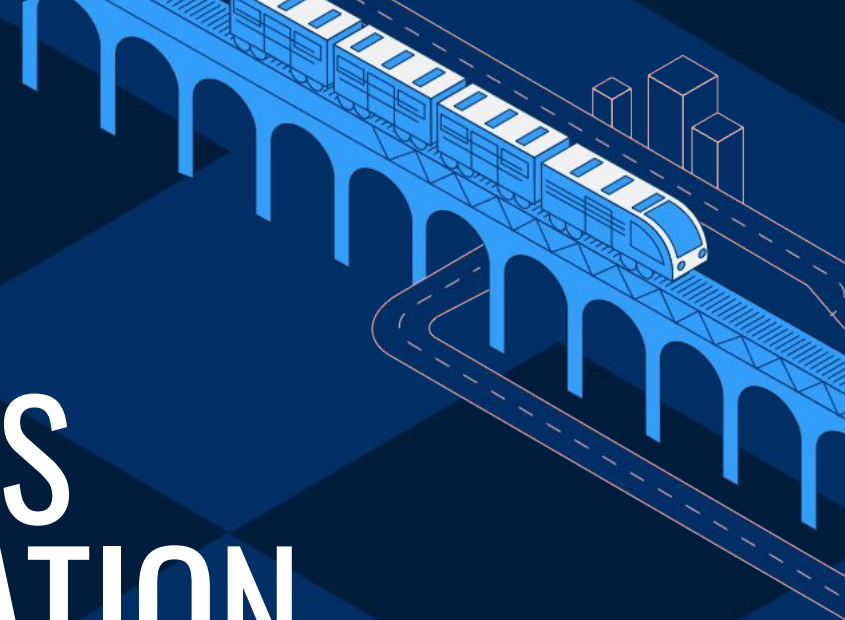
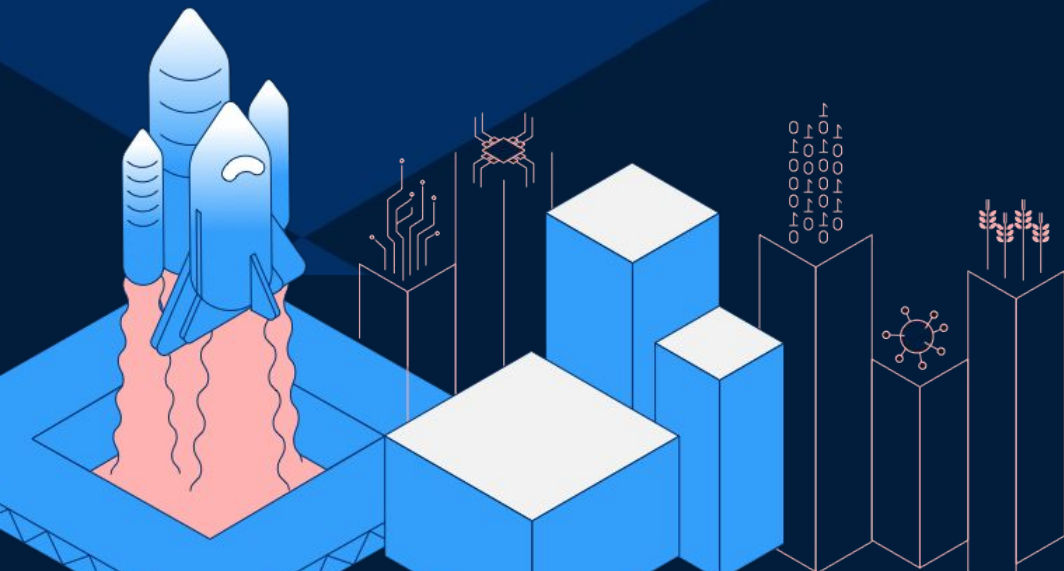




ILLINOIS INNOVATION ECOSYSTEM



February 2021

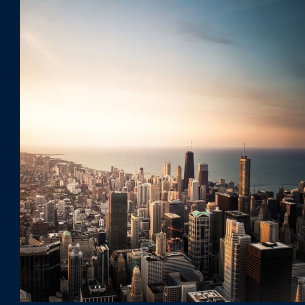
Illinois at a Glance

Economic Powerhouse



5th

Largest economy in the United States, roughly the size of the Netherlands



Research Leader



\$18.1B

In public and private R&D expenditures annually

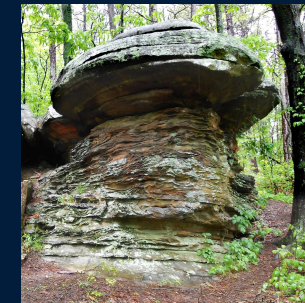


Diversified Economy



14%

The highest proportion of employment in any single Chicago sector, most diverse economy in the U.S.



What makes up the ecosystem?



Universities & Research



Research Universities

12

Research universities with more than \$15M in academic R&D

\$2.6B

in total academic R&D



Northwestern
University

I ILLINOIS



THE UNIVERSITY OF
CHICAGO

UIC UNIVERSITY OF ILLINOIS
AT CHICAGO

 RUSH UNIVERSITY

SIU Southern Illinois
University
CARBONDALE



LOYOLA
UNIVERSITY CHICAGO

ILLINOIS INSTITUTE
OF TECHNOLOGY 



ILLINOIS STATE
UNIVERSITY



Northern Illinois
University

SOUTHERN ILLINOIS UNIVERSITY
EDWARDSVILLE



ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

Federal Research Laboratories



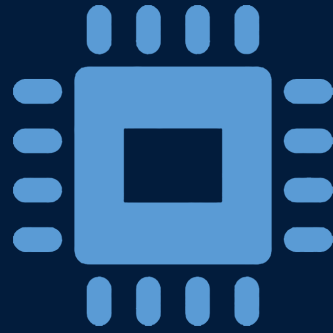
National leader in...

