A Decade of Impact: Illinois’ Entrepreneurial Momentum

In the past 10 years, Illinois has...

- Earned more than $52 million in royalties.
- Disclosed 1,976 inventions.
- Negotiated 472 licenses and options, including 67 start-ups.
- Filed 1,437 U.S. patent applications.
- Received 484 Issued U.S. patents.

Economic Benefits of Entrepreneurism

U of I semiconductor technologies have generated $35M in royalties and helped define the modern electronics era.

- Deuterium- used in semiconductor devices, the technology provides a solution to hot carrier effects, which are known to cause problems with device reliability.
- Layer Disorder & Native Oxide - these technologies enable superior laser diodes and lasers and have been extensively licensed. They can be found in use in many semiconductor devices, laser printers, fiber optic communications, microelectronic devices and more.

EnterpriseWorks, the University’s business incubator/accelerator in the Research Park, has supported the launch of 127 start-up companies since 2003, half of which originated from faculty. Research Park start-up companies raised $110M in venture capital from 2005-2011.

- The Research Park was awarded AURP’s Outstanding Research Park of 2011.
- The Research Park, currently home to more than 90 companies, was also named by Forbes in 2010 as one of “10 Incubators that are Changing the World.”

IllinoisVENTURES, the University’s start-up and early stage technology firm, supports the formation of technology companies in Illinois and throughout the Midwest. They have invested more than $40 million in 65 projects and have attracted $530 million in third-party capital and other funding (a remarkable 13 to 1 leverage).

Recent Start-up Milestones

- Catifyx, developing better methods for producing biologically-active compounds with improved pharmacokinetic properties, launched their first product and was featured in Chemical & Engineering News.
- Citrix Systems acquired UI start-up Bytemobile, a leading provider of data and video optimization solutions for mobile network operators. Bytemobile’s customers serve more than 2 billion subscribers and process more than 20 petabytes of data traffic through customer networks daily.
- ShareThis is the largest platform for sharing and influence across the web, reaching more than 400 million users across more than 1 million web sites.
- SolarBridge, a supplier of electronics for solar panels, received $25 million in Series D financing and will use the funding to expand to Europe. SolarBridge was also featured in MIT’s Technology Review.
- MC10, developing flexible electronics for novel environments, raised $14.85 million in Series B financing and formed a Sports Advisory Board whose members include Matt Hasselbeck and Grant Hill.
- Semprius, a solar manufacturer based in North Carolina opened its first production facility in September 2012. The company also set a world record for photovoltaic module efficiency and raised more than $10 million in funding.
- Metabolonx, a diagnostic company focused on the identification of lung cancer from breath, announced study results reporting 80% accuracy in lung cancer detection, comparable to a CT scan.

High Impact Innovations from Illinois

While the past decade has seen a marked upturn in entrepreneurial momentum, the University has a long history of innovation, including:

Chiral Transition Metal Based Catalyst for the Asymmetric Epoxidation of Unfunctionalized Olefins with Unprecedented Selectivity

This technology, which has been licensed to chemical companies, is a chemical preparation tool used in the production of many drugs, including the class of drugs known as NSAIDS (Non-steroidal anti-inflammatory drugs).

Ecteinascidins

A UIUC Chemistry professor discovered the compound Ecteinascidin in the mid 1980s. Derived from a toxin found in orange sea squirts native to the waters near Puerto Rico, the compound was licensed to Spanish pharmaceutical company PharmaMar, which spent a decade converting it into a potential new cancer drug. The drug, called Yondelis is approved in Europe for the treatment of soft tissue sarcomas and lung, breast, and ovarian cancer.

EUDORA®

One of the first electronic mail systems.

High Oil Corn & Super-Sweet Corn

High Oil & Super-Sweet Corn varieties developed at UIUC are now widely in use in the state of Illinois and elsewhere. High Oil provides better feed for livestock and poultry and yields more energy per bushel of corn. Super-Sweet Corn is responsible for much of all sweet corn.

Mosaic®

This well-known web browser was developed at the University of Illinois’ National Center for Supercomputing Applications (NCSA). Mosaic® made the Internet user-friendly and is the basis of many Internet browsers in use today. Marc Andressen and Eric Bina, two of the developers, went on to found Netscape. Mosaic was also licensed by a UIUC start-up called Spyglass, who later licensed the technology to Microsoft where it became the basis for Microsoft’s Internet Explorer.

Plasma Display Panel & Improvements

Researchers at UIUC invented the flat panel display in the 1960’s, the forerunner of today’s high-definition flat panel television monitors. The flat-panel plasma monitor invention in the 1960s was a spin-off of work that ECE and Coordinated Science Lab faculty were doing on the U of I’s famed PLATO system. PLATO, or Programmed Logic for Automatic Teaching Operations, had the distinction of also being a “first.” It was the first computer-assisted instructional program in the world. The three inventors even won an Emmy Award in 2002 for their work.

Mosaic®

A later improvement to this technology, by a different UIUC researcher, enabled the flat panel television’s in use today.