

Peter K. Dorhout Vice President for Research

Professional & Scientific Council
November 2, 2021



- Safety moment
- Vision for the OVPR and our leadership team
- Celebrate recent successes
- What's over the horizon?

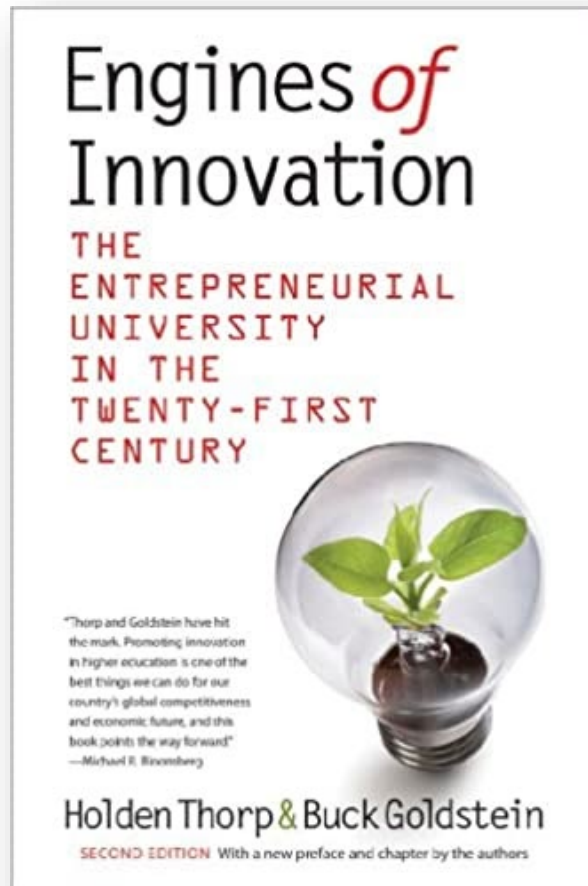


Photo: Doug Kerr via *Flickr*

Vision for the VPR at Iowa State

- Support challenging and world-class student and faculty research environments that apply and share knowledge and address societal challenges to make Iowa and the world a better place
- Provide educational leadership for comprehensive student, faculty, and staff training in safe, effective, and ethical research practices and promote a rich and diverse research culture that is welcoming to all
- Manage and develop investments, strategies, and business models for research development and support the success of research centers, institutes, Ames Laboratory, and other partners
- Display servant leadership and partnership in facilitating technology transfer, corporate relations, and economic development and engagement
- Facilitate key collaborative, interdisciplinary partnerships with faculty, staff, departments, colleges, and special units

Renewed call to action

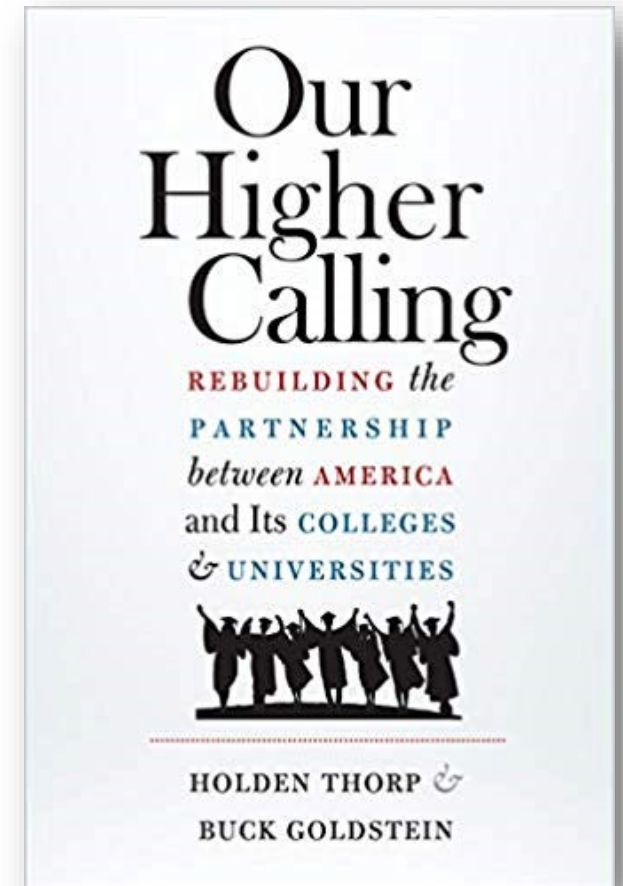


2010

“Big problems require new approaches to problem solving: ... disciplined mind, ... synthesizing mind, ... creating mind, ... respectful mind, and the ... ethical mind.”

“Team building and engagement are critical to success. Multiple disciplines & communities must be engaged.”

“Partnership with the community is essential.”



