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## **Three Pennsylvania Universities Receive Awards to Bridge the Funding Gap**

PHILADELPHIA--(BUSINESS WIRE)--Lehigh University, Philadelphia University and Thomas Jefferson University were each awarded \$200,000 in the fourth round of the [University City Science Center's QED Proof of Concept Program](#), the Science Center announced Dec. 12, 2011. It was the first time any of the three universities have received a QED award. The QED Program is designed to facilitate commercial investment in early-stage life science technologies with high potential in the healthcare industry.

The projects receiving awards include a fabric that resists bacterial contamination developed at Philadelphia University, a portable device for delivering oxygen to critical care patients developed at Lehigh University, and a breakthrough diagnostic test for pancreatic cancer developed at Thomas Jefferson University. The projects were selected from 10 finalists by an independent group comprising industry and investment professionals.

"These awards demonstrate that medical technologies of high commercial potential exist at many of our region's research institutions," says Science Center President and CEO [Stephen S. Tang, Ph.D., MBA](#). "We are delighted to see Lehigh University, Philadelphia University and Thomas Jefferson University join the ranks of past QED awardees such as Children's Hospital of Philadelphia, Drexel, University of Pennsylvania, Rutgers and Temple."

"Multi-institutional programs like QED are key to our region's competitiveness as a source of new medical technologies and products," says [Christopher Laing, MRCVS, Ph.D.](#), Vice President of Science and Technology at the Science Center, who oversees commercialization programs including the QED program. "If you look at successful technology clusters, they are built on a critical mass of research infrastructure. The Greater Philadelphia region represents almost 4% of the nation's academic medical research output, and QED creates a mechanism for new product development that mobilizes and showcases that entire powerhouse."

In addition to the \$200,000 award, each research team receives one year of business guidance from the Science Center's network of experienced entrepreneurs to help them bring their technologies to market.

The three technologies selected to receive funding awards in Round 4 are:

- A portable medical oxygen concentrator for patients with lung disease. Mayuresh Kothare, Ph.D. and Shivaji Sircar, Ph.D. of Lehigh University have discovered a way to miniaturize the mechanism that delivers oxygen-rich gas from ambient air, allowing greater energy efficiency, and lower costs. QED Business Advisors Mark Boyer and Nick Spring contributed valuable insight to the development plan for this project.
- A new biocidal textile technology from Philadelphia University to address the high incidence of hospital-acquired infections. Previous work has resulted in patented technology for textiles that kill a broad range of dangerous bacteria. The multidisciplinary Philadelphia University team, consisting of principal investigator Alex Messinger, Diana Cundell, Brian George and D.R. Widder, will further develop the technology to meet the market needs for killing bacteria, durability and washability requirements for new clinical applications, including lab coats that kill bacteria on contact. QED Business Advisors Ted Kirsch and Ron Rothman have supported this project team.
- A strong candidate for the first clinically reliable test for pancreatic ductal adenocarcinoma, the primary form of pancreatic cancer which currently has no reliable system for early detection, being developed by Hwyda Arafat, MD,

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Ph.D., Professor of Surgery and Co-Director of the Jefferson Pancreatic Center at Thomas Jefferson University, and Mon-Li Chu, Ph.D., Professor and Vice-Chair of Research in Dermatology & Cutaneous Biology. The team is receiving input from QED Business Advisors Chris Blaxland, Dave Hesson, and Don Skerrett.

"As a longstanding supporter of the QED Program, Jefferson is truly excited to receive its first funding award," said Steven McKenzie, MD, Ph.D., Professor of Medicine and Pediatrics, and Vice President for Research at Thomas Jefferson University. "The QED program offers a unique chance for research faculty to engage in product-oriented research guided by entrepreneurs, investors, and companies. These opportunities are a big part of the momentum we're seeing in technology commercialization in our region."

"The QED Program's goal of linking academic research to the marketplace aligns well with Philadelphia University's aim for scientific discovery to have a positive and practical impact on people's lives," says Philadelphia University President Stephen Spinelli, Jr., Ph.D. "Our project demonstrates our mission of teaching innovation and encouraging integrative thinking, seeing and creating connections between different bodies of knowledge and across disciplinary boundaries. This work is integrated into Philadelphia University's innovation-focused curriculum and applied research, and builds on its 127-year history of world-leading textile engineering expertise."

Alan J. Snyder, Ph.D., Vice President for Research at Lehigh University notes the QED program's assistance in bringing laboratory research into real-world practice. "When a patient wakes up to a better reality," he says, "we've realized our goal of fostering innovation. The QED award, and the business assistance that comes with it, brings us one step closer."

The QED Program has reviewed 40 detailed technology development projects since it was launched in 2009. Including this latest round of awards, the QED Program has funded a total of 12 projects since its launch. Four of the projects to date have resulted in technology options or licenses –including one to the very first start-up company to be launched from the Children's Hospital of Philadelphia, a recipient of a Round 2 award.

### **About the Science Center**

The University City Science Center accelerates technology commercialization, regional economic development, and the market availability of life-enhancing scientific breakthroughs by bringing together innovations, scientists, entrepreneurs, funding, laboratory facilities, and business services. Established in 1963 and headquartered in Philadelphia, PA, the Science Center was the first, and remains the largest, urban research park in the United States. Graduate organizations and current residents of the University City Science Center's Port business incubators have created more than 15,000 jobs that remain in the Greater Philadelphia region today and contribute more than \$9 billion to the regional economy annually. For more information about the Science Center, go to [www.sciencecenter.org](http://www.sciencecenter.org).

### **About the QED Program**

The QED program was launched in April 2009. Nineteen universities and research institutions in Pennsylvania, New Jersey and Delaware participate under a common agreement that defines matching funds and intellectual property management: Children's Hospital of Philadelphia, Delaware State University, Drexel University, Fox Chase Cancer Center, Harrisburg University of Science and Technology, Lankenau Institute for Medical Research, Lehigh University, Monell Chemical Senses Center, Philadelphia College of Osteopathic Medicine, Philadelphia University, Rutgers University, Temple University, Thomas Jefferson University, University of Delaware, University of Medicine and Dentistry of New Jersey, University of Pennsylvania, University of the Sciences in Philadelphia, Widener University and The Wistar Institute.

QED has received a \$1.0 million grant from the U.S. Economic Development Administration, plus additional financial support from the Commonwealth of Pennsylvania's Ben Franklin Technology Development Authority, the William Penn Foundation, and Wexford Science + Technology. The Science Center is currently looking for partners to make a one-time strategic investment to sustain the program.

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