



**iFAB**

Illinois Fermentation and  
Agriculture Biomanufacturing Tech Hub

# What is iFAB?

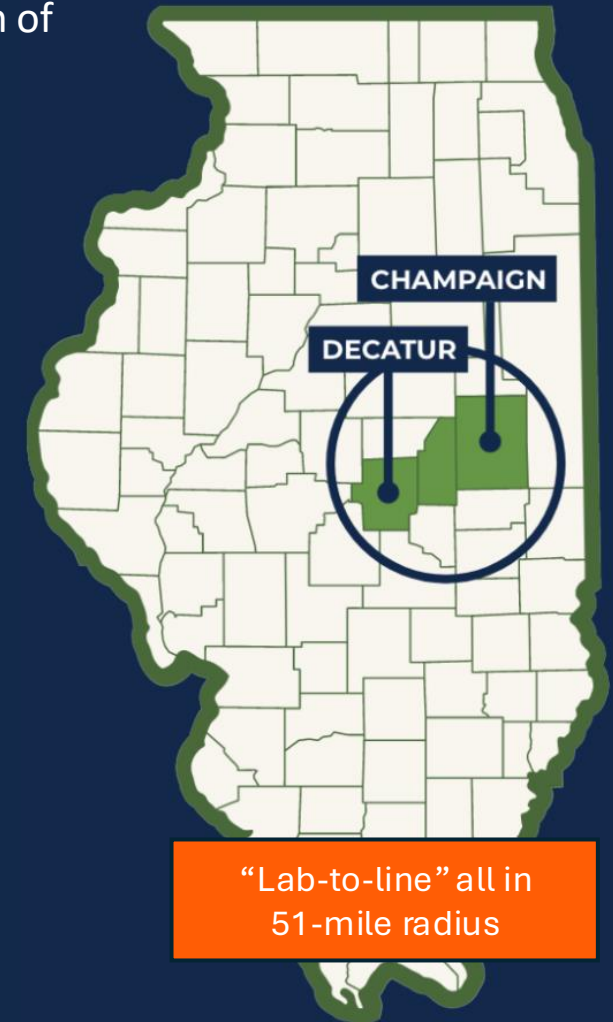
The **Illinois Fermentation and Agriculture Biomanufacturing Tech Hub (iFAB Tech Hub)** is consortium of 36 members (and 32 strategic partners) led by the University of Illinois Urbana-Champaign.

Our mission is to leverage our region's unique assets—an abundance of feedstock, world-class bioprocessing facilities, unparalleled transportation networks, and higher education institutions—to establish Central Illinois as a global leader in precision fermentation and biomanufacturing.

Aligning federal policy and strategic investment with American know-how and innovation will future-proof our supply chains, bolster manufacturing in rural America, drive job growth nationwide, and enhance America's global competitiveness.

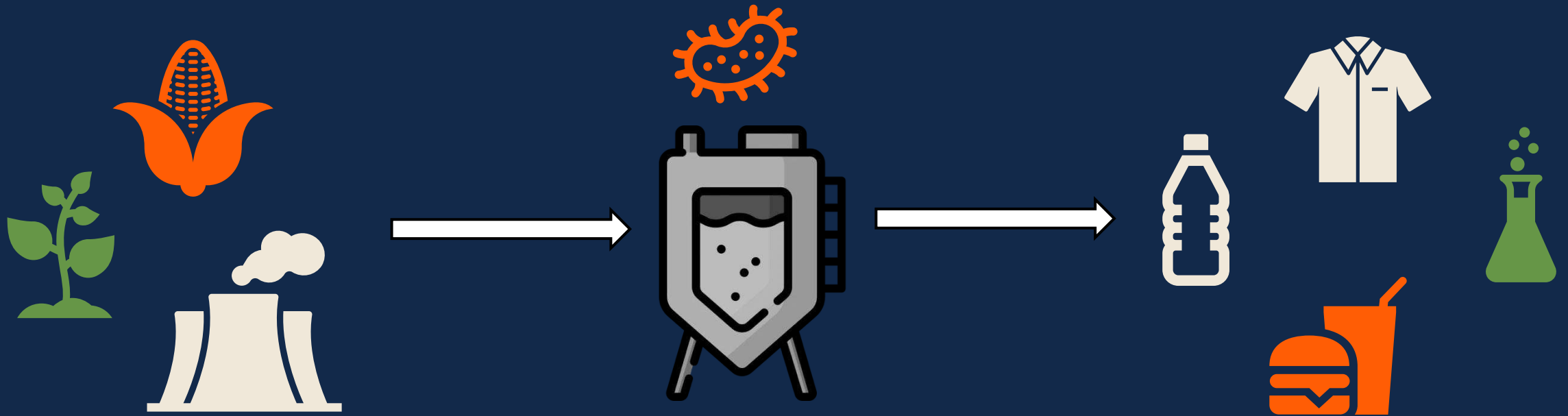
## FAST FACTS: Why Biomanufacturing & Why Illinois?

