

Businesses want to locate where the best and the brightest of our youth come to learn.
— Delaware Governor Jack Markell



Where the best and the brightest come to learn and work

The State of Delaware is becoming a science and technology powerhouse. Why?

People – Delaware’s science and technology workforce is fueling innovation in large and small science and technology companies. Delaware is ranked at the top in the nation for biochemists, biophysicists, microbiologists, computer systems analysts, and database and network administrators.*

Education – Delaware’s colleges and universities provide world-class science and technology education, along with the opportunity to gain real-world experience in scientific internships.

Vision and Entrepreneurial Infrastructure – For example, the University of Delaware and the state are converting a former Chrysler assembly plant into a Science & Technology Center for high-tech laboratories, health sciences, alternative energy, and other emerging industries.

Human health – powering Delaware’s economy

The health care sector in Delaware generates over \$1B in annual revenue and was the **only** sector to add jobs during the recession of 2007-2010.

Health sciences and patient services are central elements of Delaware’s economic trajectory and long-term sustainability plans. In fact, Delaware is poised to address the cost of health care services.

The Delaware IDeA program, by developing human health research talent, and building sustainable infrastructures and partnerships, is central to the state’s economic health.

* Source: 2010 State Technology and Science Index: Enduring Lessons for the Intangible Economy
Ross C. DeVol, Kevin Klowden, and Benjamin Yeo, The Milken Institute. January 25, 2011

Delaware **IDeA**

Strategic Investments in Science, Technology and Health

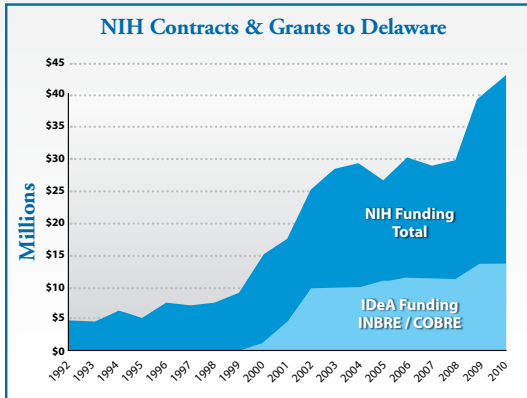
Dare to be first.

UNIVERSITY OF
DELAWARE®



Building a Competitive Biomedical Network

In 1993, Congress directed the National Institutes of Health (NIH) to launch a dedicated program to support institutions to enhance their competitiveness to conduct human health research. This was the beginning of the Institutional Development Award program, or IDeA. Today, thanks to IDeA, Delaware scientists, clinicians, students and entrepreneurs actively contribute to the national biomedical research agenda.



NIH IDeA – Dramatically increased competitiveness

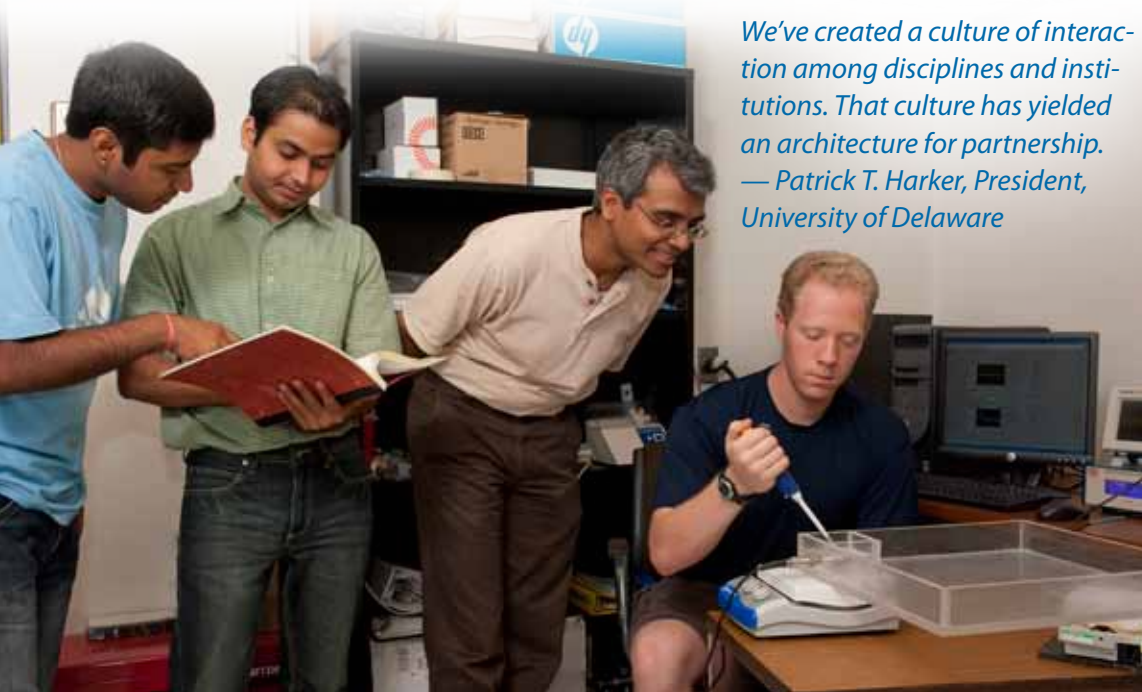
An important metric of success in biomedical research is the ability to successfully compete for peer-reviewed research grants and contracts.

