

OFFICE OF THE
VICE PRESIDENT FOR RESEARCH

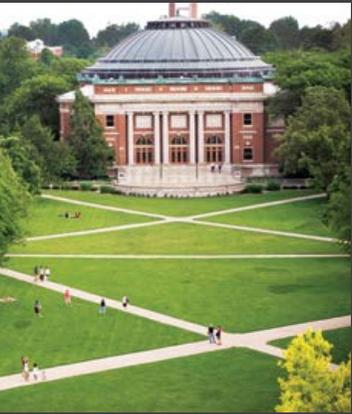
ELEVATING

ECONOMIC
DEVELOPMENT.

UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

OVPR
ELEVATING IDEAS.

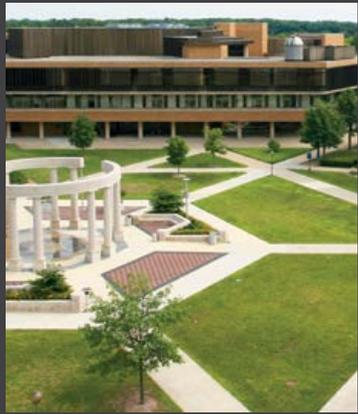
URBANA-CHAMPAIGN



CHICAGO



SPRINGFIELD



The University of Illinois' three distinct campuses in Urbana-Champaign, Chicago, and Springfield serve the people of Illinois and the world through a shared commitment to our missions of excellence in teaching, research, public service, and **economic development.**

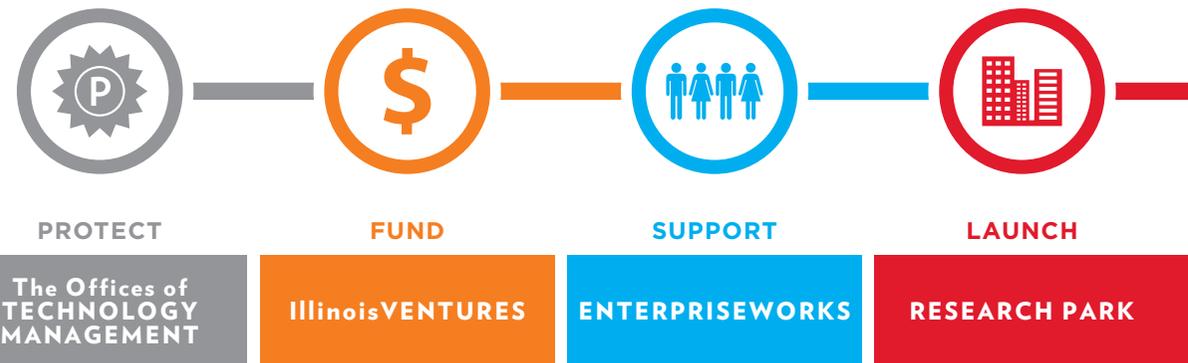
UNIVERSITY OF ILLINOIS
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UIC

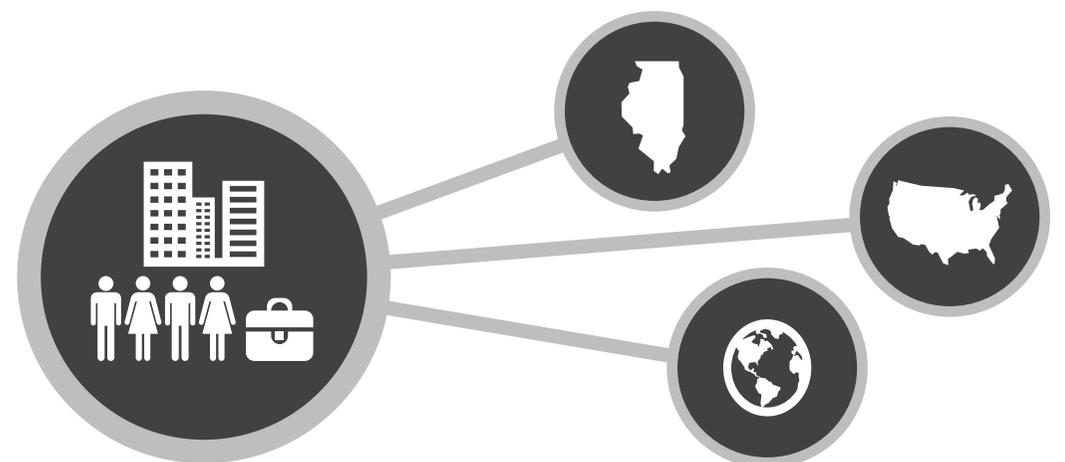


The Office of the Vice President for Research (OVPR) advances the economic development mission of the University of Illinois by supporting research and innovation activities that **elevate ideas** into sustainable businesses and global solutions.



