

# *National and Economic Security:*

Providing a safe and secure livelihood for all



Advancing Life and Health Sciences



Providing National Security and Defense



Saving Energy and Protecting the Environment



Modernizing our Infrastructure



Ensuring Economic Prosperity through Data Science and AI



Feeding the World

# *Lilly and Purdue have a comprehensive partnership*

**\$52M to fund life science research over 5 years, \$50M renewal**

- It is a **programmatic focus**:
  - Developing improved delivery of injectable medicines
  - Developing predictive models
  - Reduce risks associated with investing in drug development
  - Predict the outcome of new therapies in humans
- The **renewed collaboration** focuses on:
  - Expanded research in genetic medicine, intrathecal delivery, and nanoparticle drug delivery



# *“Lilly Scholars at Purdue” supports talent development*

## \$42M to fund Lilly Scholars

- Recruit the best, the brightest, and the most diverse students to Purdue University
- Build a pipeline of the most diverse pharmaceutical manufacturing talent to Eli Lilly
- Cohort #1 — 200 offers, 98 accepted — 58% URM, 77% female, 45% first generation
- Cohort #2 – 550 applicants – 70 offers

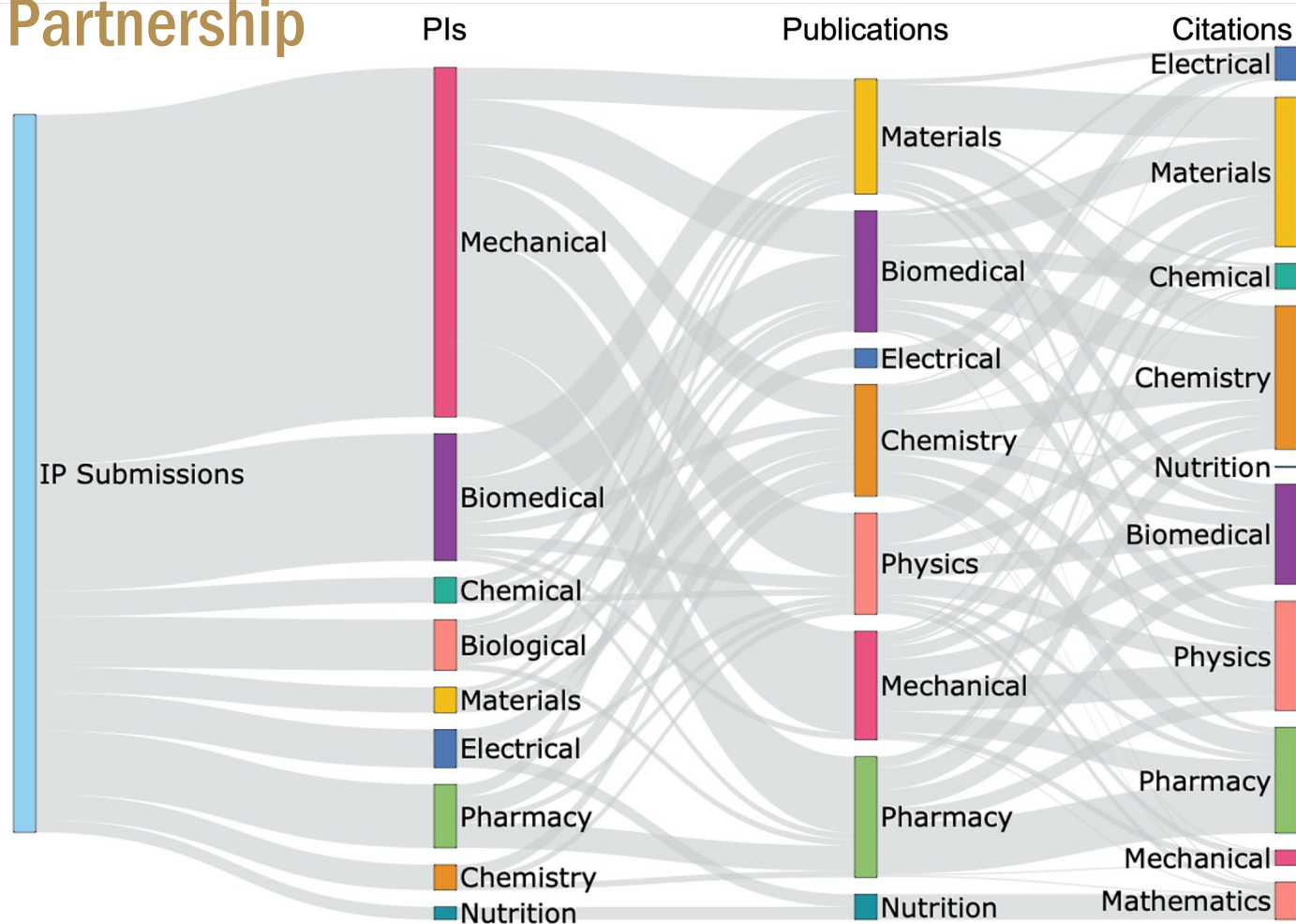


- *Full tuition scholarship* • *Co-op or internship* • *Mentorship* • *Pharma training program*