- ✓ 30% of U.S. Chemical Demand through biomanufacturing by 2040
- ✓ Total expected market of \$200 billion within 15 years
- ✓ 1 million additional jobs by 2030
- ✓ Opportunity to re-shore manufacturing
- ✓ Illinois is a leading producer of soybeans, corn and swine
- ✓ Home to the world's largest corn wet-milling plants, producing sweeteners like dextrose
- ✓ ADM Intermodal Ramp, 280-acre inland port for processing international cargo



"Lab-to-line" all in  
51-mile radius

# Precision Fermentation as a Tool for Biomanufacturing



Specifications too steep for scale

Scaling opportunity



### Pharma biologics

#### Description

- Biopharma biologics (e.g., mRNA vaccines, insulin, hormones, CAR-T cells, gene therapy, or antibodies)

2040 market potential



### Specialty chemicals

- Enzymes
- Animal-based and plant-based proteins and lipids<sup>1</sup>
- Pigments and fragrances
- Chemical APIs

\$50 billion



### Food

- Dairy, meat, and egg proteins
- Fats
- Additives
- Dyes and flavors

\$100 billion



### Chemicals precursors

- Monomers and resins
- Fertilizers and pesticides
- Lubricants
- Fibers

\$50 billion

Margin

Volume

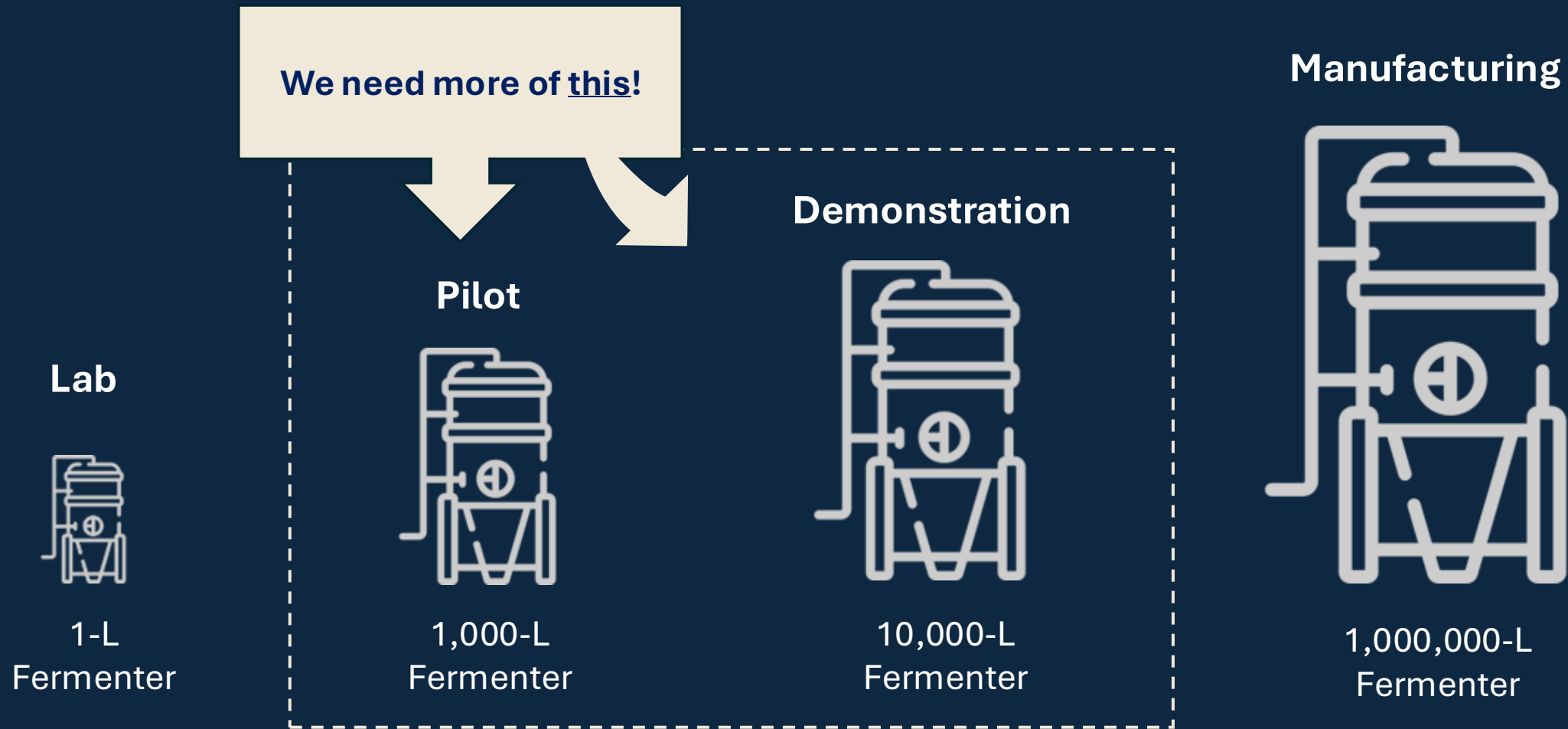
Source: BCG analysis.

