Economic Development Update

Board of Regents Meeting
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Iowa economic development ecosystem

- UI Ventures
- UI Research Foundation
- UI Partners
- UI Research Park
- protostudios
- JPEC

- Student, Faculty & Staff Entrepreneurship
- Student Internship & Placement
- Workforce Training & Development
- Basic & Applied Research & Development
- Business & Technical Partnerships
- Technology Licensing, Startups & Research Park
Building economic ecosystems
Direct and indirect impact

BioVentures Center
- 100% occupancy
- 17 companies and 90 people

IEDA $1.5M award
- Advanced prototyping
- Biomedical startup target

Advanced Drug Development
- Advanced manufacturing proposal

43 companies in UI Research Park employing 1800 people
200+ student & faculty startups
640 faculty invention disclosures
55% disclosure increase FY13-FY16
20,057 student enrollments in JPEC entrepreneurship classes
347 Iowa companies received business consulting services from JPEC faculty/student teams
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

Coffee Shop/Home → protostudios → UI Research Park → A Place of their Own

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
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

*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
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<th>Company Name</th>
<th>Industry Sector</th>
<th>Stage</th>
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<td>Advanced Infoneering</td>
<td>Synthetic vision for aviation</td>
<td>Product sales</td>
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<td>Ardis Pharmaceuticals</td>
<td>Infectious diseases</td>
<td>Pre-clinical</td>
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<td>ASL Analytics</td>
<td>Noninvasive chemical monitoring</td>
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<td>Diagnostics for depression, alcoholism</td>
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<td>Brain Image Analysis</td>
<td>Neuroscience and Clinical Image processing</td>
<td>Product Sales</td>
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<td>Coronado Biosciences</td>
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<td>Exemplar Genetics</td>
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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