# Industry partnerships impact scholarship and people

## Lilly Partnership



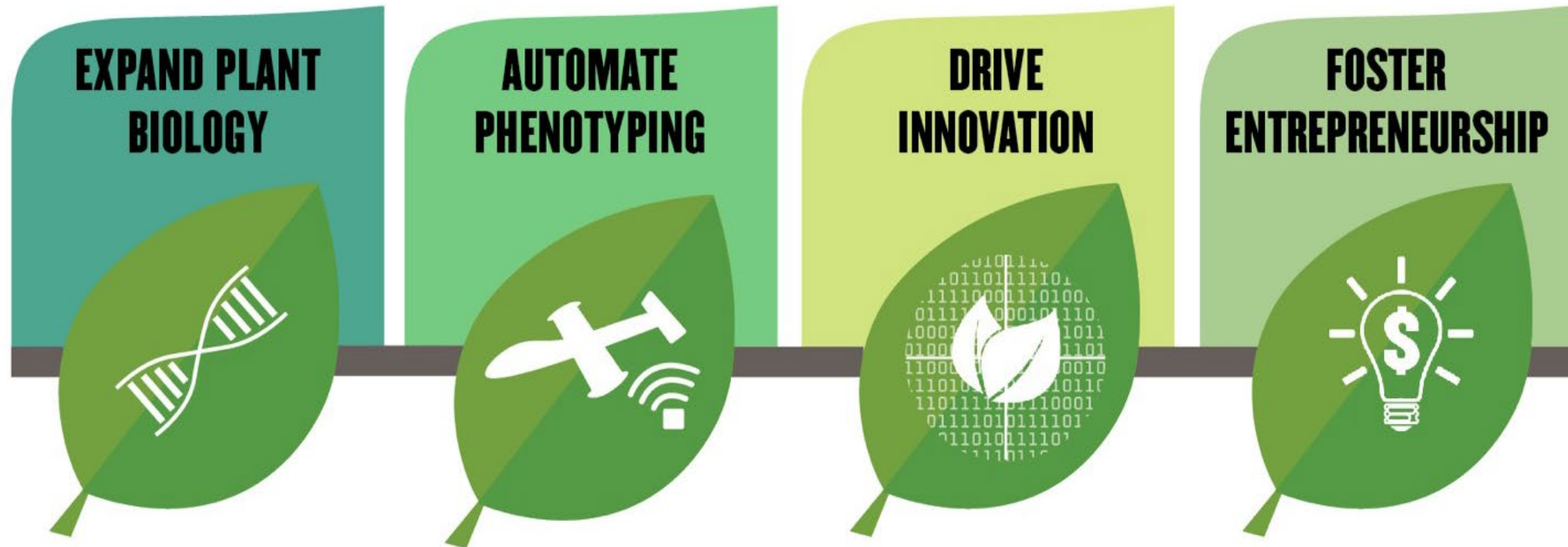
### Scholarship:

- 150+ publications (IF > 6.7)
- 111 IP disclosures
- 9 patents filed

### People :

- 245 students engaged
- 15 post-docs completed training
- 41 graduate students received degrees