- Quantum
 - Energy technology
 - Nanotechnology
 - Super computing
-
- Quantum
 - Particle physics
 - Accelerator technology
-
- Agricultural research
 - Food technology
 - Biofuels

Academic R&D

\$2.6B

R&D spending by
Illinois universities



8th

In Computer Science
research nationally



8th

In Life Sciences
research nationally

University-Supplied Talent

3rd

Most computer science
grads nationally

10%

Of computer science degrees
produced nationally

4th

Most MBAs nationally

STEM Degrees by Year



STEM Talent

24,000+

STEM graduates annually

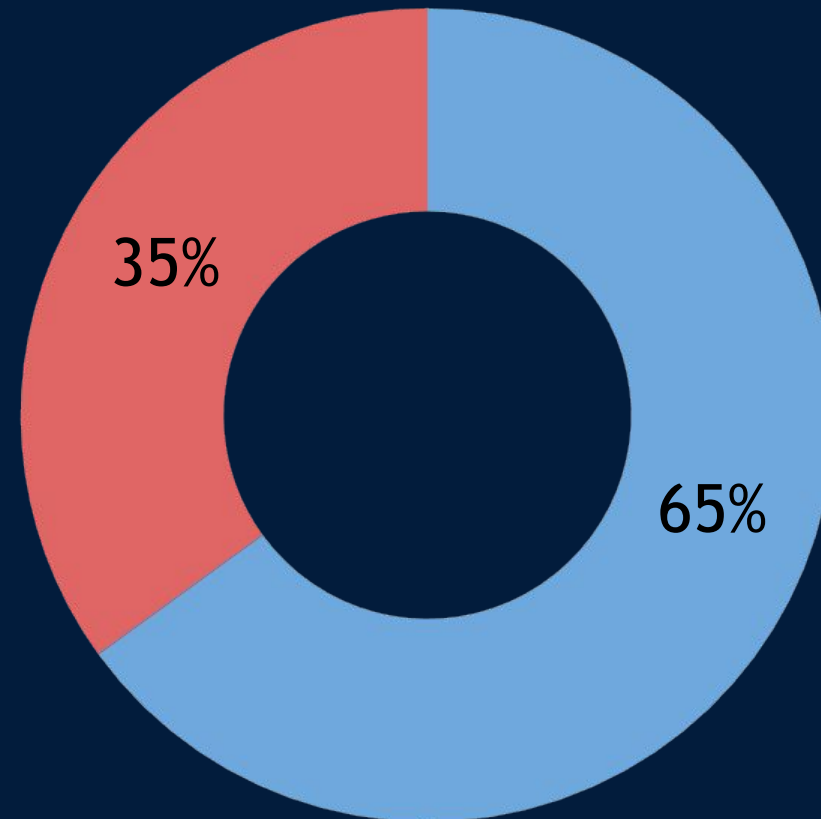
35%

of science & engineering grads
receive advanced degrees

350,000+

STEM Employees

STEM Degrees by Level



● Bachelor's ● Advanced

University-Driven Startups

1,064

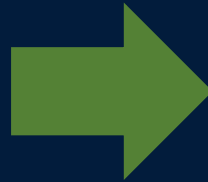
Companies created in the last five years