2018

Iowa State Research

- Foundation of excellence in research & development
 - \$368 M expenditures in 2020 (last HERD report)
 - Four years of >\$50 M from industry partners
 - Award-winning year: 6 AAAS Fellows, 14 NSF Career, Am. Acad. A&S, 2 NAI, NEH, Am. Acad. Poets, Am. Council Learned Soc., Carnegie, Sloan, MacArthur
- Top 100 world-wide universities for patents generated, 2020
 - #65 in the world: <https://academyofinventors.org/wp-content/uploads/2021/06/NAI-IPO-Top-100-Universities-Granted-U.S.-Utility-Patents-2020.pdf>
- National leader in Innovation & Entrepreneurship
 - Assoc. Public & Land-grant Universities IEP Innovation Award, 2020
 - US Admin. For Small Business & Entrepreneurship Award, 2021



ISU Research Portfolio

Grand Challenge Research Themes

“Build a mosaic versus a monolith.” – V. Coleman, CSO at USAF

- Enabling healthy lives (plants, animals, people, communities)
- Building sustainable human and natural ecosystems
- Creating next generation materials and manufacturing technologies
- Enabling data driven discovery and secure cybersystems
- Developing global citizens and vibrant societies



Bioscience Platforms

Biobased products



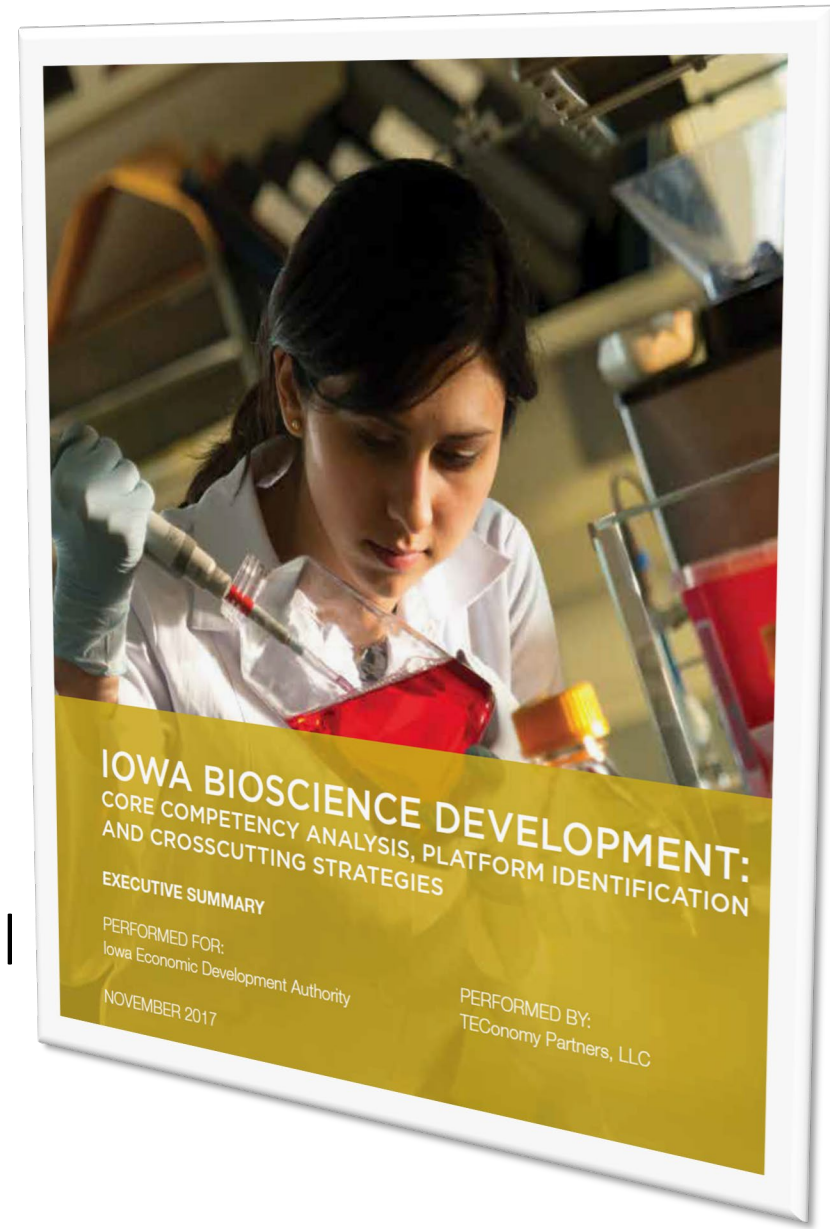
Digital and precision agriculture



Vaccines and immunotherapeutics



To accelerate translation of discoveries to commercial products by building the partnerships and leveraging strengths



