



# Economic Development Update

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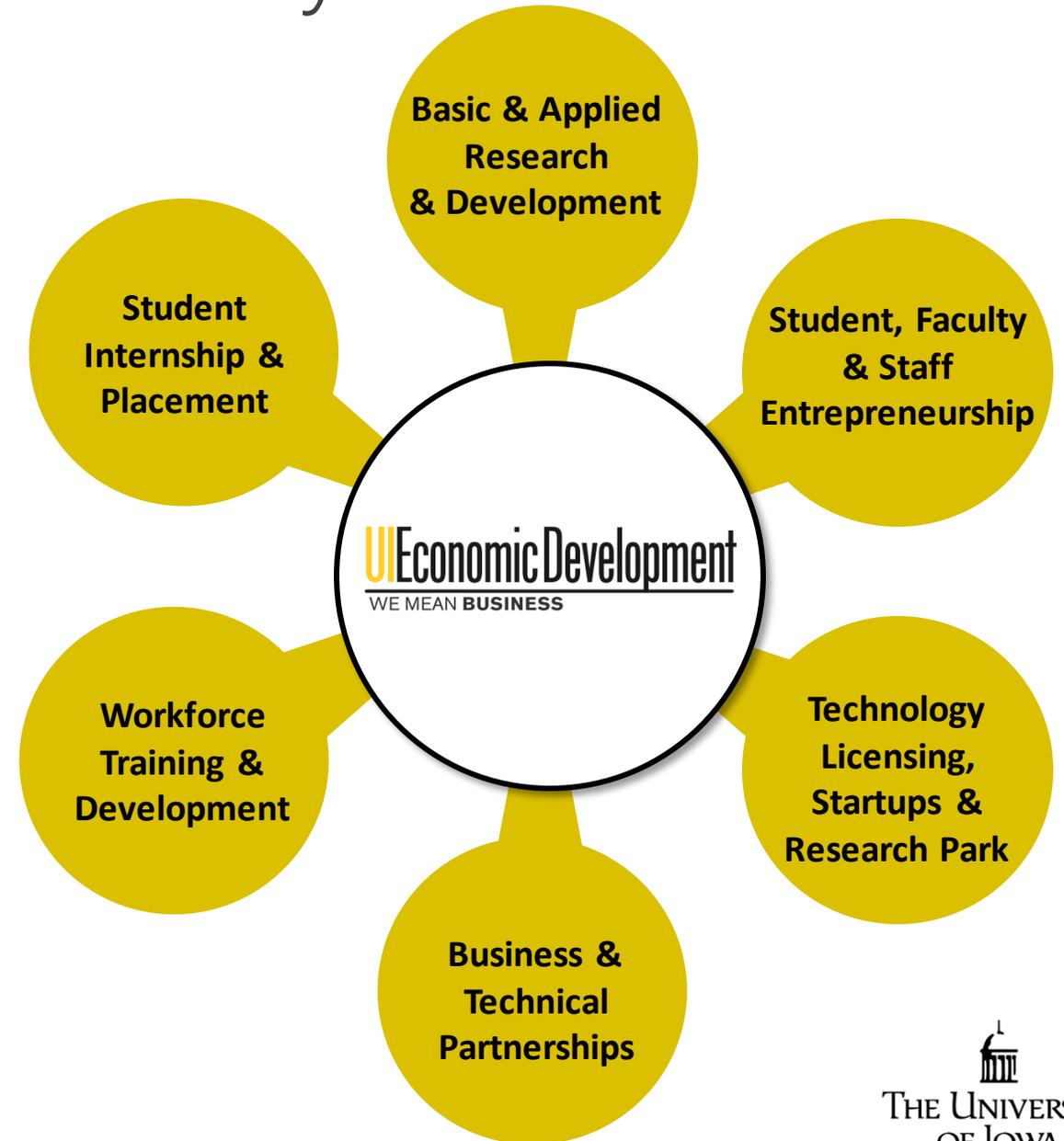


# Iowa economic development ecosystem



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JPEC



# Building economic ecosystems

## Direct and indirect impact

**43** companies in UI Research Park employing

**1800**  
people

**200+** student & faculty startups



### BioVentures Center

- 100% occupancy
- 17 companies and 90 people

**640**   
faculty invention disclosures

**55%**   
disclosure increase  
FY13- FY16

### IEDA \$1.5M award

- Advanced prototyping
- Biomedical startup target

**20,057**

student enrollments in JPEC entrepreneurship classes



**347**



Iowa companies received business consulting services from JPEC faculty/student teams