By collaborating with the Offices of Technology Management, IllinoisVENTURES, EnterpriseWorks, and the Research Park, and partnering with both public and private entities, **OVPR brings together research activities, entrepreneurial education, and infrastructure to drive technology transfer, company formation, and startup success.**

The companies that form stimulate and contribute to the local, national, and global economy.



MARCH 2000

Economic development added as the **FOURTH MISSION OF THE UNIVERSITY.**

JULY 2000

University of Illinois Board of Trustees creates Vice President for Economic Development and Corporate Relations (OVPEDCR) to manage the University's technology commercialization and economic development activities.



MARCH 2011

Office of the Vice President for Technology & Economic Development renamed to Office of the Vice President for Research (OVPR).



MAY 2003

Office of the Vice President for Economic Development & Corporate Relations renamed to Office of the Vice President for Technology & Economic Development (OVPTED).

MAY 2012

University of Illinois becomes the first University tenant to lease space at 1871, Chicago's entrepreneurial hub for digital startups.



JANUARY 2013

Vice President for Research presents to Board of Trustees about UI LABS, a bold new initiative focused on bringing universities, industry, and government together to apply real solutions to tomorrow's biggest challenges.



FEBRUARY 2013

In his State of the State address, Governor Quinn announces a \$5 million investment (matched by another \$5 million from University of Illinois) to create the Illinois Manufacturing Laboratory (IML) to deploy new technologies and tools from U of I to help small- and mid-sized manufacturers in the state become more productive and profitable.

\$10M TO CREATE IML

OCTOBER 2013

University of Illinois partners with UI LABS and other academic, industry, and government partners to submit proposal for a \$70 million Digital Manufacturing & Design Innovation Institute grant from the U.S. Department of Defense.



DECEMBER 2013

Illinois Manufacturing Laboratory (IML) officially launched. Pilot projects with Illinois manufacturers are announced by Governor Quinn.

MARCH 2013

UI LABS established as an independent entity



FEBRUARY 2014

U.S. Department of Defense awards \$70 million grant to create Digital Manufacturing & Design Innovation Institute. Led by UI LABS and the U of I, the grant is leveraged by \$250 million in private funding.

\$70M GRANT

+ \$250M PRIVATE FUNDING

= \$320M INSTITUTE

JULY 2014

University of Illinois designated as "Innovation & Economic Prosperity" University by Association of Public and Land-grant Universities.

This designation recognizes institutions that advance the economic well-being of their states, regions, and the nation through a variety of exemplary, innovative, and sustainable efforts.



The Offices of
TECHNOLOGY MANAGEMENT

PROTECT

UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN • CHICAGO • SPRINGFIELD

**ECONOMIC
DEVELOPMENT
TIMELINE**

The Offices of
**TECHNOLOGY
MANAGEMENT**



PROTECT

**The Offices of Technology
Management (OTMs)
evaluate, protect, market,
and license the University's
intellectual property.**



Share the Vision 2012:
Lesley Millar-Nicholson,
OTM; Errol Arkilic, National
Science Foundation; Orlando
Saez, State of Illinois Dept.
of Commerce & Economic
Opportunity; and Dr. Lawrence
School, Office of the Vice
President for Research.

JUL 2011

Intellectual property licensed to a record number (20) of startup companies in Fiscal Year 2011.

In a time of economic recovery for the state and the nation, the OTMs mark this as a significant achievement and supporting evidence that

**UNIVERSITY RESEARCH IS
AN ENGINE OF JOB CREATION
& ECONOMIC DEVELOPMENT.**

APR 2012

OTM-Urbana partners with EnterpriseWorks to host inaugural Share the Vision technology showcase to facilitate relationships among faculty, entrepreneurs, venture capitalists, and corporate executives.

PRESENTERS INCLUDE:

- 39 faculty members
- 30 startup companies

20 IN 2011

RECORD NUMBER STARTUPS



The discovery of the HIV treatment drug PREZISTA® represented a turning point in HIV therapy.

