

The Virginia G. Piper Charitable Trust and Flinn Foundation Launch \$45 million Initiative to Develop Personalized Diagnostics

Nobel laureate Dr. Lee Hartwell, TGen and the Biodesign Institute at ASU to lead Arizona-based global effort to improve patient outcomes and reduce health care costs

PHOENIX, Oct. 17, 2007 — Two Arizona-based philanthropic organizations have committed \$45 million to fund an innovative initiative to develop personalized molecular diagnostics. The ability to diagnose and treat disease based on every person's unique physiological makeup is critical to enabling physicians to improve health outcomes while at the same time reducing medical costs.

Under the Partnership for Personalized Medicine, The Virginia G. Piper Charitable Trust has committed \$35 million and the Flinn Foundation has granted \$10 million to bring together a wide range of resources to advance a global personalized medicine initiative.

World-renowned scientist Dr. Lee Hartwell, 2001 Nobel laureate and director of Fred Hutchinson Cancer Research Center, has been recruited to lead this effort. The Hutchinson Center, based in Seattle, is a leader in using molecular diagnostics for the early detection and clinical management of cancer and other diseases. In addition to his current position as president and director of Fred Hutchinson Cancer Research Center, he will chair the Partnership executive committee, which includes Dr. George Poste, director of the Biodesign Institute at Arizona State University, and Dr. Jeffrey Trent, president and scientific director of the Translational Genomics Research Institute (TGen).

"It is a tremendous opportunity for me to be a part of this new model for improving health while reducing health care costs that is being funded by the Piper and Flinn foundations," Hartwell said. "The collaboration between TGen, the Biodesign Institute at ASU, other institutions in Arizona and Fred Hutchinson Cancer Research Center brings together enormous expertise to tackle major challenges in bringing new science and technology to disease management."

The cornerstone of the Partnership is the creation of the Virginia G. Piper Center for Personalized Diagnostics that draws upon the scientific strengths of two of the state's leading bioscience entities, TGen and the Biodesign Institute at ASU, each of which will contribute significant laboratory space to the effort. The Piper Center will utilize bioinformatics and high-performance computing expertise at both institutions, existing nanotechnology and imaging expertise at the Biodesign Institute, and supercomputing resources through ASU's Ira A. Fulton School of Engineering.

Additionally, an industrial scale, high-throughput proteomics production facility will be established that taps expertise at both TGen and the Biodesign Institute at ASU in robotics, protein analysis and computing.

Hartwell's involvement provides the Piper Center with opportunity to draw on the Hutchinson Center's extensive capabilities in health economics and the design of clinical and public-health trials through consultative and collaborative relationships.

"The Piper trustees made this investment because Dr. Hartwell has a vision to transform the prevention, diagnosis and treatment of disease," said Dr. Judy Jolley Mohraz, president and CEO of the Piper Trust. "That vision draws together scientists, clinicians, engineers, statisticians, insurers and regulators to work collectively to make health care more targeted and affordable. This initiative holds the promise of making a difference in the quality of life for people here in Arizona and throughout the world."

According to John Murphy, president and CEO of the Flinn Foundation, biomarker discovery and diagnostic development could ultimately lead to earlier disease detection and more precise disease management. "To leverage Arizona's institutional assets, the Flinn Foundation's grant commitment to TGen will link Arizona's research universities, health care providers, research institutes and industry partners throughout the state to support the collection and storage of biospecimens and drive Arizona-centric demonstration projects," Murphy said.

Approximately 50 percent of the Flinn Fund for Arizona Proteomics Research will be available to promote research collaborations to leverage the state's significant institutional resources in this field, Murphy added, with the balance supporting the creation of a high-throughput proteomics production facility.

Proteomics is a promising and cutting-edge field that studies proteins and their functions in the body. The proteomics production facility will focus on discovering new proteins for the development of diagnostic tests for patients with cancer or other illnesses. These tests could ultimately lead to earlier disease detection and more precise disease management.

Even though the necessary technologies to develop personalized diagnostic tests are available, barriers such as the expense of clinical trials and difficulty obtaining clinical samples have significantly slowed the development process. The Partnership will focus on the development, testing and validation of new molecular diagnostic tools and the approval and distribution of these tools for widespread clinical use. This will be accomplished through a series of collaborative demonstration projects that integrate key health organizations.

"The Holy Grail of personalized medicine includes blood-based tests that improve diagnosis and help direct clinical care," said Trent. "The unparalleled opportunity the Partnership provides is to expand the magnitude of proteomic studies across a spectrum of key clinical questions."

The Partnership includes recruitment of new faculty and will engage national and international partners to ensure developments are rapidly commercialized.

"With the team of scientific and clinical research excellence we are assembling, our goal is to transform medicine from the current 'one size fits all' approach to one that is targeted around a patient's unique genetic and molecular profile," Poste said.

Partnerships formed with large health care systems and disease-focused foundations will facilitate the implementation and validation of molecular diagnostics in clinical settings, as well as close ongoing interaction between scientists and clinicians. Health care systems will benefit from newly developed diagnostics through the most cost-effective use of medical treatments, while patients and the public in general will enjoy greater overall health outcomes.

ASU President Michael Crow added that this endeavor “promises to become a shining example of how multiple partners can work together to address a critical need in human health and accelerate solutions that extend beyond our own community.”

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About The Virginia G. Piper Charitable Trust

A private foundation, The Virginia G. Piper Charitable Trust is dedicated to honoring Virginia Galvin Piper’s philanthropic commitment to changing lives and strengthening community in Maricopa County. By investing in nonprofits and encouraging strategic planning for the future, the Trust strives to make Maricopa County a stronger, more nurturing and vibrant community. For more information, visit www.pipertrust.org.

About the Flinn Foundation

The Flinn Foundation is an independent grant-making charity established by a Phoenix physician and his wife (Robert S. and Irene P. Flinn) in 1965. It is dedicated to improving the quality of life in Arizona principally by advancing the medical sciences. It fulfills this mission through its support of various scientific and educational programs and activities, including the Flinn Scholars program. For more information, visit www.flinn.org.

About TGen

TGen is a nonprofit 501(c)(3) organization focused on developing earlier diagnoses and smarter treatments. Translational genomics research is a relatively new field employing innovative advances arising from the Human Genome Project and applying them to the development of diagnostics, prognostics and therapies for cancer, neurological disorders, diabetes and other complex diseases. TGen’s research is based on personalized medicine. The institute plans to accomplish its goals through robust and disease-focused research. For more information, visit www.tgen.org.

About the Biodesign Institute at Arizona State University

The Biodesign Institute at ASU integrates diverse fields of science to cure and prevent disease, overcome the limitations of injury, renew the environment and improve national security. By fusing research in biology, engineering, medicine, physics, information technology and cognitive science, the institute accelerates discoveries into uses that can be adopted rapidly by the private sector. For more information, visit www.biodesign.asu.edu.

About Fred Hutchinson Cancer Research Center

At Fred Hutchinson Cancer Research Center, interdisciplinary teams of world-renowned scientists and humanitarians work together to prevent, diagnose and treat cancer, HIV/AIDS and other diseases. Hutchinson Center researchers, including three Nobel laureates, bring a relentless pursuit and passion for health, knowledge and hope to their work and to the world. For more information, visit www.fhcrc.org.