69%

Of active university startups stay in Illinois

2x

Startups 2018-2019,
compared with 2010-2014



2015-2019

1,064

2010-2014

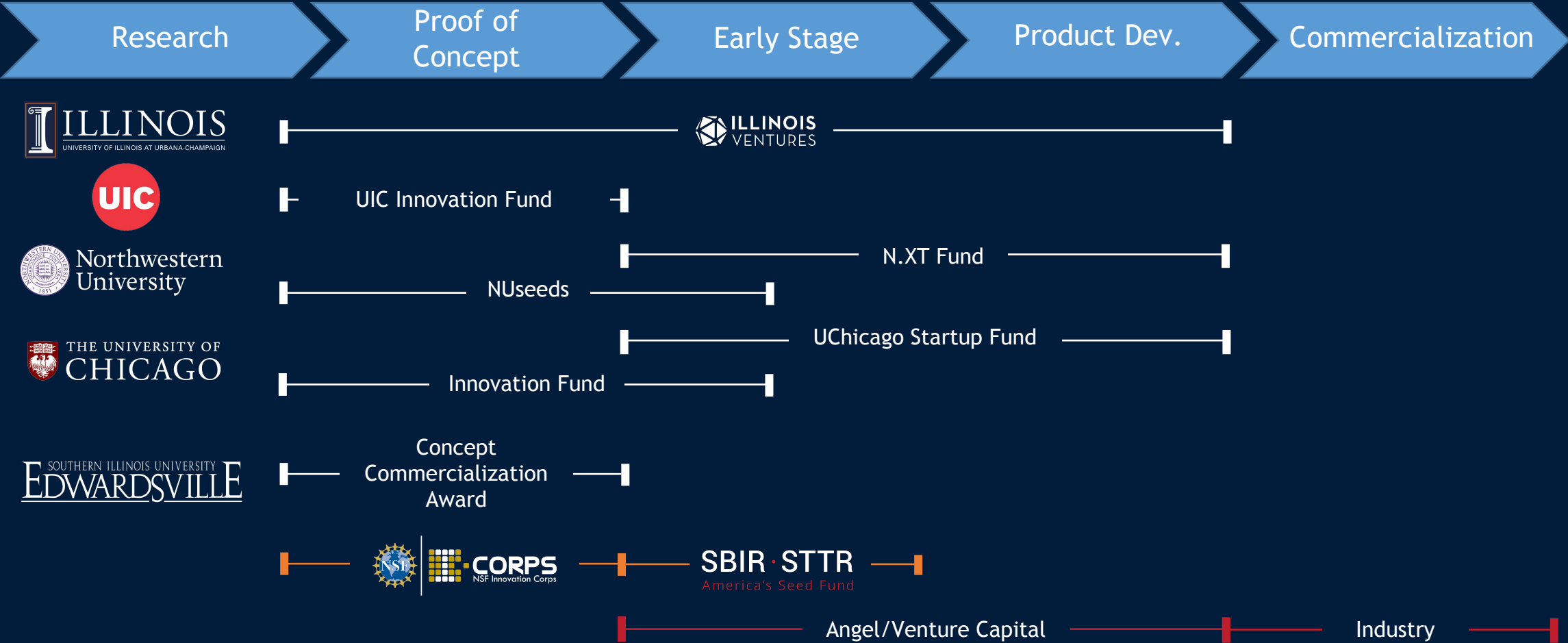
576

University Incubation & Tech Parks



- 1 Bradley University: Peoria Next
- 2 Illinois State University: Means Center
- 3 Illinois Institute of Technology: University Technology Park, Kaplan Institute
- 4 Lake Forest University: Oppenheimer Center
- 5 Northern Illinois University: EIGERlab
- 6 Northwestern University: The Garage
- 7 Rosalind Franklin University: Innovation and Research Park
- 8 Southern Illinois University Carbondale: Research Park, Small Business Development Center
- 9 Southern Illinois University Edwardsville: Research Park
- 10 University of Chicago: Polsky Center
- 11 University of Illinois at Chicago: Health Technology Incubator (HTI)
- 12 University of Illinois at Springfield: Innovative Springfield
- 13 University of Illinois at Urbana-Champaign: Research Park, EnterpriseWorks
- 14 Western Illinois University: Quad City Manufacturing Lab

Capital Catalyzing Growth



- University Funds
- Federal Funding
- Private Funding



Discovery Partners Institute

DISCOVERY PARTNERS INSTITUTE

- The Discovery Partners Institute (DPI) is a joint education, research and innovation institute led by the University of Illinois System.
- DPI will bring together university and industry innovators, as well as entrepreneurs and venture capitalists.
- New Chicago hub is planned for completion in 2021

ILLINOIS INNOVATION NETWORK

- The Illinois Innovation Network is a system of connected hubs throughout the state that will work together to drive innovation.
- Themes:
 - Computing & Data
 - Environment & Water
 - Food & Agriculture
 - Health & Wellness