DEC 2012

University of Illinois at Chicago (UIC) receives Licensing Executives Society Deals of Distinction Award for University-patented HIV treatment drug, Prezista®.

The award recognizes noteworthy licensing deals and encourages innovative solutions to business matters involving contracts. Prezista® is one of UIC's top royalty producers.

In fiscal years 2009-2013, University of Illinois technologies generated more than \$98 million in revenues.

FIVE YEARS ➔ **\$98+ MILLION REVENUES**



*Dr. Heinrich Taube,
Founder of Harmonia
Photo: L. Brian Stauffer*

FEB 2013

JUL 2013

OTM-Chicago partners with IllinoisVENTURES and Office of the Chancellor to form **Chancellor's Innovation Fund**, providing proof-of-concept funding and seed stage equity investments to help advance the commercialization of UIC inventions.

\$10M

**CHANCELLOR'S
INNOVATION
FUND**

The Chancellor's Innovation Fund will allocate \$10 million over 5 years to help advance technology commercialization at UIC.

The Urbana-Champaign campus was selected as one of ten National Science Foundation (NSF) **I-Corps** Sites. This program enables academic institutions to catalyze teams whose technology concepts are likely candidates for commercialization.

Music professor HEINRICH TAUBE developed Harmonia, a computer application that aims to make music theory instruction better for teachers and music theory application better for students by allowing students to complete assignments online. Dr. Taube participated in the first cohort of NSF I-Corps.





*I-POC award recipient
Dr. Stephen Boppert*

JAN 2014

OTM-Urbana launches Illinois Proof-of-Concept (I-POC) Program to bridge the funding gap between research and entry into the marketplace.

5

THE FIVE PROJECTS
FUNDED IN THE FIRST
ROUND OF I-POC
ALL RESULTED IN
STARTUP COMPANIES

Electrical & Computer Engineering professor STEPHEN BOPPART, one of the I-POC award recipients, was recognized for his Quantitative Pneumatic Otoscope, which provides a standard surface view of the eardrum and sees through the eardrum to visualize middle ear contents.



PROTECT

FUND

SUPPORT

LAUNCH



The Offices of TECHNOLOGY MANAGEMENT

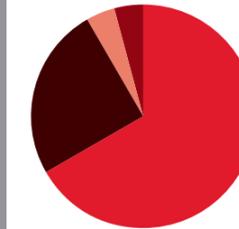
The mission of the Offices of Technology Management (OTMs) is to **encourage innovation, enhance research, and facilitate economic development** through the transfer of intellectual property. The OTMs are responsible for the very first function in the innovation pipeline and play a critical role in helping students and faculty elevate their ideas into real goods and services.

- **36%** of OTM-Urbana and **50%** of OTM-Chicago patents issued in FY2013 are already licensed or optioned
- **59 STARTUPS** licensed technology through OTM in fiscal years 2009–2013

U.S. PATENTS BY SECTOR



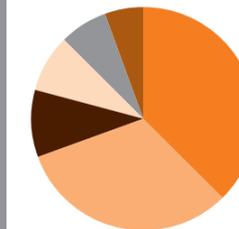
CHICAGO CAMPUS



- 16** HEALTHCARE-THERAPEUTICS
- 6** ENGINEERING
- 1** HEALTHCARE-DIAGNOSTICS
- 1** OTHER



URBANA-CHAMPAIGN CAMPUS



- 27** ENGINEERING
- 23** MATERIALS
- 7** SOFTWARE
- 6** HEALTHCARE-THERAPEUTICS
- 5** HEALTHCARE-DIAGNOSTICS
- 4** OTHER

FISCAL YEAR 2013



OTM was instrumental in managing IP challenges, facilitating networking opportunities, and marketing our technology inside and outside of the University. This support and expertise is critical when launching a new company. ”

—BRETT WALKER, CO-FOUNDER & CEO, ELECTRONINKS



The OTM staff was very flexible and supportive of Thermal Conservation Technologies (TCT). They modified our license terms, which allowed us to qualify for SBIR funds, and they helped prepare me for the Clean Energy Trust competition. I feel that I can consult with the OTM staff whenever I need business advice. ”

—ALAN FEINERMAN, FOUNDER & CTO, THERMAL CONSERVATION TECHNOLOGIES



Illinois VENTURES

FUND

UNIVERSITY OF ILLINOIS
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ECONOMIC
DEVELOPMENT
TIMELINE

IllinoisVENTURES



FUND

IllinoisVENTURES is a University of Illinois-created investment firm that provides seed funding to early-stage technology and startup companies.



iCyt, a biomedical engineering company, was IllinoisVENTURES' first investment. Gary Durack, iCyt founder, displays a flow cytometer biological cell sorter. The company was later acquired by Sony Biotechnology.

