



**Massachusetts Life Sciences Center Completes Second Round of New Investigator Grants**

*Three additional awards brings second round to nearly \$2 million*

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**Waltham, MA** – The Massachusetts Life Sciences Center has completed its second round of New Investigator Matching Grants by awarding \$600,000 to three Harvard-affiliated researchers. These grants supplement the \$1,380,256 awarded last month to seven other young scientists. The Center’s New Investigator Grants advance the careers of New Investigators who are working on innovative life sciences research at Massachusetts research institutions.

The three newly announced recipients will receive \$100,000 per year over the next two years. Each grant will be matched dollar-for-dollar by the scientist’s research institution.

This is the Center’s second round of New Investigator Grants. The first round, announced in July 2008, awarded over \$3.1 million to eleven Massachusetts investigators. Thus far, the Center has invested a total of \$12.6 million in scientific research grants, matched dollar-for-dollar by academic institutions and company sponsors, creating a total pool of \$25.2 million to support life sciences research in the Commonwealth.

“The New Investigator Matching Grants drive innovation in Massachusetts, while strengthening our life sciences workforce by drawing talented scientists here to conduct their research and keeping talented researchers in the field,” said Dr. Susan Windham-Bannister, President & CEO of the MLSC. “By investing in these young researchers, we are ensuring that our state will see even more prospects for scientific advancement, job creation, and overall growth.”

“After a rigorous review process by myself and other members of the Center’s Scientific Advisory Board, we recommended these projects as holding great potential for scientific

advancement while opening up new opportunities for job creation and growth,” said Dr. Harvey Lodish, Chair of the MLSC Scientific Advisory Board, Member of the Whitehead Institute for Biomedical Research, and Professor of Biology and Professor of Bioengineering at MIT. “By investing in the next generation of researchers, we are investing in the future of scientific innovation in our state.”

The three new recipients announced today are:

**Dr. Briana Burton (Harvard University) -- \$100,000 per year for two years**

Dr. Burton will develop new methods to study the mechanisms used by bacteria to transport DNA (chromosomes) across cell membranes. Bacterial nucleic acid transport is vital in the spread of antibiotic resistance genes between bacteria, as well as in the formation of viable bacterial spores. Further, biomedical researchers rely daily on the ability to move nucleic acids into and out of cells via synthetic methods. At this time surprisingly little is known about the fundamental biology of the protein machinery cells have designed for nucleic acid transport.

Dr. Burton, an Assistant Professor of Molecular and Cellular Biology says the New Investigator Grant will allow her extraordinary scientific freedom. “A major challenge in starting my own lab has been finding a balance between working on high-risk, high-reward projects, and the lower impact projects that will produce immediate results,” says Dr. Burton. “The funding from the Massachusetts Life Sciences Center allows us to aggressively and comprehensively pursue the high-impact projects. It is wonderful to be a part of this program that recognizes the importance of basic research in building and supporting medical and biotech advances.”

**Dr. Matthias Marti (Harvard School of Public Health) -- \$100,000 per year for two years**

Dr. Matthias Marti will work on establishing a high throughput screen to identify compounds that inhibit the formation and development of malaria transmission stages. The reduction and eventual elimination of malaria transmission is a major goal of the worldwide malaria eradication program. In preparation for the proposed transmission stage screen, his laboratory has developed a series of crucial technologies for the standardized culture, the detection and the quantification of these stages *in vitro*. Dr. Marti hopes that the proposed research will lead to the discovery of small molecules that can be developed into malaria transmission blocking drugs.

“This award will not only ensure realization of a project that is a central part of my research plan,” says Dr. Marti, “it will hopefully contribute to the worldwide efforts to develop new interventions against human malaria.”

**Dr. Tobias Ritter (Harvard College) -- \$100,000 per year for two years**

Dr. Ritter hopes to use late-stage fluorination to aid in the development of new pharmaceuticals and diagnostics. Many pharmaceuticals and positron-emission tomography (PET) tracers contain fluorine atoms due to their favorable properties. The scientific merit of the proposed research is the application of the first late-stage

fluorination reaction, which was developed in the PI's lab, to the synthesis of new pharmaceuticals and PET tracers. Specifically, he proposes to make fluoromorphine and the PET tracer fluoro-PIB that may afford an analgesic with better side effect profile than morphine and a PET tracer to assist in the diagnosis of Alzheimer's, respectively.

"I am confident that this grant will give me the freedom to pursue opportunities that I never thought I'd have," says Dr. Ritter. "This opens up so many doors for me that will hopefully lead to the development of new diagnostics and pharmaceuticals."

On June 24, 2009, the Massachusetts Life Sciences Center awarded seven other New Investigator Grants to researchers from seven other colleges and universities in Massachusetts:

- **Dr. Jeffrey Bailey of UMass Medical School** will receive **\$100,000** per year for two years
- **Dr. Christopher Gabel of Boston University Medical Center** will receive **\$100,000** per year for two years
- **Dr. Sun Hur of the Immune Disease Institute at Children's Hospital of Boston** will receive **\$100,000** per year for two years
- **Dr. Raul Mostolovsky of Massachusetts General Hospital** will receive **\$100,000** per year for two years
- **Dr. Mark Niedre of Northeastern University** will receive **\$180,256** over the next two years
- **Dr. Konstantina Stankovic of the Massachusetts Eye and Ear Infirmary** will receive **\$100,000** per year for two years
- **Dr. Satoshi Yoshida of Brandeis University** will receive **\$100,000** per year for two years

#### **About the Massachusetts Life Sciences Center**

The Massachusetts Life Sciences Center is a quasi-public agency of the Commonwealth of Massachusetts tasked with implementing the Massachusetts Life Sciences Act, a ten-year, \$1 billion initiative that was signed into law in June of 2008. The Center's mission is to create jobs in the life sciences and support vital scientific research that will improve the human condition. This work includes making financial investments in public and private institutions that are advancing life sciences research, development and commercialization as well as building ties between sectors of the Massachusetts life sciences community. For more information, visit [www.masslifesciences.com](http://www.masslifesciences.com).

#### **About the New Investigator Grant Program**

The New Investigator Solicitation seeks to spur innovative new research and advance the careers of new investigators who are working on cutting-edge life sciences research at Massachusetts research institutions. For more information on the program, visit <http://www.masslifesciences.com/grants/invest.html>

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