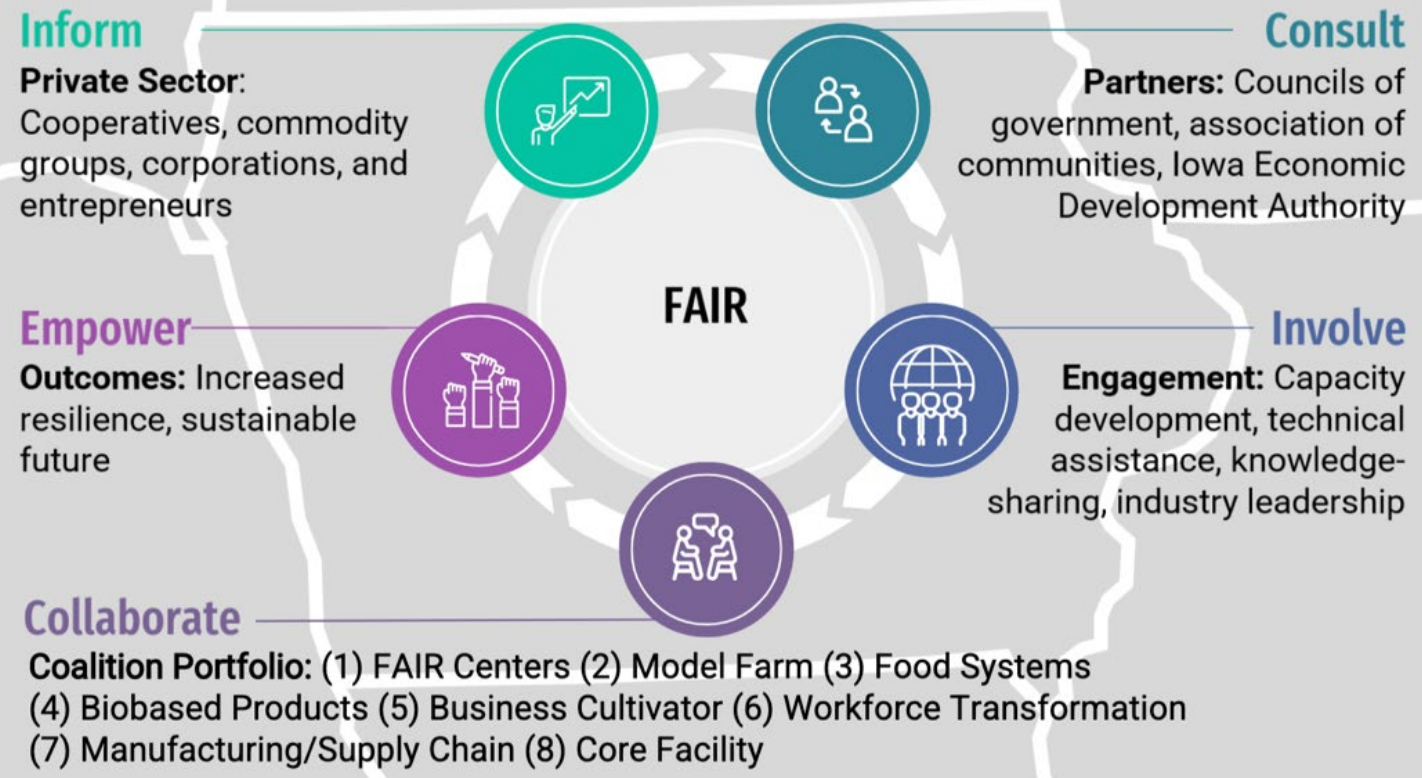
Over the Horizon

- U.S. Innovation & Competitiveness Act (Senate)
- NSF of the Future (House)
- Agriculture Reconciliation Bill
- Infrastructure Bill
- Dept. of Commerce – Build Back Better Regional Challenge



Build Back Better Regional Challenge Grant

Food and Agriculture Innovation & Resilience (FAIR)

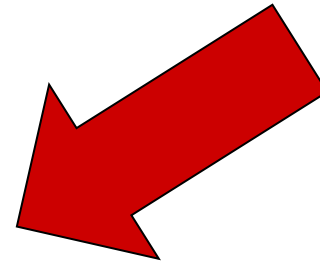
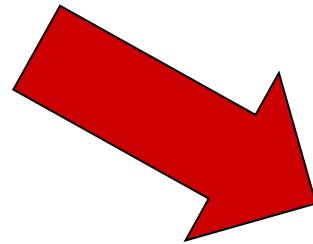


Innovation & Entrepreneurship

Brings jobs and capital to Iowa

Faculty
Staff
Students
Collaborators
Community
Extension

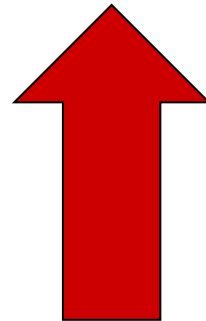
Talent



Place

Ames
Facilities
Programs
Ames Lab
Research Park
Student Innovation Center

To have impact through innovation...



Research

...create a University and community of systematic change-making.