MAY 2000 FEB 2004 APR 2009

IllinoisVENTURES (IV) established as an early-stage technology investment firm.

IllinoisVENTURES raises first venture fund, the Illinois Emerging Technologies Fund, an early-stage technology venture capital fund.

IllinoisVENTURES raises its second early-stage technology venture fund, the Illinois Emerging Technologies Fund II.

\$51M

The Illinois Emerging Technologies Funds raised \$51M to invest in research-derived technologies and University intellectual property.





Chromatin, Inc. is a supplier of biomass feedstock for energy producers and a leading agriculture technology company.

Photo: Larry Rana, USDA

OCT 2011

IV-backed company **Chromatin, Inc.** selected as one of ten companies to receive a multi-million dollar award from the U.S. Department of Energy to develop energy-rich sorghum.

Chromatin's seed and feedstock products are customized for use in traditional agriculture and bio-industrial processes.

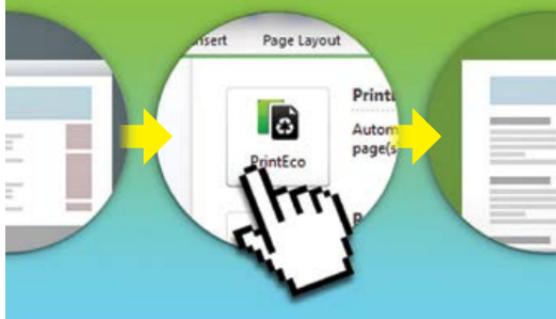
DEC 2011

IV-backed company **ShareThis** named one of America's most promising companies by Forbes.

ShareThis is recognized as the top tool for sharing content across websites. Foundational Intellectual Property for ShareThis is based off the work of Industrial & Enterprise Systems Engineering Professor David Goldberg.

 **SHARETHIS:**
ONE OF AMERICA'S MOST
PROMISING COMPANIES.

—FORBES



PrintEco developed software that automatically optimizes documents for printing in order to save paper. Wasteful printing is reduced by up to 24% when using PrintEco's product.

MAY 2012

JUN 2012

IV-backed company **Semprius'** high concentration photovoltaic (HCPV) solar modules named to MIT Technology Review's list of **TOP 10 EMERGING TECHNOLOGIES FOR 2012.**

IV-backed company **PrintEco** named to Entrepreneur Magazine's list of

"100 BRILLIANT COMPANIES."

printeco

WORLD RECORD

SEMPRIUS, founded by Materials Science & Engineering Professor John Rogers, develops concentrator photovoltaic modules for use in solar panels. The company set a world record for photovoltaic module efficiency, reaching 33.9%.





Chancellor's Innovation Fund Award Recipients: (left) Jennifer Andrew, OTM-Chicago Technology Manager, John Hetling, and Jason McAnany

FEB 2013

JUN 2013

IllinoisVENTURES partners with OTM-Chicago and the Vice Chancellor for Research to form **Chancellor's Innovation Fund**, providing proof-of-concept funding and seed stage equity investments to help advance the commercialization of UIC inventions.

IllinoisVENTURES ranked #1 in gap funding for third-party capital attraction by innovosource.

**#1 CAPITAL
ATTRACTION**

\$10M

**CHANCELLOR'S
INNOVATION
FUND**

Managed by IllinoisVENTURES, the Chancellor's Innovation Fund will allocate \$10 million over 5 years to help advance technology commercialization at UIC.

PROTECT FUND SUPPORT LAUNCH



IllinoisVENTURES

IllinoisVENTURES funds innovative research that improves lives.

CHANCELLOR'S INNOVATION FUND SUCCESS STORY



“Detecting Glaucoma
Where it Starts”

Several potentially blinding eye conditions affect the peripheral retina causing vision loss in early stages of glaucoma. It is impossible to accurately evaluate the function of the peripheral retina with currently available diagnostic instruments.