Note: API = active pharmaceutical ingredients.

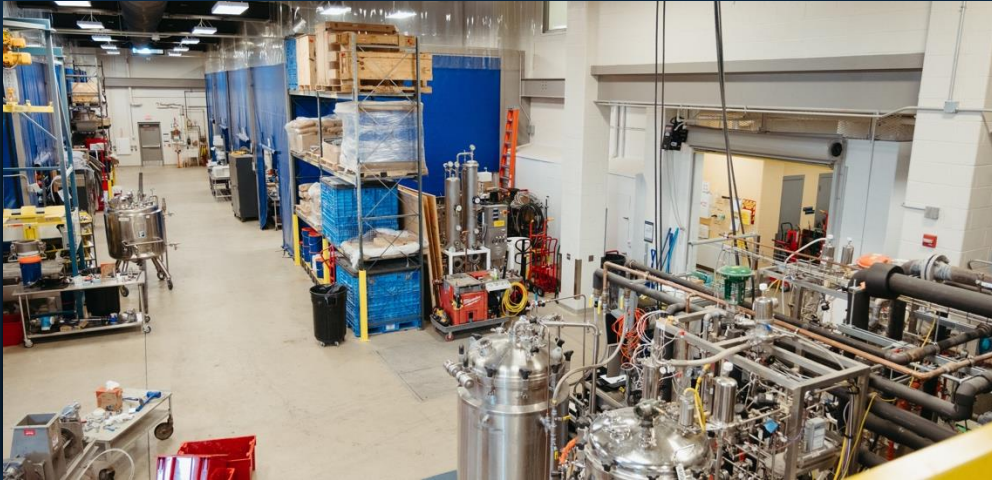
<sup>1</sup>For example, collagen, silk, and palm oil.



# Lack of Fermentation Infrastructure: Bottlenecking the Industry



# University of Illinois Pilot-Scale Facilities



IBRL: Pilot & lab scale bioprocessing facility designed to de-risk technologies in **food ingredients, high-value industrial molecules, cosmetics, fuels, etc.**



FSHN: Pilot plant & kitchen for **research, education, formulation, and proof of concept** for food products. Capable of supporting sensory, client samples, and clinical/animal studies.



# Lead: UIUC's Integrated Bioprocessing Research Laboratory (IBRL)

- Opened six years ago
  - Coincided with a phenomenal expansion in the global biomanufacturing and bioprocessing industries
- Focused on precision fermentation
  - Supported **150+ companies** to date with pilot testing
  - Trained **700+ students** and industry members
  - Revenue positive
- Have already exceeded pilot testing and training capacities
- To continue to facilitate commercial expansion, economic development, and biomanufacturing success, **IBRL must grow programmatically and expand its infrastructure.**

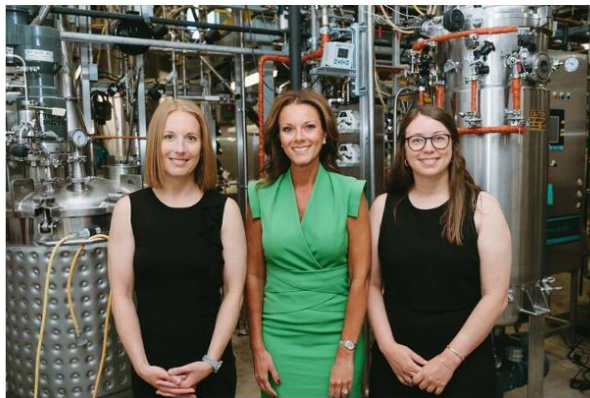


# FUNDING

## iFAB awarded \$51 million EDA Tech Hubs grant to propel Central Illinois as a biomanufacturing leader

July 2, 2024 | Claire Benjamin

[Awards](#) / [Sustainability](#) / [Technology](#)



One of four hubs at the highest funding level: \$51M – and this is just the beginning!



