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**GW RECEIVES \$1.5 MILLION GRANT FROM W.M. KECK FOUNDATION TO DEVELOP
INNOVATIVE NEW *IN VIVO* “PROTEIN MICROSCOPE”**

**For the First Time New Microscope Will Provide View of Proteins Interacting in Living Tissue
to Help Researchers Combat Neurodegenerative Diseases**

WASHINGTON — The George Washington University’s Institute for Proteomics Technology and Applications (IPTA) announced today it has received a three-year, \$1.5 million grant from the W.M. Keck Foundation to develop a new *in vivo* “protein microscope” that will allow researchers for the first time to view how proteins interact in living tissue. The microscope is expected to enable researchers to identify protein targets that may advance the treatment of neurodegenerative diseases such as ALS (Lou Gehrig’s disease) and spinal muscular atrophy.

“This research has the potential to transform the field of proteomics,” said John F. “Skip” Williams, University provost and vice president for health affairs. “The George Washington University is proud to be on the cutting edge of a dynamic field that has the opportunity to improve the quality of people’s lives.”

The research has two primary phases. First, researchers will create an *in vivo* “protein microscope” that provides images of protein distributions in living cells and tissues by combining a high-tech mass spectrometer and an optical microscope. Second, GW and Children’s National Medical Center researchers will use the “protein microscope” to explore protein distributions in and around the neuromuscular junction in unprecedented detail.

“We thank the Keck Foundation for their support and look forward to breaking new ground in the study of the structure and function of proteins,” said Donald R. Lehman, executive vice president for academic affairs. “This proposal for a ‘protein microscope’ is the kind of high-yield, multi-team research that is the future of the sciences not only at The George Washington University, but across the United States. We worked diligently to mold focused research groups into a cross-disciplinary team, which includes Children’s National Medical Center, that will produce highly visible, unique research with the support of the Keck Foundation.”

Akos Vertes, professor of chemistry and of biochemistry and molecular biology, will serve as the principal investigator for the project. The broad objectives of the GW IPTA are to engage in research in developing new proteomics technology and in using that technology for proteomics research. The IPTA is an interdisciplinary research collaborative among the University’s Departments of Chemistry, Biology and Physics at the Columbian College of Arts and Sciences; the Departments of Biochemistry and Molecular Biology and of Pharmacology at the School of Medicine and Health Sciences; and the Department of Computer Science at the School of Engineering and Applied Science. The institute has received funding from GW’s Research Enhancement Fund to seed its growth.

Based in Los Angeles, the W.M. Keck Foundation was established in 1954 by the late W.M. Keck, founder of the Superior Oil Company. The foundation’s grant making is focused primarily on pioneering efforts in the areas of medical research, science and engineering. The foundation also maintains a Southern California Grant Program that provides support in the areas of civic and community services with a special emphasis on children.

For more information about the W.M. Keck Foundation, visit www.wmkeck.org.

For more information about the GW IPTA, visit www.bioinformatics.gwu.edu/academics/proteininstitute.php.

For more news about GW, visit the GW News Center at www.gwnewscenter.org.