Dr. John Hetling and Dr. Jason McAnany, Chancellor's Innovation Fund award recipients, invented the Peri-Stim™, a device designed to overcome this limitation by specifically delivering a stimulus to the peripheral retina.

The Peri-Stim™ is a desktop device that delivers a carefully designed pattern stimulus to the outermost edges of the visual field; there are no other pattern stimulus devices currently available that fill the entire peripheral visual field.

The novel Peri-Stim™ system may be combined with electrophysiological or psychophysical recordings to create a diagnostic test with high sensitivity to early stage eye disease, facilitating early diagnosis, early management, and ultimately better patient outcomes.

“ In addition to providing seed funding, IllinoisVENTURES was actively involved in helping Autonomic Materials, Inc. build a successful and sustainable business model. ”

—JOE GIULIANI, CEO,
AUTONOMIC MATERIALS, INC.



ENTERPRISEWORKS

SUPPORT

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**ECONOMIC
DEVELOPMENT
TIMELINE**

ENTERPRISEWORKS



SUPPORT

**EnterpriseWorks
is a business incubator
that offers entrepreneurial
programming and support
services to early-stage
technology startups.**



EnterpriseWorks is located in the Research Park on the Urbana-Champaign campus.

JUL 2003

JUL 2011

EnterpriseWorks opens as an early-stage technology business incubator.



ENTERPRISEWORKS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

State of Illinois commits \$100,000 to fund **EnterpriseWorks I-Start Entrepreneur Assistance Program** (I-Start) to encourage more University of Illinois inventors to pursue startup formation and commercialization of their research and technology.

**I-START
SERVICES**

- Legal setup
- Business development
- Marketing
- Financial & Payroll
- SBIR application
- Industrial design & Prototyping



Oso PlantLinks can be placed in houseplants; users are notified when moisture levels are low.

OCT 2011

EnterpriseWorks launches **I-Start**, a competitive matching award program targeted to University researchers with strong potential to commercialize technology through new company formation.

\$11.6M

31 I-Start clients have raised \$11.6M in outside funding

OSO TECHNOLOGIES,

a University of Illinois startup, was one of the first companies to participate in the I-Start program. Oso's PlantLink device, monitors the moisture level in house plants, gardens, and lawns, and notifies the user when they need to be watered.





University President Robert Easter addresses the Chicago entrepreneurial community at the dedication of the HTI facility.

AUG 2012

Building off the success of EnterpriseWorks on the Urbana-Champaign campus, **EnterpriseWorks Chicago** established as early-stage technology business incubator to serve the UIC and broader biotech community in Chicago.

ENTERPRISEWORKS
C H I C A G O

APR 2013

The State of Illinois and University of Illinois invest \$3.4 million to launch Health, Technology, Innovation (HTI), the flagship initiative of EnterpriseWorks Chicago.

\$3.4M
HEALTH
TECHNOLOGY
INNOVATION
FACILITY





*EnterpriseWorks
Chicago Director Kapila
Viges kicks off the HTI/
AbbVie partnership
celebration event.*

JUL 2013

The Urbana-Champaign campus was selected as one of ten National Science Foundation (NSF) **I-Corps** sites. This program enables academic institutions to catalyze teams whose technology concepts are likely candidates for commercialization.

**NSF I-CORPS
PARTNERS** 

ENTERPRISEWORKS

OFFICE OF TECHNOLOGY
MANAGEMENT

TECHNOLOGY
ENTREPRENEUR CENTER

MAR 2014

AbbVie, Inc. commits to partnership with HTI.

The partnership between EnterpriseWorks Chicago and AbbVie, Inc., a global pharmaceutical company, brings industry closer to the discovery-driven academic culture and is an example of a mutually beneficial university-industry relationship.



**UNIVERSITY
+ INDUSTRY**

PROTECT FUND SUPPORT LAUNCH



ENTERPRISEWORKS

 **77%**
STAY
IN STATE

77% of EnterpriseWorks companies stay in Illinois after graduating from the incubator.

 **160+**
COMPANIES

160+ companies have graduated from the EnterpriseWorks incubator.

EnterpriseWorks-incubated companies have raised more than \$722 million in outside capital.

\$722M+
OUTSIDE CAPITAL

\$54+ M
GRANTS

EnterpriseWorks offers free SBIR/STTR grant consulting to tenants. Nearly 200 SBIR/STTR grants totaling more than \$54 million have been awarded to EnterpriseWorks/Research Park companies.



