

SEPTEMBER 06, 2006

HHMI Recruits New JFRC Group Leaders and Fellows

The Howard Hughes Medical Institute (HHMI) announced today that it has recruited 10 additional scientists to head research laboratories at its Janelia Farm Research Campus (JFRC), which is opening in Ashburn, Virginia in October.

The Institute is also announcing that the next open competition for Janelia Farm group leaders will begin on September 1. Recruitment of new fellows is ongoing. Qualified scientists are invited to apply through the Janelia Farm web site at <http://www.hhmi.org/janelia/>.

The 10 scientists selected in the latest recruitment effort will move to Janelia Farm during the late summer and fall of 2006. "The highly creative scientists we have selected have all taken unique paths through academic or industrial research environments. They bring different but complementary skills to Janelia Farm," said Janelia Farm director Gerald M. Rubin, who led the recruitment. "And they are all eager to work together to solve some of the most difficult scientific problems of our time."

"The scientists we have assembled are all committed to the idea that creativity, collaboration, and the freedom to explore new areas, coupled with generous long-term support, are a winning combination for science."

- **Gerald M. Rubin**

At Janelia Farm, the new group leaders and fellows will join a close-knit scientific community of six scientists who were selected last year to lead research groups at JFRC. The scientists are working on two broad goals: Discovering the basic rules and mechanisms of the brain's information-processing system, and developing biological and computational

techniques for creating and interpreting biological images.

As HHMI's first freestanding campus, Janelia Farm is a setting in which small research groups can explore fundamental biomedical questions in a highly collaborative, interdisciplinary culture. The \$500 million campus will officially open in October 2006.

All the researchers at Janelia Farm will engage in active bench science and work in small teams that cross disciplinary boundaries to bring chemists, physicists, computational scientists, and engineers into close collaboration with biologists. This highly interactive culture will provide a strong foundation for Janelia Farm's graduate training program. Joint programs have been established with the University of Chicago and the University of Cambridge; other partnerships are being negotiated.

Resident investigators at Janelia Farm fall into two main categories: group leaders and fellows. Group leaders receive an initial appointment of six years. They will each direct research groups of between two and six lab members. The fellows, who receive a five-year appointment, are independent researchers, who are not formally associated with a group leader. They are free to form their own collaborations and will lead a research group of up to two lab members.

The group leaders and fellows have already begun sketching out ideas for their collaborative work on some ambitious projects: building new types of microscopes that will permit scientists to observe living cells in unprecedented detail; learning how the brain adapts and rewires in response to new experiences; deciphering which neurons control specific behaviors in the fruit fly *Drosophila melanogaster*; using protein design and computation techniques to create novel nanosensors that can be used in living organisms and cells; and understanding the physical mechanisms that neurons use to process and store information.

“We have picked big science problems that are not being addressed well in conventional research settings,” said Rubin. “The scientists we have assembled are all committed to the idea that creativity, collaboration, and the freedom to explore new areas, coupled with generous long-term support, are a winning combination for science.”

The names and current affiliations of those scientists newly selected to join Janelia Farm are:

Group Leaders

- **Alla Y. Karpova, Ph.D.**

Cold Spring Harbor Laboratory

- **Loren L. Looger, Ph.D.**

Stanford University

- **Jeffrey C. Magee, Ph.D.**

Louisiana State University

- **Scott M. Sternson, Ph.D.**

The Rockefeller University

Director of the Applied Physics and Instrumentation Group

- **Harald F. Hess, Ph.D.**

Nuquest Research, LLC

Fellows

- **Vivek Jayaraman, M.S.**

California Institute of Technology

- **Rex Kerr, Ph.D.**

The Salk Institute

- **Michael B. Reiser, M.S.**

California Institute of Technology

- **Dmitry Rinberg, Ph.D.**

Monell Chemical Senses Center

- **Elena Rivas, Ph.D.**

Washington University School of Medicine

The new scientists will join six previously selected group leaders, who have just moved in or will soon arrive at Janelia Farm. The previously selected group leaders are:

- **Eric Betzig, Ph.D.**

New Millennium Research

- **Dmitri B. Chklovskii, Ph.D.**

Cold Spring Harbor Laboratory

- **Sean R. Eddy, Ph.D.**

HHMI at Washington University School of Medicine in St. Louis

- **Eugene W. Myers, Ph.D.**

University of California, Berkeley

- **Julie H. Simpson, Ph.D.**

University of Wisconsin-Madison

- **Karel Svoboda, Ph.D.**

HHMI at Cold Spring Harbor Laboratory

“As with our previous recruits, the scientists we have selected were trained in a range of disciplines that match the interdisciplinary objectives of Janelia Farm,” said Rubin. “There are three physicists, two chemists, three biologists and two engineers.”

The research programs at Janelia Farm are a natural extension of HHMI's commitment to offering creative scientists freedom from constraints that limit their ability to do groundbreaking research. The Janelia Farm campus and its scientific program will closely complement HHMI's longstanding investigator program. That program currently consists of more than 300 researchers at 66 universities throughout the United States, who have the freedom and flexibility to push the bounds of knowledge in some of the most important areas of biomedical research.

This is the second round of recruitment for the Janelia Farm group leaders and the first round for fellows. HHMI employed an open international competition to identify scientific researchers in the fields of biology, chemistry, computer science, engineering, mathematics and physics. The competition for group leaders was open to scientists at any career stage. More than 200 applications were received for the group leader positions. The applications were reviewed by the current group leaders, Janelia Farm senior fellows, and 15 HHMI investigators.

When the campus is at full capacity in 2009, there will be 24 group leaders and about 20 fellows. The permanent research staff will number about 250

people and there will be up to 100 visiting scientists. The visiting scientists will be at Janelia Farm to pursue collaborations or take advantage of the campus's unique resources. Depending on the purpose of their visit, they may stay from one week to as long as two years.