Industry



Fortune 500 Community

Biotechnology

abbvie **Baxter**



IT and Communications

ANIXTER



MOTOROLA
SOLUTIONS



Food



Logistics and Transportation

UNITED



Energy



4th

Largest concentration of
fortune 500 companies

Healthcare

Walgreens



Retail



Advanced Manufacturing



Insurance and Finance



Others

RR DONNELLEY



Tech Sector Growth

Tech Companies Valued \$1B+

UPTAKE



Mu Sigma

AVANT

Raise

SMS ASSIST

Tech Companies with 500+ Employees

GROUPON®



ECHO GLOBAL
LOGISTICS

here

MORNINGSTAR®

TRUNK CLUB

A NORDSTROM COMPANY

Private Sector R&D

\$14.4B

In private sector R&D, 2017

8th

Most private sector R&D
nationally

\$14.4B



Illinois

\$7.5B



State
Average

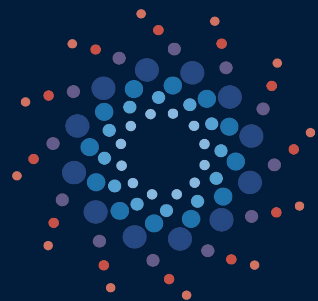
300+

Corporate R&D facilities
in Chicago area

Capital



SBIR/STTR



SBIR • STTR
America's Seed Fund

\$528m

in SBIR/STTR awards to Illinois
over the last 10 years

\$136M

\$392M



Phase I

Phase II

SBIR/STTR
Funding, 2010-19

Venture Capital

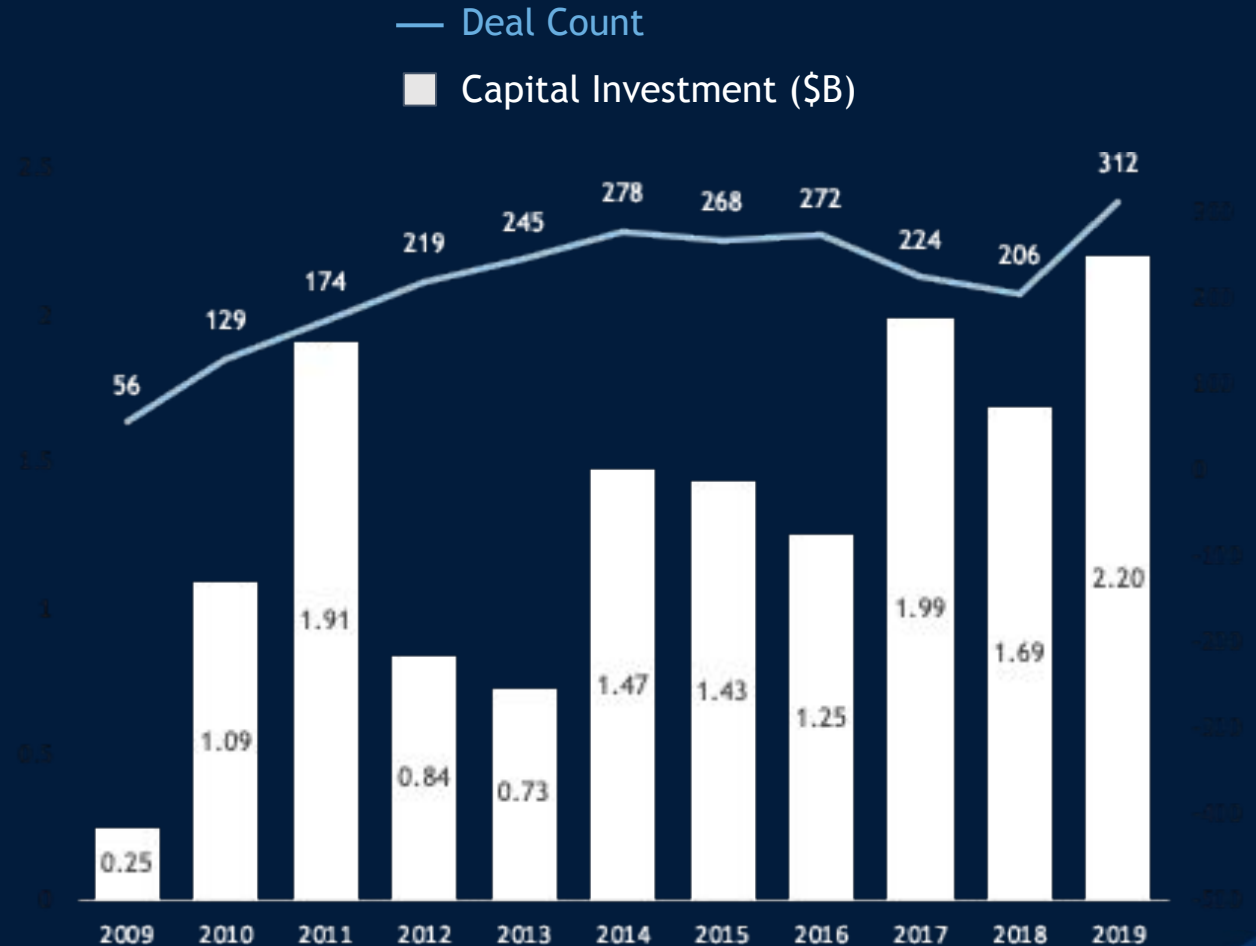
\$2.2B

In venture funding in 2019,
accounting for bulk of Great
Lakes activity

Chicago

highest VC returns for
any U.S. startup hub

Venture Capital Investment



Angel & Venture Capital

30+

Angel investment groups

80

Venture capital funds

Sample of Funds

 **IMPACT ENGINE**

Baird Venture Partners 

**Pritzker
Group**



 **ILLINOIS
VENTURES**

SERRA VENTURES

OCA VENTURES

lightbank

capx
PARTNERS

**CHICAGO
VENTURES**

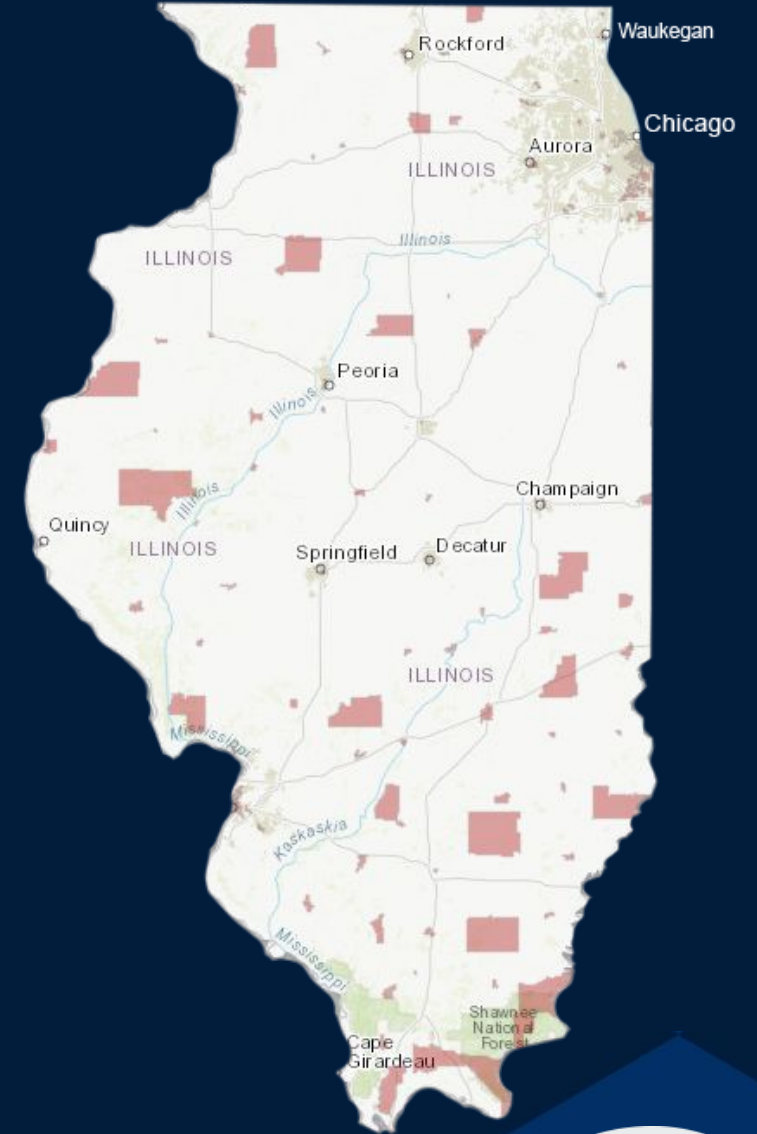
SANDBOX
INDUSTRIES

 **ORIGIN VENTURES**

Opportunity Zones



- Created by the Tax Cuts and Jobs Act in December 2017.
- Opportunity zones are an economic development tool meant to spur investment in distressed communities.
- Tax incentives are provided for qualified investments within opportunity zones.



Entrepreneurial Resources



Network of Incubators

50+
Incubators



Top 10 Incubator to Watch (Forbes),
400+ companies launched



Over 35 peer-selected startups.
Employs more than 525, 90 percent of
35 companies still in business



Energy and science technology
incubator housed within Argonne
National Laboratory



Chicago's first incubator focused on the
development of business and entrepreneurs
in music, film/video and creative technology



120,000 sq. ft. co-working space with
nearly 500 tenants, including
accelerators, incubators, tech talent
schools, and the ISTC



Chicago's first innovation center