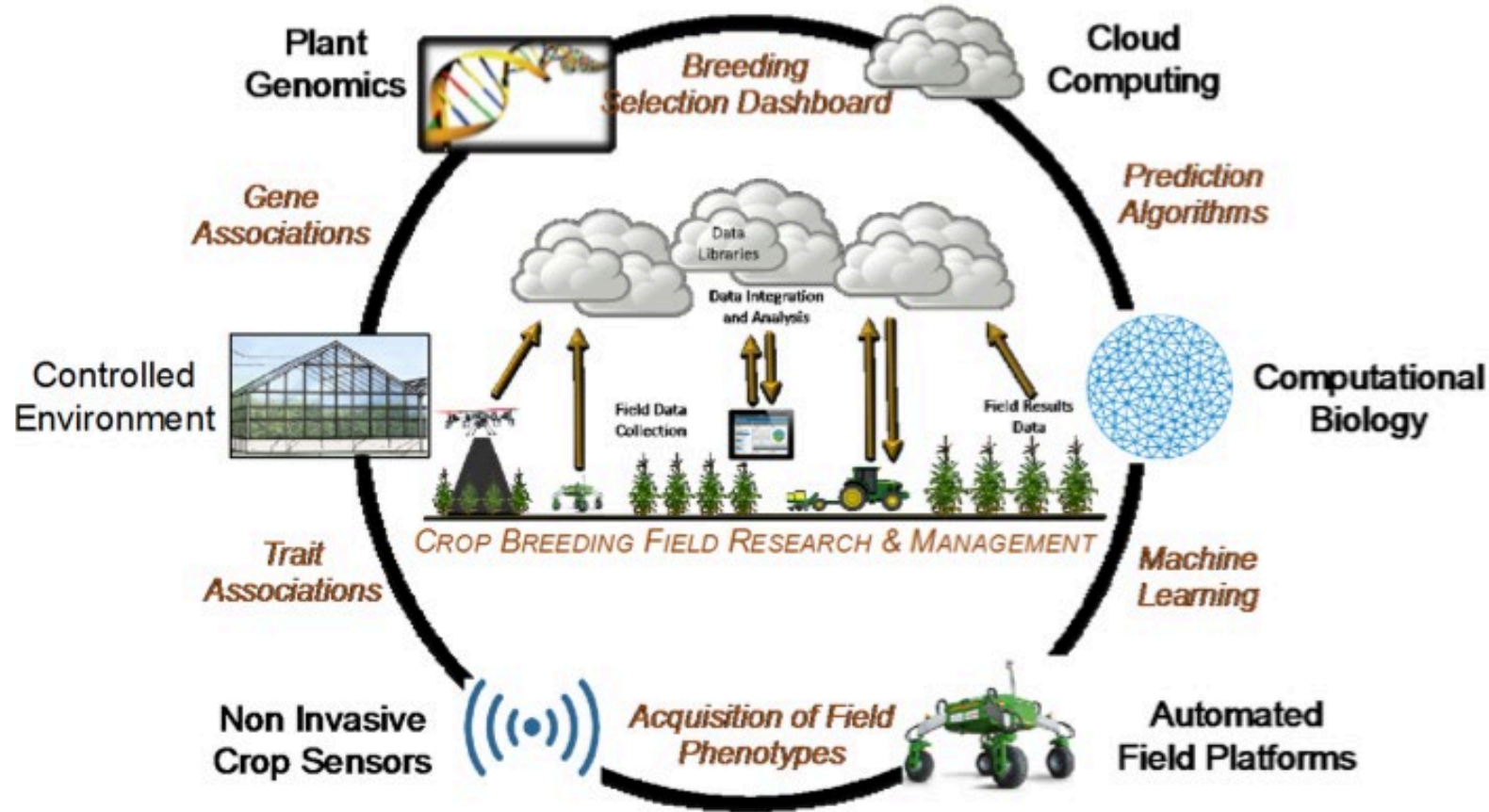
# *Purdue invests in Plant Sciences*



The Purdue Plant Sciences Pipeline brings together multidisciplinary research and education to move discoveries from the bench to application and commercialization.

# DOE-ARPA E TERRA Program calls for proposals

Convergence of Biologists, Engineers and Computer Scientists



## Team:

- Purdue University
- IBM
- Univ. of Queensland

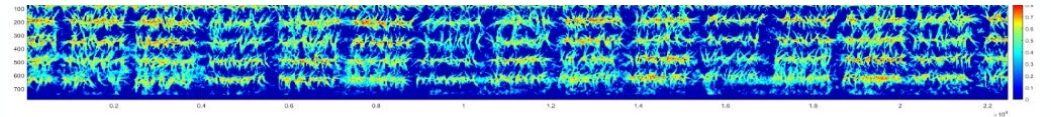
## Colleges Involved:

