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Penn Institute for Regenerative Medicine receives \$3.9M: Investigators from the Institute for Diabetes, Obesity and Metabolism to play crucial role in Regenerative Therapies in Diabetes research program.

University of Pennsylvania's newly created Institute for Regenerative Medicine (IRM), in collaboration with the Children's Hospital of Philadelphia (CHOP), Fox Chase Cancer Center, Haverford College, Lincoln University and Thomas Jefferson University, will receive \$3.9 million from Pennsylvania's share of the national tobacco settlement for 2007-2008.

Investigators from the Penn Institute for Diabetes, Obesity and Metabolism (IDOM) will lead the Regenerative Therapies in Diabetes research program under the auspices of this grant.

IDOM investigators, led by Dr. Doris Stoffers, Associate Professor of Medicine, and collaborators at CHOP and Fox Chase will develop and test therapies for preserving and restoring the function of human islet beta cells, which produce insulin and are lacking in patients with diabetes. The research projects represent the full spectrum from bench to bedside, which include a clinical trial directed by Dr. Michael Rickels, Assistant Professor of Medicine and Assistant Director of the Type 1 Diabetes Unit of the IDOM. Basic science projects range from pre-clinical studies of β cell growth in response to an approved diabetes therapy to discovery-based approaches aimed at the identification of new growth factors to enhance β cell growth. The basic science projects will be directed by IDOM investigators Doris Stoffers and Klaus Kaestner, Professor of Genetics, and their colleagues Jake Kushner and Kenneth Zaret from CHOP and Fox Chase Cancer Center, respectively. Critical expertise in human islets will be

provided by the Clinical Core, which is directed by Dr. Ali Naji, Professor of Surgery and Director of the Type 1 Diabetes Unit of IDOM. He will work closely with Dr. Martin Carroll, Associate Professor of Medicine and Dr. Gwen Danet-Desnoyers, Adjunct Associate Professor of Medicine. Both are Directors of the newly developed Xenotransplantation Core.

The program's focus on developing novel treatments for diabetes is in concert with the emphasis that Governor Rendell has placed upon finding new approaches to manage this devastating disease, which he recently described as "a major public health problem that is taking a serious human and economic toll on all Pennsylvanians." He has unveiled a "Diabetes Action Plan" as part of his healthcare initiative and has stressed that health care disparities exist in the Commonwealth, especially in relation to care for chronic diseases including diabetes.

The funding received from the Commonwealth will also be used to expand education programs to teach the scientific basis of regenerative medicine to underserved minority students in the Philadelphia School District. A partnership with Lincoln University and Haverford College will provide exciting opportunities for students to work closely with research investigators. Initiatives aim to develop a pipeline of scientists and clinicians in Pennsylvania, beginning with students at the elementary level and providing opportunities for students to continue their studies at the undergraduate and graduate levels.