focused on physical product
development and manufacturing



Health and med tech hub for healthcare
entrepreneurs and investors, 150+
healthtech startups



Industrial Council of
Nearwest Chicago

120+ smallbiz tenants in its 410,000
square-foot incubator, one of the first 5
business incubators in the country



Illinois first secondary education
innovation center. The 6,400 square foot
state-of-the-art innovation center is
designed to ignite collaboration and
entrepreneurial activity.



Network of Accelerators

30+
Accelerators

Health and Food



Accelerator jump starting
health care startups



Accelerator focused on
medical device innovation



Nation's first accelerator
focused on building supply chains
for sustainable local food

Digital Innovation



One of the nation's premier
accelerators. Access to 150+
mentors that include founders of
Answers.com, BaseCamp, Groupon,
GrubHub, OKCupid, Orbitz,
OpenTable, Walmart



World's largest accelerator startup;
one of 37 chapters world wide

Underrepresented Groups



16 week program helping “tech
women do business, business
women do tech”



Designed to empower military
veterans to become entrepreneurs
and leaders in innovation

Social Innovation



Former accelerator, now impact
investment fund, invested \$700K
in 23 companies

Infrastructure

Transportation Hub

102M Passengers pass through Chicago airports each year



America's Air and Rail Transportation Hub

117M Visitors to Illinois every year, including over 50 million to Chicago



Center Point of Interstate Transportation

Cost and Quality of Life

34%

Lower total operating costs for
tech companies in Chicago
than San Francisco

+

60%

Lower average rent prices

500

Museums and art galleries

120

State parks

10

Professional sports team

Government



State Infrastructure Investment

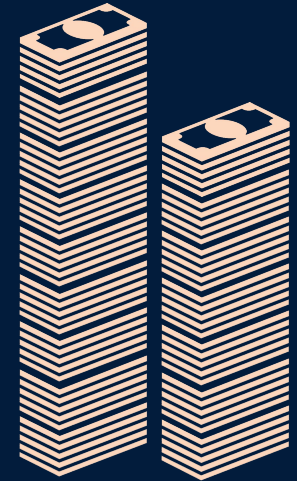
\$500M

to create university/industry
innovation collaboration network



\$440M

Investment in innovation via
2019 State Capital Bill



Strategic Public-Private Initiatives



Council of technology leaders to drive growth and opportunity



Dedicated exclusively to increasing Illinois' competitiveness for job creation and investment



\$222M fund managed by the state treasurer to attract, assist, and retain quality technology businesses in Illinois. With plans to increase the amount available for the next 10 years to \$1 billion.



