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IN THE NEWS

Recent Grant Supports Research Trainees and Junior Faculty in Autism

“Transformative.” That’s the way David Golan, HMS dean for graduate education, described the new Nancy Lurie Marks Clinical and Research Fellowship Program in Autism. This cross-cutting initiative, funded by the Nancy Lurie Marks Family Foundation, will provide nearly \$5 million over six years to support HMS faculty and students interested in autism and related neurological disorders.

The program will fund autism-focused basic and clinical research in a range of fields, including genetics, genomics, neurology, neuroscience, psychology, informatics, developmental pediatrics, endocrinology and molecular biology. In addition, it will integrate participants across researcher levels, providing funding for junior faculty and postdoctoral trainees, as well as medical students in the new Scholars in Medicine and HMS-PRIME (MD–MMSc) programs. As such, the Nancy Lurie Marks Clinical and Research Fellowship Program in Autism is building on HMS initiatives that enhance opportunities for student research and promote translational science, as embodied in the Harvard Catalyst. Both are important priority areas in the Strategic Planning Initiative led by Dean Jeffrey Flier.

Michael Greenberg, the Nathan Marsh Pusey professor of neurobiology and head of that department at HMS, will direct the program; Joseph Volpe, a clinician and clinical researcher and the Bronson Crothers Distinguished Professor of Neurology at Children’s Hospital Boston, will be codirector, overseeing the clinical research aspects and the medical student component.

The establishment of this program could not have come at a more opportune time. “Research in autism is at a critical stage where scientific progress is providing new insight into this disorder at a

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very rapid rate,” noted Greenberg. “It is our hope that the Nancy Lurie Marks Clinical and Research Fellowship Program in Autism will allow us to bring our increased understanding of the neurobiological basis of autism to bear on the development of new therapies for treating this disorder.” Another hope is that introducing autism as an area of focus to individuals early in their careers may spark interest in the field as a direction for the future.

Each Nancy Lurie Marks fellow (junior faculty member or postdoctoral trainee) and scholar (medical student) will work with an expert mentor and laboratory in autism research at HMS, either on the Quad or in one of the HMS-affiliated academic medical centers. These fellows and scholars will then be part of a community of autism researchers across the HMS community and will also interact with parallel groups of young researchers throughout HMS.

“This is a very exciting milestone for HMS education,” said Golan. “We anticipate that this program will be transformative for autism research at HMS and that the fellowships will have a transformative effect on those who participate.”

—Jan Reiss

HMS Immunologist a Leader of New TB, HIV Institute in South Africa

Bruce Walker, HMS professor of medicine at Massachusetts General Hospital, will be one of four initial principal investigators at a new tuberculosis and HIV research center being established by the Howard Hughes Medical Institute (HHMI) in South Africa.

HHMI is undertaking the initiative in partnership with the University of KwaZulu-Natal (UKZN), establishing the KwaZulu-Natal Research Institute for Tuberculosis and HIV (K-RITH). K-RITH will create an international center for research and training with the goal of making major scientific contributions to the worldwide efforts against the TB and HIV epidemics.

K-RITH builds on work already begun by Walker and several other Harvard researchers and the Harvard Initiative for Global Health (HIGH). In 2002, a grant to Walker from the Doris Duke Charitable Foundation led to the construction of the Doris Duke Medical Research Institute

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(DDMRI) at UKZN, which formally opened in 2003 to promote AIDS research at the heart of the global HIV epidemic.

The DDMRI serves as the nucleus for the new expanded effort to focus not just on HIV but also on TB. Last summer, Branch Moody, HMS associate professor of medicine at Brigham and Women's Hospital; Sarah Fortune, HSPH assistant professor of immunology and infectious diseases; and Eric Rubin, HMS assistant professor of medicine (microbiology and molecular genetics) and HSPH associate professor of immunology and infectious diseases, received funding from HHMI and HIGH for work on TB and HIV in South Africa.

The new institute will be located in a facility to be built on the campus of the Nelson R. Mandela School of Medicine. It will be connected to existing facilities of programs in the DDMRI in which Walker and other HMS researchers play key roles, the HIV Pathogenesis Programme and the Center for the AIDS Program of Research in South Africa. The new building will include two floors of biosafety level 3 labs. HHMI has pledged a total of \$60 million for construction and research over the next 10 years.

Walker was also recently named director of the Phillip T. and Susan M. Ragon Institute of MGH, MIT and Harvard. The institute was founded in February with a gift of \$100 million from the Ragon, to support innovative, unconventional research; accelerate the discovery of an HIV/AIDS vaccine; and foster worldwide collaboration among scientists with different but complementary backgrounds.

Walker studies the immune response to viral pathogens, particularly HIV. He is leading an international research effort to understand how some people who are infected with HIV but have never been treated can control the virus through their immune system. He hopes such knowledge can lead to a vaccine and new treatments for the disease.

Presidential Order Regenerates Research on Stem Cells

The executive order signed by President Barack Obama on March 9 ending restrictions on human embryonic stem cell research thoroughly revamps standard operating procedure at the Harvard Stem Cell Institute.

A ban put in place in 2001 severely limited government funding of work with these pluripotent cells, so the research largely depended on private contributions. These two streams of funding, public and private, and the research they supported had to be kept strictly separate. “We had to do an enormous amount in terms of monitoring purchases and setting up separate accounting procedures,” said David Scadden, one of two scientific directors of the institute and the Gerald and Darlene Jordan professor of medicine at HMS and Massachusetts General Hospital.

Duplicate pieces of equipment had to be purchased and had stickers on them indicating whether they could be used for embryonic stem cell research. Now all of that is gone.”

“More important is the symbolic impact,” Scadden said. “Stem cell scientists no longer operate under a cloud of political ideology.”

In a letter posted on the institute website (www.hsci.harvard.edu), Scadden and Douglas Melton, the institute’s other scientific director, write, “Science as a way of knowing is a very powerful tool for good, and it is liberating to hear that science, not political ideology, will guide the Obama administration in its decisions.”

A day after the President’s order, the Harvard Faculty of Arts and Sciences approved a new undergraduate major focusing on stem cell science. The Harvard department featuring this discipline, Stem Cell and Regenerative Biology (SCRB), is cochaired by Scadden and Melton, who is also a Howard Hughes investigator and the Thomas Dudley Cabot professor in the natural sciences at Harvard. SCRB was the first cross-school department at the University, based at both FAS and the Medical School.

—Robert Neal

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