Since the launch of the IDeA program, Delaware has increased **eight-fold** the annual level of NIH research funds awarded to institutions in the State – a dramatic rise from less than \$5M in 1992

to more than \$42M in 2010. Direct IDeA funding comprises about one third of the annual NIH total, indicating the catalytic nature of these programs.

In 1999 and 2000, NIH launched two new IDeA programs, the Centers of Biomedical Research Excellence (COBRE) and the IDeA Networks of Biomedical Research Excellence (INBRE). The goal of the COBRE program is to help early-career scientists launch research careers in human health. In parallel, the INBRE programs forge statewide research and education partnerships among academic and clinical institutions across the state.

We've created a culture of interaction among disciplines and institutions. That culture has yielded an architecture for partnership.
— Patrick T. Harker, President, University of Delaware



An Architecture for Partnership

Today, Delaware is proud to host the statewide Delaware INBRE program and four COBRE programs – three at the University of Delaware and one at Nemours/Alfred I. duPont Hospital for Children. **Since 2000, over \$127M in NIH funding has been competitively awarded to support the INBRE and COBRE programs in Delaware, and has catalyzed an additional \$200M in health research funding for the State.**

Delaware INBRE

Started in 2001, the Delaware INBRE is a partnership among six Delaware institutions: four academic partners – the University of Delaware, Delaware State University, Delaware Technical & Community College and Wesley College – and two clinical partners – Christiana Care Health System and Nemours/Alfred I. duPont Hospital for Children.

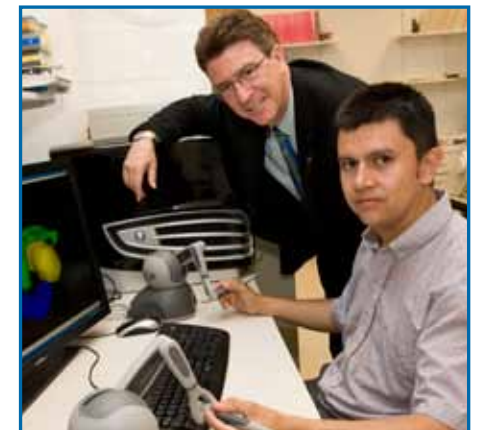


Over the past 10 years, Delaware INBRE has secured \$45M from NIH to build research infrastructure, including laboratory renovations and core instrumentation centers, supported over 50 biomedical pilot research projects, and trained nearly 800 students from its partner institutions. INBRE helped to develop the Delaware Biotechnology Institute, the Center for Translational Cancer Research, the Delaware Cardiovascular Research Center, and the Center for Bioinformatics & Computational Biology. The Delaware INBRE program is led by Dr. Karl Steiner at the University of Delaware.

In 2009, several INBRE partner institutions joined forces with Thomas Jefferson University in Philadelphia, to form the **Delaware Health Sciences Alliance**.

Delaware COBRE Programs

The COBRE program supports thematic multidisciplinary centers that augment and strengthen institutional biomedical research capacity. Delaware's four COBRE programs support early career scientists in becoming successful biomedical researchers through mentorship by well-established and experienced scientists.



Membrane Protein Production & Characterization – Dr. Abraham Lenhoff, UD

Women in Science and Engineering on Osteoarthritis – Dr. Thomas Buchanan, UD

Molecular Design of Advanced Biomaterials – Dr. Thomas Beebe, UD

Center for Pediatric Research – Dr. Thomas Shaffer, Nemours / A.I. duPont