Bishai Named Director of K-RITH


“As a physician and a scientist, Bill Bishai understands the scale of human suffering caused by tuberculosis and the daunting challenges faced by researchers seeking to identify new strategies for responding to this epidemic,” says HHMI President Robert Tjian. “He is just the kind of leader we hoped to recruit.”

As codirector of the Center for Tuberculosis Research at Johns Hopkins, Bishai focuses his research on understanding how and why the tuberculosis (TB) bacillus is so successful at infecting humans. Bishai says that understanding the fundamental interactions that occur between the microbe and human cells is a critical step in developing new drugs and vaccines to treat tuberculosis. “If one wants to target the infection with drugs, knowing the mechanisms of pathogenesis is an important roadmap for making those drugs,” says Bishai. He plans to use the same strategy at K-RITH to develop quicker, cheaper tools for diagnosing TB infection.

South Africa has more residents infected with HIV than any other nation—an estimated 5.7 million in 2008—and one of the highest per capita rates of TB in the world. KwaZulu-Natal province, home to more than 10 million people, bears an even greater burden of disease than the nation as a whole, with as much as 40 percent of the population positive for HIV.

“Under Bill Bishai’s bold leadership I believe that the studies undertaken at K-RITH will make major scientific contributions that will go a long way in providing insights and possible solutions in the control, diagnosis, and treatment of the devastating co-epidemic of TB and HIV and, more importantly, train a new generation of scientists in Africa, an integral objective of this institute,” said UKZN vice chancellor and principal Malegapuru William Makgoba at the announcement of Bishai’s directorship in Durban, South Africa, in May.

“If it is not great to know that the best research facilities anywhere on the planet for developing and training future scientists in this particular area are located here at UKZN within the continent of Africa?” Makgoba continued. “If I were young and choosing a career, I would reflect profoundly on this.”

The new K-RITH facility, including biosafety laboratories necessary for TB research, will be integrated with the existing Doris Duke Medical Research Institutes. The total cost of constructing the building, which will begin in September 2010, is estimated at about $50 million, with HHMI providing substantial support toward its completion.

K-RITH’s resident research staff will eventually grow to more than 110 people, including eight senior scientists, 40 pre- and postdoctoral students, and a support staff of 40. In 2008, HHMI awarded seed grants totaling more than $1.1 million to scientists in the United States and South Africa as part of a K-RITH development plan and continues to support the initial programs.

Bishai, 50, received both his medical degree and doctorate from Harvard University. He completed his fellowship training in the Division of Infectious Diseases at the Johns Hopkins University School of Medicine and was a Howard Hughes Postdoctoral Research Fellow in the laboratory of Nobel laureate Hamilton Smith. He has authored more than 150 papers in peer-reviewed journals and receives grant support from the National Institutes of Health. He serves on several editorial boards and review panels, and he is cochair of the World Health Organization Stop TB Partnership’s Working Group for New TB Drugs. Bishai and his family expect to relocate to Durban in 2011.