



Economic Development Update

Board of Regents Meeting
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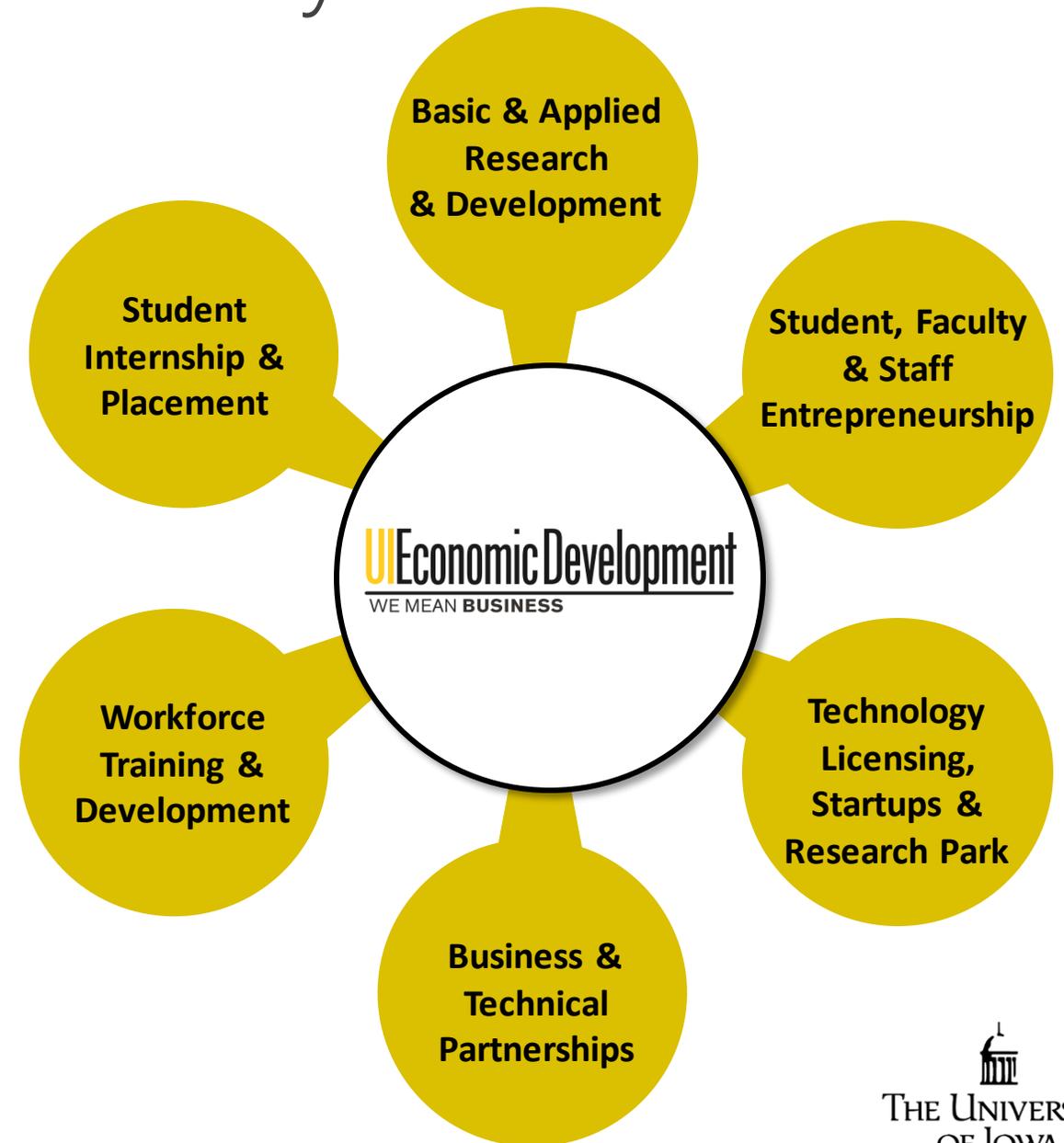


Iowa economic development ecosystem



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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

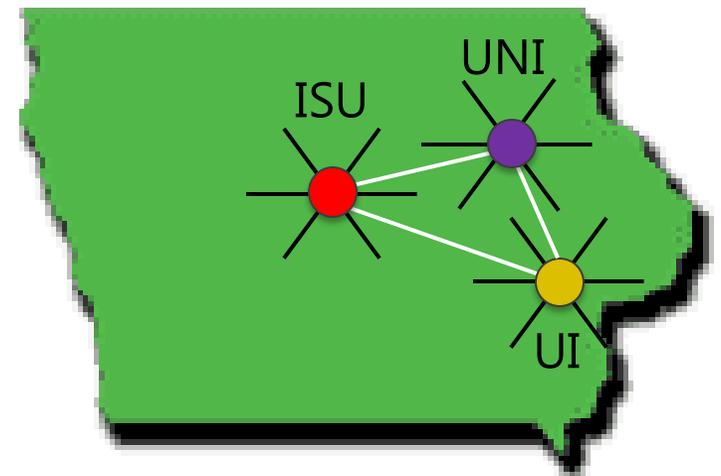
Small, high-resolution prototypes
Workforce training and skills uplift

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

Startup success

Medical 21 has **signed a license** with the UIRF to continue developing UI research into using cellulose-based material for vascular grafting.

Spark Therapeutics raised **\$128M** in its initial public offering of stock as it works to develop genetic treatments for blinding eye diseases

iotaMotion, developing a prototype for a device to non-invasively improve hearing in cochlear implant recipients, won **\$225,000** through the NSF's Small Business Innovation Research/Small Business Technology Transfer program.

InnoBioPharma founder Zhendong Jin received a **\$50,000** grant for completing the NSF's national I-Corps training to continue developing anti-cancer agents derived from a rare deep-sea sponge.

Voxello, developing devices and solutions to help critically ill and disabled patients communicate with care providers, received **\$150,000** from the NIH's Small Business Innovation Research program, and is currently raising private capital.

MediRevv, which specializes in management of the health care revenue cycle, is among 24 Iowa companies that made the **Inc. 5000 list** of the fastest-growing U.S. companies.

Immortagen recently closed on **\$500,000** in private funding for its advanced DNA-based predictive cancer screening processes.

Viewpoint Molecular Targeting received **\$300,000** in from the NIH's Small Business Innovation Research program for the production of the company's image-guided radiopharmaceutical treatment of metastatic melanoma.



Supporting Iowa's future STEM workforce

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





Questions and discussion