

Press Release



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GOVERNOR ANNOUNCES \$3 MILLION FOR NANOBIOTECH RESEARCH GRANTS

Funds to support 12 cutting-edge research projects, advance discoveries in science and medicine at the atomic level

BALTIMORE, MD (June 4, 2009) – Governor Martin O’Malley announced today the recipients of nearly \$3 million in research funding through the 2009 Maryland Nanobiotechnology Research and Industry Competition Grants. Twelve industry-leading research projects from the public and private sector received a one-time award for operating and capital funding. This is the first time Maryland has conducted a statewide nanobiotechnology research grants competition. Nanobiotechnology is the revolutionary application of life sciences manufacturing, diagnostics, and delivery at the atomic level that has the potential to dramatically reshape the biotechnology industry.

“These grants are an important part of our long-term strategy for growing Maryland’s bioscience industry, creating jobs, and positioning Maryland as a national leader in bio and life sciences,” said Governor Martin O’Malley. “These 12 grants will provide critical funding to Maryland companies working to develop innovative life saving technologies for the treatment of cancer and diagnosis of infectious diseases.”

“I am pleased that the newly-created Maryland Biotechnology Center is already making a significant impact in our state’s life sciences enterprise with this \$3 million in research funding,” said Christian S. Johansson, Secretary of DBED. “This investment in nanobiotechnology demonstrates Maryland’s commitment to supporting emerging technologies that will ultimately stimulate job creation and financial benefits in our state.”

DBED, through the MBC, and TEDCO jointly administered the nanotechnology grant competition. 103 applications were received in response to the competition’s solicitation with 43 finalists subject to technical reviews of their research proposals. A total of \$3 million was available in the competition for research projects, up to \$250,000 per grant. The 12 selected grant recipients are all Maryland-sited and include institutes of higher education, public and private; nonprofit organizations; and for-profit entities, including small businesses.

Funding for this one-time research grant program to support nanobiotechnology research grants was provided through DBED. Last year, the General Assembly enacted the Coordinating Emerging Nanobiotechnology Research (CENTR) in Maryland program that authorizes TEDCO to provide future grants for nanobiotechnology research projects.

“This year’s one-time program is providing the Maryland science and technology community with an impressive amount of valuable data on this novel topic,” said Renée Winsky, president and executive director of TEDCO. “The interest we received in the grant competition validates the General Assembly’s establishment of The CENTR program in the TEDCO statute and I look forward to the progress and results that stem from this important research.”

The 12 grant recipients are:

- **Aeras Global TB Vaccine Foundation**, a \$250,000 research project led by John Fulkerson, entitled, *Targeted Protein Expression*;
- **AparnaBio**, a \$250,000 research project led by Puthupparampil Scaria, in collaboration with the University of Maryland Baltimore (UMB) and Siranomics, entitled, *Targeted Anti-anagenic siRNA Nanoparticle to Treat Lung Cancer*;
- **ASR&D Corporation**, a \$250,000 research project led by Jacqueline Hines, in collaboration with Temple University, Avianna Molecular & Technologies, and Drexel University, entitled, *Acoustic Array Biosensor Utilizing Nanostructured Films for Multiplexed Point of Care Diagnosis of Infectious Agents*;
- **Bioactive Surgical**, a \$250,000 research project led by Lew Schon, in collaboration with Johns Hopkins University (JHU) and Union Memorial Hospital, entitled, *High Density Nanofilms for Orthopedic Therapies*;
- **Cytime**, a \$250,000 research project led by Gulio Paciotti, in collaboration with Virginia Polytechnical Institute and the University of Maryland Biotechnology Institute (UMBI), entitled, *Development and Pilot Manufacturing for a Multifunctional Tumor Targeting Nanomedicine*;
- **Johns Hopkins University**, a \$230,000 research project led by Jeff Bulte, in collaboration with Sugivieson, entitled, *Image-Guided Encapsulated Cell Therapy using Multimodal Nanoparticles*;
- **Johns Hopkins University**, a \$250,000 research project led by Venu Raman, in collaboration with the University of Maryland Baltimore County (UMBC), entitled, *Functional Characterization of a Novel RNA Helicase Inhibitor Encapsulated in a Dual-MR Contrast Nanoparticles for Breast Cancer Treatment*;
- **The University of Maryland Baltimore**, a \$250,000 research project led by Joseph Lakowicz, in collaboration with the University of Maryland School of Medicine and Advanced Fluidics, entitled, *Plasmon-Controlled Fluorescence and its Application to Fluorescence Sensing*;
- **The University of Maryland College Park**, a \$200,000 research project led by Arthur La Porta, in collaboration with the National Cancer Institute (NCI) Robert Wood Medical School, entitled, *Advanced Optical Torque Wrench for Manipulation of DNA structures*;

- **The University of Maryland College Park**, a \$250,000 research project led by Bruce Yu, in collaboration with the National Institute for Standards and Technology (NIST), entitled, *Force-Sensitive Nano Networks (FSNN)*;
- **The University of Maryland College Park**, a \$232,000 research project led by Volker Briken, in collaboration with the University of Maryland Medical School, entitled, *Targeted Drug Delivery Mediated Nanocontainers*; and
- **The University of Maryland College Park**, a \$250,000 research project led by Reza Ghodssi, in collaboration with the University of Maryland Biotechnology Institute, entitled, *A Micro-Direct Methanol Fuel Cell with Nanostructured Platinum Catalysts Using the Tobacco Mosaic Virus*.

About DBED:

The Maryland Department of Business and Economic Development stimulates private investment and creates jobs by attracting new businesses, encouraging the expansion and retention of existing companies, and providing workforce training and financial assistance to Maryland companies. The Department promotes the State's many economic advantages and markets local products and services at home and abroad to spur economic development and international investment, trade and tourism. Because they are major economic generators, the Department also supports the Arts, film production, sports and other special events. For more information, visit www.choosemaryland.org

About TEDCO:

The Maryland Technology Development Corporation (TEDCO), an independent entity, was established by the Maryland General Assembly in 1998 to facilitate the creation of businesses and foster their growth in all regions of the State. TEDCO's role is to be Maryland's leading source of funding for seed capital and entrepreneurial business assistance for the development, transfer and commercialization of technology. TEDCO connects emerging technology companies with federal laboratories, research universities, business incubators and specialized technical assistance. For the fifth consecutive year, TEDCO was recognized as the most active seed/early-stage investor in the nation in the August 2008 issue of Entrepreneur magazine and received the national Excellence in Technology-Based Economic Development award from the State Science and Technology Institute (SSTI) for the Maryland Technology Transfer Fund (MTTF) program in October 2008. For more information on TEDCO and its programs and resources, visit www.MarylandTEDCO.org.

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