- Agriculture
- Engineering
- Purdue Polytechnic
- Science

Award: \$6.6M



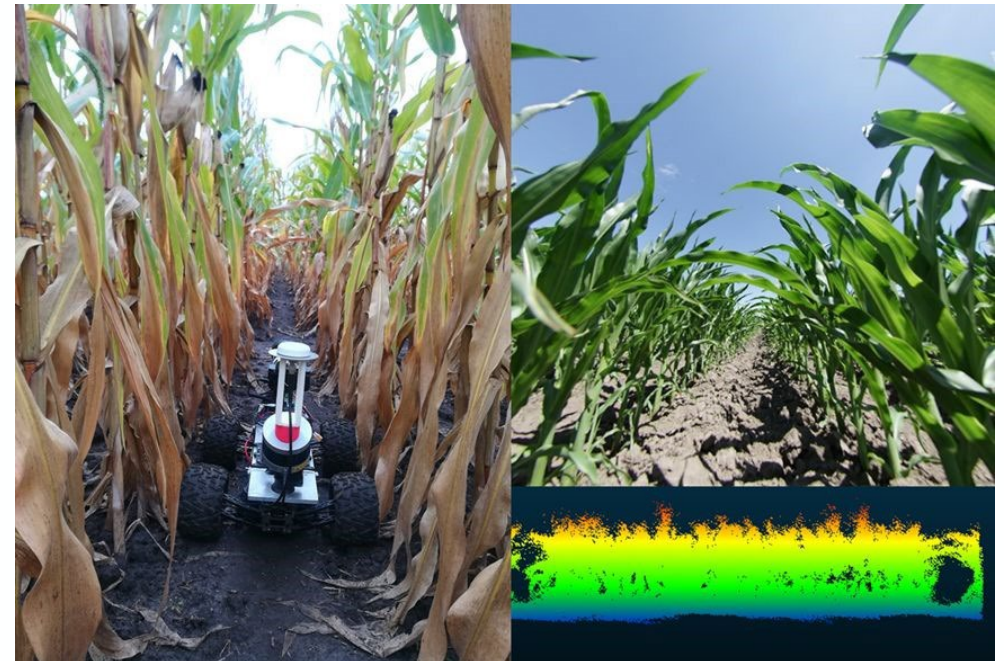
# *Purdue advances field phenotyping with help from partners*



## Support from:

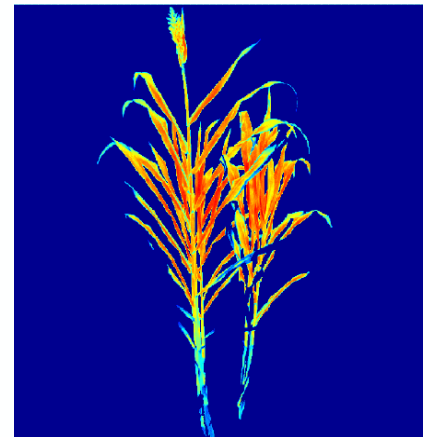
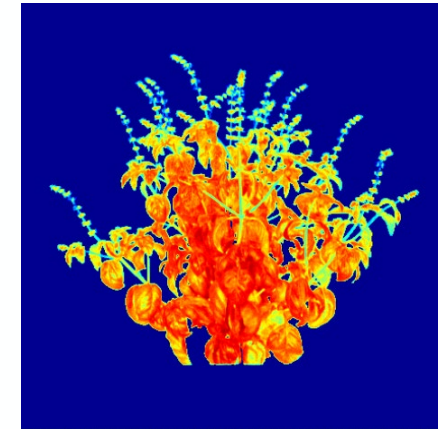
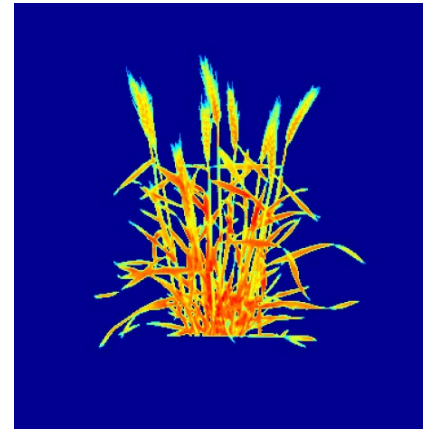
- Indiana Soybean Alliance
- Indiana Corn Marketing Council
- AgReliant Genetics
- Almaco
- Corteva
- Bayer
- Ag Alumni Seed

[Indiana Corn and Soybean Innovation Center \(purdue.edu\)](http://purdue.edu)