Driving advancement of IoT technology, policy and industry, in Chicago and the Midwest

Federal Initiatives



\$120M

Argonne/Department of Energy partnership
to create transformative battery technology
for transportation and the electric grid



The Digital Manufacturing Institute

\$380M

MxD/Department of Defense partnership to
transform manufacturing through digitization
of the supply chain

NSF I-Corps



CORPS
NSF Innovation Corps

360 **\$180M+**

I-Corps teams
since 2013

In funding raised by
I-Corps teams

I-Corps Sites

Node



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

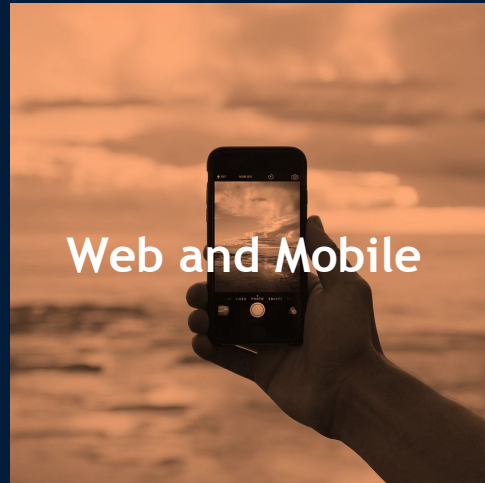


THE UNIVERSITY OF
CHICAGO

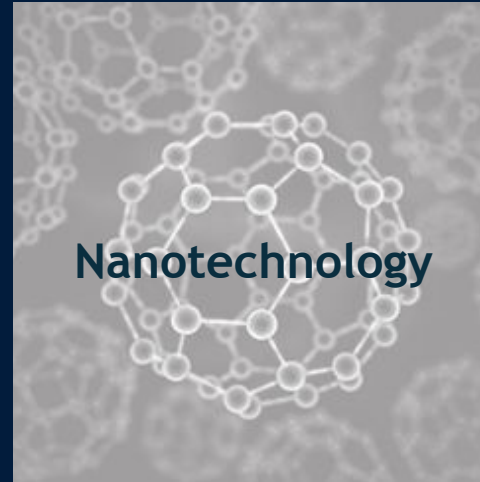


Clusters

Innovation Clusters



Innovation Clusters



Food Technology and Innovation

2nd

In the nation for food
related R&D



Tyson New Ventures:
\$150M fund for food
startups, based in Chicago

30%

Of Illinois VCs invested in
food companies

Based in Illinois



KraftHeinz



grubHub



Mondelēz
International



Food science research consortium comprised of the
Illinois Institute of Technology, FDA, and Industry

Ag Technology and Innovation

Sector Strength

330,000

Agriculture and related industry jobs

\$69M

Invested in AgTech in 2017



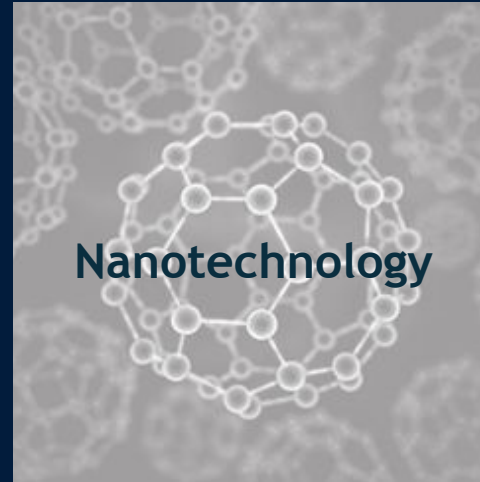
**ILLINOIS
AGTECH**
— Accelerator —



**ILLINOIS
AGRI-FOOD
ALLIANCE**

s2g^{leaf}ventures

Innovation Clusters



Health and Life Sciences Innovation

\$98.6B → **592,000** → **157,000**
In economic output Jobs New jobs by 2025

3rd

Chicago is the third largest life science metro by employment

2nd

Largest gain in the nation in medical device establishments

\$806M

In NIH funding, 2017

Health and Life Sciences Innovation



ILLINOIS
MEDICAL
DISTRICT

Second largest urban medical
district in the nation

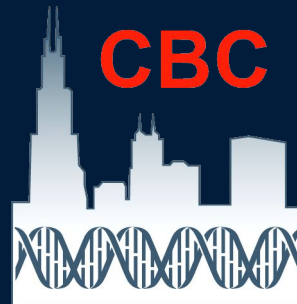
\$3.4B

In economic activity

50,000

Daily visitors

Advancing Innovation



Chicago Biomedical Consortium (CBC) Searle Funds at Chicago Community Trust collaboration with Northwestern University, University of Chicago and University of Illinois at Chicago to accelerate biomedical discoveries and improve human health.



Northwestern
University

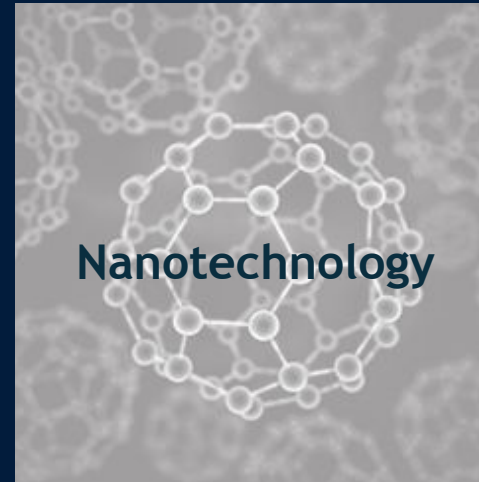
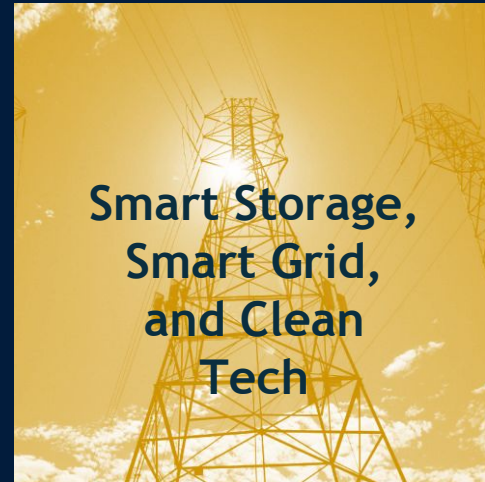