EnterpriseWorks has been a phenomenal partner for launching Electroninks. The shared facilities, entrepreneurial ecosystem with other startups in similar fields, and general helpfulness of the staff make EnterpriseWorks the logical choice when launching a University startup. ”

—BRETT WALKER, CO-FOUNDER & CEO, ELECTRONINKS



EnterpriseWorks has been crucial in terms of granting us the necessary laboratory space to conduct proof-of-concept research and experimentation. Along with the amazingly insightful and knowledgeable Entrepreneurs-in-Residence, the programs and clinics offered at EnterpriseWorks are invaluable in terms of providing us with mentorship and instilling a sense of pride and drive that comes with being University of Illinois entrepreneurs. ”

—LUCAS SMITH, FOUNDER & CEO, BIOANALYTICS



RESEARCH PARK

LAUNCH

UNIVERSITY OF ILLINOIS
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ECONOMIC
DEVELOPMENT
TIMELINE

RESEARCH PARK



LAUNCH

**The Research Park provides
an environment where
technology-based businesses
can collaborate with faculty
and students and utilize
University resources.**



Caterpillar opened the Champaign Simulation Center to meet the needs of its virtual product development and simulation.

MAR 2000 JAN 2001 JAN 2001

University of Illinois Research Park (UIRP)

established to support innovation and economic development on the Urbana-Champaign campus.

Motorola opened as Research Park's anchor tenant.



Caterpillar Simulation Center opens in Research Park.

300+ STUDENTS

More than 300 student interns have worked in the Caterpillar Simulation Center.

The Research Park is located on **200 ACRES** adjacent to the Urbana-Champaign campus.





The iHotel and Conference Center offers first-class amenities—and first-class convenience—to companies located at the Research Park.

JAN 2005

State Farm Research and Development Center opens.

The State Farm Research and Development Center offers a dynamic environment where talented Illinois students, guided by company staff, support the insurance giant's programs and initiatives.

AUG 2008

iHotel and Conference Center opens in Research Park.

The iHotel and Conference Center facilities include 124 hotel rooms; a Houlihan's restaurant and bar; and a multipurpose 38,000-square-foot conference center.

 **124
ROOMS**

 **RESTAURANT
& BAR**

 **CONFERENCE
CENTER**



The AB InBev Bud Lab is a state-of-the-art data analytics center located in the University of Illinois Research Park.

FEB 2010

Sony announces acquisition of iCyt Mission Technology, Inc.

In just five years, iCyt, a biotechnology company that started with just two employees, was acquired by Sony.

DEC 2011

Association of University Research Parks awards UIRP the Outstanding Research Park of the Year Award.

**OUTSTANDING
RESEARCH
PARK
—OF THE YEAR—
AWARD**

SEPT 2013

AB InBev opens data analytics center in Research Park.

The Bud Lab brings together the University of Illinois' top talent with the company's portfolio of leading beer brands in a vibrant beer environment designed to stimulate innovative thinking.





*Yahoo and University
leaders break ground
on Yahoo's 40,000
sq. ft. facility.*

FEB 2014

Yahoo breaks ground on new facility in Research Park.

YAHOO!

250 JOBS

The new facility
will accommodate
250 employees.

MAR 2014

John Deere announces expansion of Technology Innovation Center in Research Park.



THE TECHNOLOGY INNOVATION CENTER

- Tracks key technology trends that impact John Deere research
- Develops commercial technologies
- Employs students from various disciplines

PROTECT FUND SUPPORT LAUNCH



RESEARCH PARK

RESEARCH PARK BY THE NUMBERS

- 93** **93 COMPANIES,**
including 10 Fortune 500 firms
- 1,500** **More than 1,500 EMPLOYEES,**
including 400 students
- \$114M** **Total construction
INVESTMENT: \$114M+**
- \$1.2M** **\$1.2M in annual tax revenue
to the city of Champaign**
- \$6.8M** **\$6.8M in annual tax revenue
to the state of Illinois**

(STATISTICS AS OF SEPTEMBER 2014)

RESEARCH PARK FUN FACTS

YAHOO

has more employees (100+) than any other company in the Research Park and a 98% employee retention rate.

STATE FARM

has hired more student interns than any other company in the Research Park to date.

RESEARCH PARK

offers more than 100 social, educational, and networking events annually.



"Outside at Research Park" is a series of summer concerts and has become a tradition for many members of the local community.