# Funded Projects

iFAB projects will work together to support a globally competitive “lab-to-line” precision fermentation hub in Central Illinois, with support for companies at each stage of scaling.

## EnterpriseWorks

2.0



University of Illinois  
Urbana-Champaign

## IBRL Expansion



University of Illinois  
Urbana-Champaign  
1500L

## Primient PROOF



Decatur, IL  
13,000L

## ADM<sup>®</sup> BioProducts



Decatur, IL  
80,000L

iFAB Hub Management

# Infrastructure Project Leads

 **IBRL**  
**Expansion**



**Brian Jacobson**  
*IBRL/iFAB*

**EnterpriseWorks**  
**2.0**



**Gerald Wilson**  
*University of Illinois  
Research Park*

 **Primient**  
**PROOF**



**Eric Lee**  
*Primient*

**Ismael Nieves**  
*Primient*

 **ADM**  
**BioProducts**



**Jose Léboreiro**  
*ADM*



**Colin Graves**  
*ADM*

# Federal Consistency and Support



April 2025

## Charting the Future of Biotechnology

An action plan for American security and prosperity



## National Security Commission on Emerging Biotechnology Report

- Recommends **\$15B** of deployed federal funds
- Explains competition with China
- Recommends leveraging existing programs (i.e. Tech Hubs)
- Names **iFAB**



# Federal Consistency and Support

iFAB penned a letter in support of the NSCEB report, “Charting the Future of Biotechnology.” Industry leaders and stakeholders are continuing to sign the letter, which calls on Congress and the Administration to implement the following recommendations:

- **Recommendation 2.3A** – Authorize and fund the Department of Energy and Department of Commerce to develop a network of manufacturing facilities across the country for precommercial bioindustrial product scale-up at a minimum of \$800 million.
- **Recommendation 3.2A** – Congress should direct the Department of Defense (DOD) to work with private companies to build commercial facilities across the country to biomanufacture products that are critical for Department of Defense needs.
- **Recommendation 5.2A** – Congress should maximize the impact of biomanufacturing workforce training program.



## SUPPORTERS

[Adamas Nanotechnologies](#) | [ADM](#)  
[AgVault LLC](#) | [Air Protein](#)  
[Alfa Laval Inc.](#) | [Amyris, Inc.](#)  
[Antheia, Inc.](#) | [Apex Bio Consulting LLC](#)  
[Applexion](#) | [AQUA Cultured Foods](#) | [AsimicA](#)  
[BASF Corp](#) | [Bayer](#) | [Black & Veatch](#)  
[Boston Bioprocess](#) | [Caladan Bio](#) | [Capra Biosciences](#)  
[Cauldron](#) | [C16 Biosciences](#) | [Checkerspot](#)  
[Circe](#) | [Corn Refiners Association](#) | [Cultivarium](#)  
[D^2 Biotech Consulting, LLC](#)  
[Economic Recovery Corps](#) | [Edlong Corp](#)  
[Engineering Biology Research Consortium](#)  
[Erg Bio](#) | [FafaBiotic LLC](#) | [frakktal](#)  
[Geltor](#) | [General Biological Corporation](#)  
[Good Food Institute](#)  
[Hawkwood Biotech](#) | [Hydrosome Labs](#)  
[Hyfe](#) | [IFE](#)  
[Illinois Manufacturers' Association](#)  
[Imio Technologies, Inc.](#) | [Indie Bio](#)  
[Industrial Microbes](#) | [Integrated Dynamics, Inc.](#)  
[Jaffe Policy Consulting](#)  
[Kalion](#) | [Kerry](#)  
[Kraft Heinz](#) | [LifeFoundry, Inc.](#)  
[Loop Bioproducts](#) | [Mach Global Advisors](#) |



# Members of iFAB

Tech Hub



## HIGHER EDUCATION

Integrated Bioprocessing Research Laboratory  
Parkland College  
Richland Community College  
University of Illinois Urbana-Champaign

LEAD

## ECONOMIC DEVELOPMENT ORGANIZATIONS

Champaign County Economic Development Corporation  
Economic Development Corporation of Decatur & Macon County  
Illinois Economic Development Corporation