# *Multi-Disciplinary approach to innovation*

## Ag Alumni Seed Phenotyping Facility

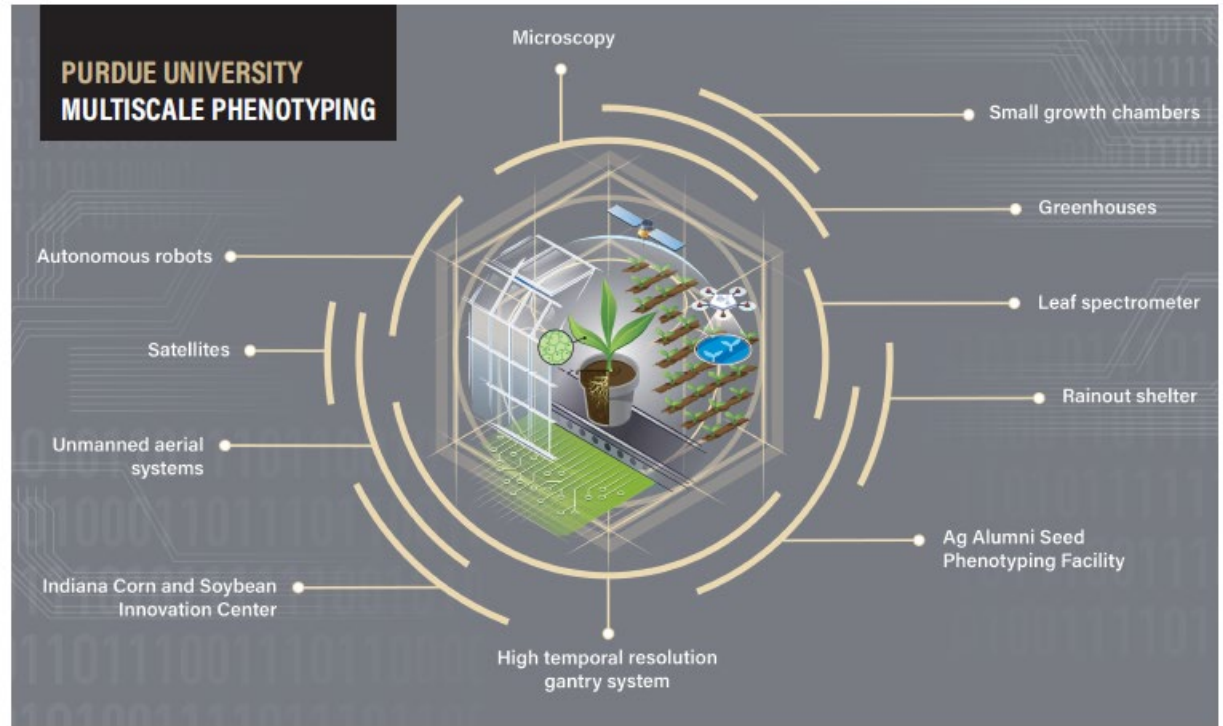




# *Capitalizing on our accomplishments*

## Flagship programs in plant phenomics, digital agriculture and big data

- From 2014–2023
- \$300 M in new grants and gifts
- 9000 publications from 150 faculty
- 20% growth in undergraduate enrollment
- Faculty span 5 colleges
- 17 new patents issued in the last two years
- 23 plant-related startup companies commercializing Purdue IP



# Ag-celerator funded start ups

growanu.com

- Student start up



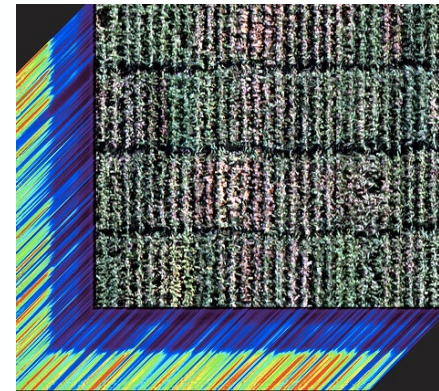
plotphenix.com

- Sold to a large company



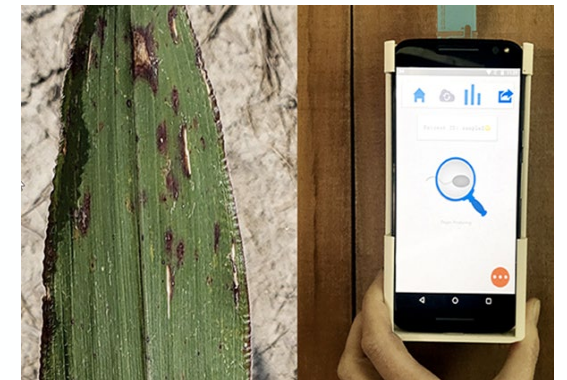
gryfn.io

- Data Science company



insignumagtech.com

- Post-doc start up



# *Thank You*

Karen Plaut

Executive Vice President for Research

[kplaut@purdue.edu](mailto:kplaut@purdue.edu)