THE UNIVERSITY OF
CHICAGO



UIC UNIVERSITY OF ILLINOIS
AT CHICAGO

Innovation Clusters



Energy Storage, Smart Grid, and Clean Tech



\$3.2B

In legislated smart grid upgrades

\$22.5M

legislated to Energy Foundry fund
for early-stage clean tech and
smart grid-enabled startups

3rd

in DOE funding for advanced
energy technologies R&D

113,918

Clean energy jobs, highest number in the
Midwest, 5.3% projected growth

Advancing Clean Tech



clean
energy
trust



**ENERGY
FOUNDRY**

Energy Storage, Smart Grid, and Clean Tech

\$4.6M

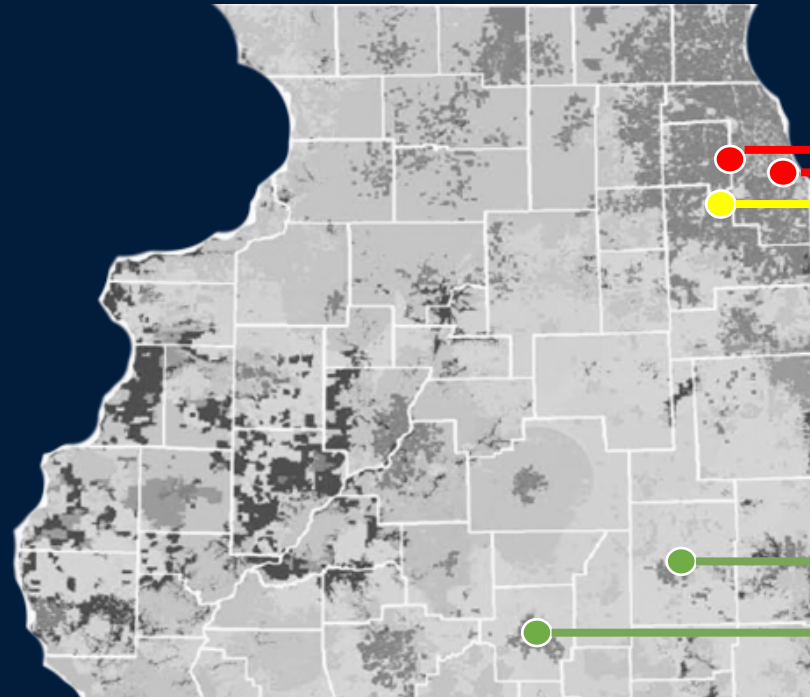
for creation of Illinois Clean Energy
Community Foundation to seed
funding for energy innovation

