (GI) tract. The fellow will take part in research concerning this novel biomarker.
- **Frontier Performance Polymers Corp. of Parsippany with Veljko Samardzic of NJIT**  
Frontier is a technology-driven interdisciplinary company capable of integrating R&D, system design, lightweight material development, component molding, material testing, prototype fabrication and manufacturing expertise with state-of-the-art computer modeling and simulation technology for the defense, energy, environmental, and manufacturing

markets. The fellow will help Frontier expedite the development and commercialization of these products.

- **Infostat, Inc of Belle Meade with Ming-Tsung Ho of Rutgers University**

Infostat is serving local and national opto-electronic industry with its high quality specialty coating. The role of the post doc will be to enhance these technologies through research and development

- **New Visual Media Group, LLC of Eatontown with Weizhong Chen of NJIT**

The goal of this project is to apply our already proven ElectroPolymeric Display (EPD) technology to dynamic windows which will have a major impact in solving the energy problem. The role of the post doc will be to help optimize these materials and process for manufacture.

- **Niiki Pharma, Inc. of Hoboken with Rebecca Baerga of UMDNJ**

Niiki Pharma has a unique business model driven by its executive team's extensive experience in cancer drug development and marketing. The post doc will help the company towards clinical trials of its unique cancer fighting compound.

- **Rational Affinity Devices, LLC of Newark with Liliana Pérez of UMDNJ**

Rational Affinity is combining rational molecular design and engineering in a way that significantly enhances the quality, performance and reliability of biomedical and healthcare products. The post doc will help the company in its research of novel dyes that light up in particular cell-types, but not others, that will allow for the real time monitoring of cells.

- **Signum Biosciences, Inc. of Monmouth Junction with Jose Fernandez of Rutgers University**

Signum Biosciences is a private biotechnology company dedicated to developing small molecule therapeutics derived from its Signal Transduction Modulation (STM) platform to modulate signal transduction imbalances. Dr. Fernandez's extensive experience in both tissue-culture and mouse husbandry will help ensure that Signum achieves its goals to develop its therapeutics.

- **Snowdon Inc of New Brunswick with Oyenike Olabisi of UMDNJ**

Snowdon is a pharmaceutical company engaged in the discovery and development of drugs for the treatment of cancer, pain, neurological disorders and infectious diseases. The post doc will gain experience in the use of scientific approaches and strategies employed in the discovery and development of anticancer drugs. She will be mentored and guided by an experienced team of scientists at Snowdon.

- **UV Solutions, Inc. with Dr. Jenny Mahoney**

UV Solutions is in the development of an innovative and efficient method for the production of ultraviolet light. The fellow will assist in commercializing the product by using her expertise in electron beam physics to investigate the reproducibility and quality of available carbon nanotube emitters require for the product.

- **Petska Biomedical Laboratories with Dr. Gina Conforti**

Petska is developing and researching the use of interferon and interferon related products. The fellow has an extensive background in the use of these products and will continue to work in the company developing these products.

- **PortaScience, Inc with Dr. Lizabeth Romero-Perez**

PortaScience is developing a simple-to-use rapid bacteria test that will assist in timely treatment decisions for mastitis in dairy cows. The fellow, who has an extensive background in microbiology and molecular biology, will be working with the PortaScience engineering group to develop this product.

### **SBIR Bridge Grant Application**

- **BanDeMar Networks, Inc.** located in Newark, NJ

BanDeMar Networks is creating a network service called Just-In-Time Training for Emergency Incidents System that will allow for real time multimedia data to be transferred to Emergency Responders over a cell phone network (regardless of phone or service providers).

- **Simphotek, Inc** located in Newark, NJ

Simphotek is developing a general purpose software for CAD that will allow for better modeling of photonic materials and devices.

### **Incubator Seed Fund Grant**

- **3D Biotek, LLC** located at the Commercialization Center for Innovative Technologies  
3D Biotek is engaged in the development and commercialization of 3-dimensional cell culture devices for stem cell/tissue engineering and drug discovery applications.

- **iMedia Streams, LLC** located at the NJIT Enterprise Development Center  
iMedia Streams is developing a system to connect online interactions with television content in order to develop more efficient targets for advertisers.

- **Lenterra, Inc** located at the NJIT Enterprise Development Center  
Lenterra will develop a micro-optical shear stress sensor for pharmaceutical processing equipment and medical diagnostics.

- **ProFACT Proteomics, Inc** located at the Commercialization Center for Innovative Technologies  
Profact Proteomics will file six new patents enhancing its tools in drug discovery/validation and diagnostic development.

- **Simphotek, Inc.** located at the NJIT Enterprise Development Center  
Simphotek will develop a prototype and file patents and license agreements for its general purpose software for CAD.

- **Switch2Health Corp.** located at the Commercialization Center for Innovative Technologies  
Switch2Health is using its patent pending technologies to create an integrated system that is designed to reward physical activity and lead to a healthier lifestyle.

### **Edison Innovation Federal Matching Program**

#### **Rutgers University in collaboration with UMDNJ.**

The Principal Investigator of this program is Joachim Kohn. These funds will be a match for the five year \$42.5 million federal grant awarded under the Armed Forces Institute of Regenerative Medicine.