### Advanced Drug Development

- Advanced manufacturing proposal

**481**



Venture School participants\*

\*Most data for 5 years, except for Venture School, which is for first 3 years of program

# Startup incubation strategy

Convenience, cost, capabilities and customization

Dry Lab



Coffee Shop/Home



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UI Research Park



A Place of their Own

Wet Lab



UI Research Lab



Translational Research Incubator (TRI)



Bioventures Center



A Place of their Own

# From idea to innovation

## Filling a unique niche



Approximately 80% of UI startups are biomedically based

- Medical device companies require capital to have devices FDA cleared (510(k))
- In turn, this requires prototype design, fabrication and testing
- Most startups lack the financing to pay for outsourced 3-D design and prototyping

Advanced design and prototyping hub (IEDA funding)

- Prototyping and fabrication, 3-D printing, CNC machines, electronics and design tools
- Design training and skills uplift

*Doing for startups and SMEs what cloud computing did for IT startups*

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# Changing the game

## Pragmatics and operations

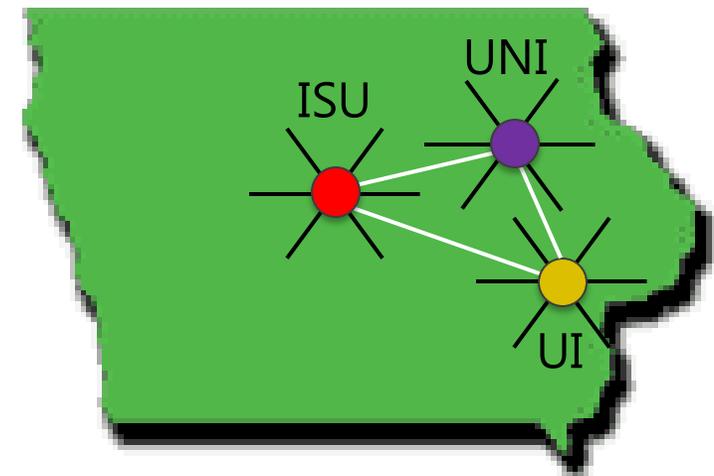
*Small, high-resolution prototypes*  
*Workforce training and skills uplift*

### Prototyping, not manufacturing

- Focuses on design and initial prototyping
- Handoff to private sector after initial design
- Partnerships with commercial prototyping firms

### ISU, UNI and Kirkwood partnerships

- No overlap in offerings
- MOUs for mutual referrals and student training



Statewide hubs and spokes

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### *Filling a unique niche in the state*

- Reduce IP and talent flight
- Build local companies and ecosystem

### Student engagement

- Hands on training
- SME support and internships

# Venture School and UI Ventures

## Training Iowa's entrepreneurs

### National Science Foundation (NSF) I-CORPS Sites grant

- Three-year, \$300,000 grant awarded spring 2015 to train and support 90 faculty entrepreneurs
- 27 faculty with commercialization projects were trained in 4 cohorts during the first year

### Venture School

- Seven cohorts hosted statewide, involving 59 teams of 170 entrepreneurs
- 28 new ventures launched
- 17 existing startups or businesses refined their business models

### UI Ventures

- 42 startups actively supported, 16 of which incorporated in FY16
- ***Viewpoint Molecular Targeting named among "Best University Startups 2016"***
- UI Ventures-affiliated companies received \$973K in SBIR/STTR grants in FY16
- Launched an investor- and alumni-based networking group, Iowa/CONNECT



UI working with 60-plus active spinout ventures using UI research and IP



Company Name	Industry Sector	Stage
Advanced Infoneering	Synthetic vision for aviation	Product sales
Ardis Pharmaceuticals	Infectious diseases	Pre-clinical
ASL Analytics	Noninvasive chemical monitoring	Product development
Behavioral Diagnostics	Diagnostics for depression, alcoholism	Pre-clinical
Brain Image Analysis	Neuroscience and Clinical Image processing	Product Sales
Coronado Biosciences	Autoimmune disorders	Clinical trials
Emmyon	Therapeutics and dietary	Pre-clinical
Entac	Software diagnostics	Product development
Exemplar Genetics	Animal models of disease	Product sales
Exobray	Oncology therapeutic hardware	Product development
FxRedux	Surgical software	Pre-clinical



# Supporting Iowa's future STEM workforce

- SE Iowa STEM Hub
- Kirkwood at University of Iowa
- Teen Coding Workshop





# Questions and discussion