10%

of all patents citing energy
publications cite Illinois research

\$3M

From SBA to Smart Grid Cluster to
support smart grid startups



\$120M DOE award for energy
storage research

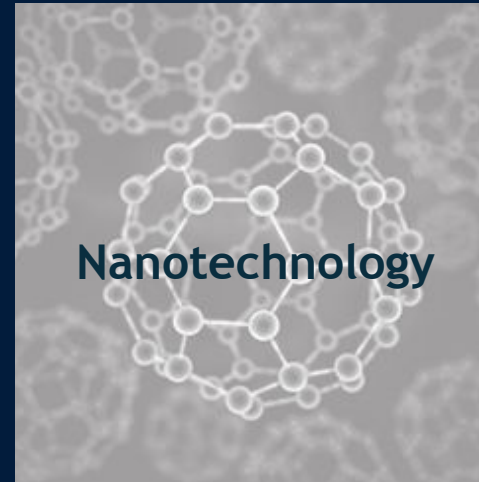


Smart grid test beds



Smart grid test beds

Innovation Clusters

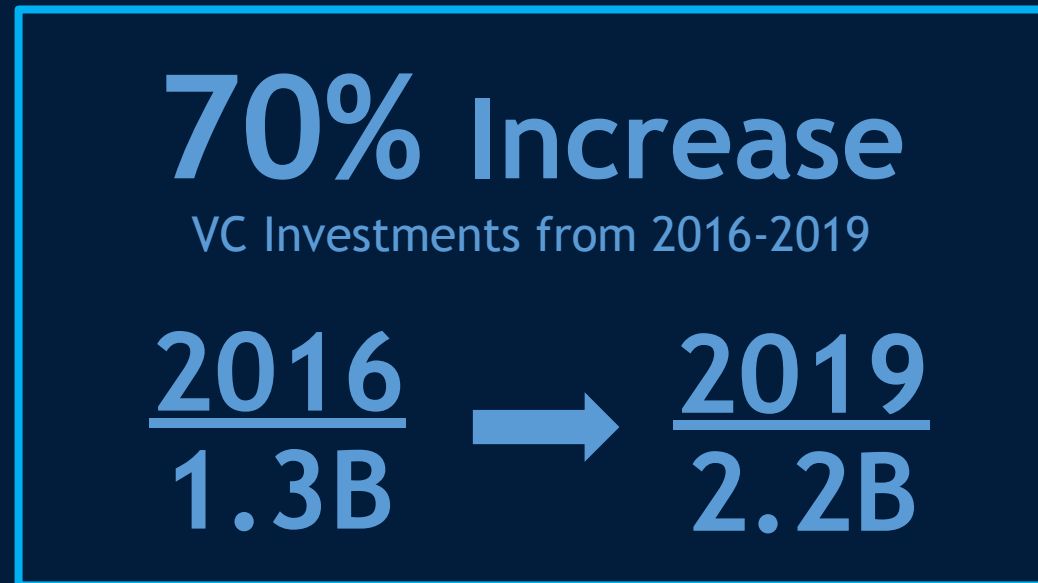


Web and Mobile Innovation



built in chicago

Tech startup resource



Innovation Clusters



Nanotechnology Hub

160+

Companies and research
institutions

11

Research centers
dedicated to nanoscience
and nanotechnology



INTERNATIONAL INSTITUTE
FOR NANOTECHNOLOGY

\$1B+

in nanotechnology research, education,
and infrastructure at the International
Institute of Nanotechnology (INN)

Growth Spaces

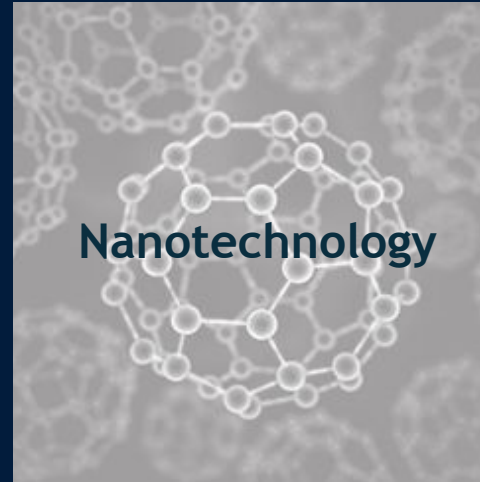


University Technology Park
ILLINOIS INSTITUTE OF TECHNOLOGY

RESEARCH PARK
UNIVERSITY OF ILLINOIS URBANA CHAMPAIGN

illinois
science +
technology
park

Innovation Clusters

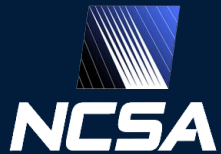


High-Performance Computing

2 Of the world's fastest
supercomputers



MIRA



Blue Waters

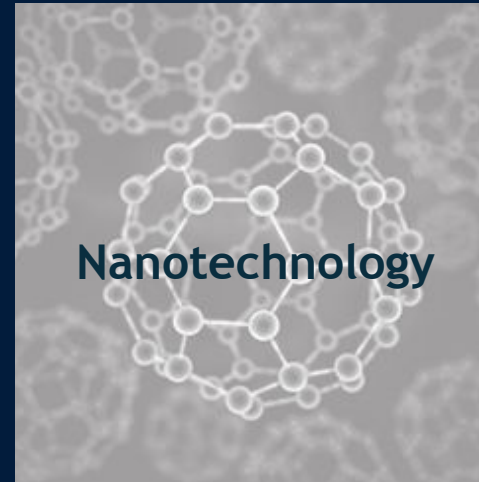
1.1 million sq.ft.

Data center, one of the largest in the world

7.96 terabytes

of data transmitting over the 3rd most
powerful fiber optic infrastructure

Innovation Clusters



Telecom and Information Technology

6th

Largest IT workforce in the nation

175,000

Jobs in 2019

3rd

Most computer science degrees awarded nationally



Scaling Illinois tech companies

Major Operations in Chicago



Microsoft



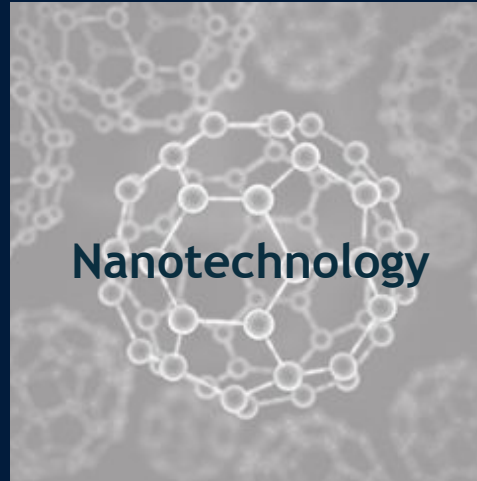
Innovation Clusters



**Food & Ag
Technology and
Innovation**



**Smart Storage,
Smart Grid,
and Clean
Tech**



Nanotechnology



**Telecom and
Information
Technology**



**Health and Life
Sciences
Innovation**



Web and Mobile



**High-Performance
Computing and
Cyberinfrastructure**



**Advanced
Manufacturing**

Advanced Manufacturing

\$108B

In manufacturing output each year

592,000

Employed in manufacturing

3rd

Highest manufacturing
output nationwide

Advancing Innovation in Manufacturing



Manufacturing convener at the intersection of computing, big data, and the Internet of Things

MHUB

Chicago's first innovation center focused on physical product development and manufacturing



Improving the productivity and competitiveness of Illinois' small and mid-sized manufacturing firms

Rockford Area Aerospace Network

Home to five tier-one aerospace companies and more than 90 supporting suppliers, with over 250 suppliers



 istcoalition.org  illinoisinnovation.com

 [@istcoalition](https://twitter.com/istcoalition)