# **Speakers**



**Dr. Robert Brown**Director, Bioeconomy
Institute



**Steven Carter**President, Iowa State
University Research Park



**Dr. Darren Jarboe**Program Manager,
Center for Crops
Utilization Research

# Iowa Business Leader ISU Research & Innovation Tour



**Dr. Steven Leath**President, Iowa State
University



Dr. Ruth MacDonald
Interim Director, BioCentury
Research Farm, Center for Crops
Utilization; Department Chair,
Food Science & Human Nutrition



**Dr. Sarah Nusser**Vice President,
Research at Iowa State
University





**Dr. Brent Shanks**Director, Center for
Biorenewable Chemicals



Andrew Suby Manager, Biomass Processing Facility



Dr. Lie Tang
Associate Professor and PSI
Faculty Scholar, Department
of Ag Biosystems
Engineering

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# Agenda

### **BioCentury Research Farm**

8:00 - 9:45 a.m.

As part of the Center for Crops Utilization Research, this first-in-the-nation integrated research and demonstration facility is dedicated to biomass production and processing. The BioCentury Research Farm accelerates innovation and production capacity associated with biobased fuels, chemicals and products, providing solutions that pave the way to meet national energy, economic and environmental directives.

**Biomass Processing Facility** – This 23,000 square foot state-of-the-art research and demonstration processing facility is able to process grain and cellulosic feedstocks on a scale not possible on the ISU campus. This facility is designed for biochemical, thermochemical and biological processing conversions in separate 2,700 square foot processing trains.

**Bioeconomy Institute (BEI)** – This university-wide initiative coordinates research, educational and outreach activities related to biobased products and bioenergy, seeking to advance the use of biorenewable resources to produce fuels, energy, chemicals and materials. Established to create consistency and collaboration, BEI is an umbrella for more than 230 faculty and staff members, 24 departments and over 20 research centers, institutes and programs, such as the Center for Biorenewable Chemicals.

Center for Crops Utilization (CCUR) – For over 30 years, CCUR has been committed to increasing the utilization of corn, soybeans and other crops and creating new agricultural enterprises by developing advanced technologies and high-value products. Over 35,000 square feet of pilot-plant processing and support space is available to ISU researchers and industry clients for converting crops into food and feed ingredients, fuels, industrial chemicals and biomaterials.

## **BioRenewables Complex**

10:15 a.m. – 12:00 p.m.

This complex includes a 70,000 square foot office and classroom wing, known as Virgil B. Elings Hall, and a 100,000 square foot research and teaching wing with an 8,000 square foot atrium known as Sukup Hall and Atrium. It also houses a 150-seat auditorium in the lower level. The complex provides affiliated faculty and staff a physical environment that promotes interdisciplinary, systems-level research and collaboration, including laboratory, meeting and teaching space for both graduate and undergraduate students. This facility serves as home for the BEI, Center for Biorenewable Chemicals (CBiRC), Biobased Industry Center, CenUSA Bioenergy, Iowa NSF EPSCoR, Archer Daniels Midland Company Biorenewables Education Laboratories, and ISU's top-ranked department of agricultural and biosystems engineering (ABE).

**Center for Biorenewable Chemicals (CBiRC)** – As one of the several research centers under BEI, CBiRC develops the tools needed to reduce reliance on traditional fossil-based carbon sources by producing viable bio-based alternatives, with the goal of transforming industrial chemical production from a petroleum-based industry to a renewable resource-based industry.

Center for Bioplastics and Biocomposites (CB2) – As a National Science Foundation Industry & University Cooperative Research Center, CB2 focuses on developing high-value biobased products from agricultural and forestry feedstocks. The center collaborates with industrial partners to develop knowledge of bioplastics and biocomposites, disseminates that knowledge through publications, workshops and tradeshows, and educates future researchers, engineers and scientists.

Plant Sciences Institute (PSI) – Striving to enhance ISU's international prominence in the plant sciences, PSI builds on traditional ISU strengths in plant breeding and crop improvement, crop genetics and genomics, bioinformatics and statistics. This institute is also forging new collaborations with the College of Engineering and embracing the emerging discipline of "Big Data" – the acquisition, management, analysis and interpretation of large, complex data sets.

#### Lunch at Workiva

12:30 - 2:00 p.m.

**Iowa State University Research Park** – This 220+ acre development offers more than 550,000 square feet of current building space and provides an environment where established technology-related organizations and science and technology entrepreneurial ventures can develop and prosper in Iowa. Research Park tenants include companies such as Workiva, BASF Plant Sciences, Boehringer Ingelhem Vetmedica, Harrisvaccines, John Deere Technology Innovation Center and Vermeer Corporation.

**Office of the President** – Dr. Steven Leath serves as the 15<sup>th</sup> president of lowa State University. He is leading ISU in strategic initiatives to maintain and improve a high quality student experience, strengthen scholarly reputation, broaden research enterprise, expand economic development programs and activities and increase diversity among students, faculty and staff.

#### Arrive back in Des Moines

3:00 p.m.