## INDUSTRY FIRMS

ADM  
Ameren  
Boston Bioprocess  
Clarkson Grain Company  
Kraft Heinz  
National Foodworks Services  
Primient  
Synonym  
Thew Arnott

## INDUSTRY GROUPS

Corn Refiners Association  
IL Corn  
Illinois Manufacturers' Association  
Illinois Soybean Association

## LABOR ORGANIZATIONS

Decatur Building & Construction Trades, AFL-CIO  
East Central Illinois Building & Construction Trades Council  
UA Plumbers & Pipefitters Local 149  
United Steel Workers

## MANUFACTURING EXTENSION ORGANIZATIONS

Illinois Manufacturing Excellence Center

## UNITS OF GOVERNMENT

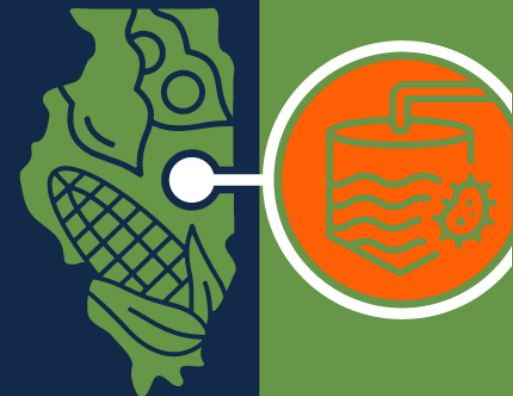
Champaign County  
City of Champaign  
City of Decatur  
Macon County  
Piatt County  
State of Illinois

## VENTURE DEVELOPMENT ORGANIZATIONS

gener8tor  
Serra Ventures  
University of Illinois Research Park, LLC

## WORKFORCE TRAINING ORGANIZATIONS

East Central Illinois Workforce Board - Champaign WIOA  
Workforce Investment Solutions - Decatur WIOA



# Strategic Partners of **iFAB** Tech Hub

## **INDUSTRY FIRMS**

Alfa Laval  
Applexion  
BioMADE  
Black & Veatch  
C1 Biosciences  
Clever Carnivore  
Erg Bio  
Facture  
Industrial Microbes  
Merrick  
Midwest Bioprocessing Center  
Next Rung Technology  
Oleo Sustainable Palm Oil Solutions  
Opera Bioscience  
Prism Immersive  
RETRN Bio

## **ECONOMIC DEVELOPMENT ORGANIZATIONS**

Douglas County Economic Development Corporation  
Greater Peoria Economic Development Council  
The International Trade Association of Greater Chicago

## **VENTURE DEVELOPMENT ORGANIZATIONS**

Cultivian Sandbox  
Illinois Ventures  
Peoria Next Innovation Center  
Synthesis Capital

## **NONPROFIT ORGANIZATIONS**

Good Food Institute

## **UNITS OF GOVERNMENT**

City of Pekin, Illinois

## **SERVICE PROVIDERS**

Ameren  
Associated Transfer and Storage  
Clayco  
Illinois American Water  
O'Shea Builders  
Sanitary District of Decatur, Illinois  
Urbana & Champaign Sanitary District



# You're Invited!



## **7<sup>th</sup> Annual CU AgTech Week**

Monday, March 9 – Friday, March 13

[cuagtechweek.com](http://cuagtechweek.com)

## **11<sup>th</sup> Annual AgTech Summit**

Tuesday, March 10

<https://researchpark.illinois.edu/all-events/agtechsummit/>

## **Inaugural iFAB Biomanufacturing Summit**

Wednesday, March 11

<https://ifabtechhub.org/event/2026-ifab-biomanufacturing-summit/>

## **Ongoing IBRL Short Courses**

Various dates, March – September

<https://ibrl.aces.illinois.edu/short-courses/>



**Carly McCrory-McKay**  
Chief Partnerships Officer



**Nicole Bateman**  
Chief Strategy Officer



**Dr. Beth Conerty**  
Regional Innovation Officer



**Laura Appenzeller**  
Assistant Vice Chancellor  
for Innovation



**Dr. Kim Kidwell**  
Associate Chancellor for  
Strategic Partnerships and  
Initiatives



**Brian Jacobson**  
Program Lead  
for Infrastructure



**Taylor Meredith**  
Communications  
Manager



**Lenora Fisher**  
Director of Business  
Attraction



**Brooke Gordon**  
Administrative Program  
Manager



**Lynzee Kraushaar**  
Business Specialist



**LEARN MORE**

# Connect with Us



iFABTechHub.org

ibrl.aces.illinois.edu



@ifabtechhub

@integrated-bioprocessing-  
research-laboratory