



Request for Presentations

2023 Iowa Biotech Showcase & Conference: Food Insecurity: Facing the Future with Innovation

Date and Location: March 7-8, 2023, at the FFA Enrichment Center in Ankeny, IA

Request opens: October 3, 2022

Request closes: November 11, 2022

Submit proposal online at: weblink coming

View proposal FAQs at: weblink coming

About Iowa Biotechnology Association (IowaBio)

The Iowa Biotechnology Association (IowaBio) has focused on supporting and growing the state's biotech industry as a 501(c)(6) non-profit, for over 27 years. IowaBio represents over 100 members across the state of Iowa and speaks with one voice for our diverse membership, seeking to influence policies on both the state and federal level that will enable more efficient growth for Iowa and the United States. Our Association is focused on fostering a stronger business and research climate and working with leaders across the state to attract and retain bioscience talent, companies and funding.

About the 2023 Iowa Biotech Showcase & Conference: Food Insecurity: Facing the Future with Innovation

The Iowa Biotech Showcase & Conference (IBSC) is an annual conference hosted by IowaBio that brings together innovators, biotech leaders, investors, and support vendors from across

Iowa for two days of industry-specific programming and networking opportunities. Highlights of the IBSC routinely include:

- Biotech showcase pitch competition
- Educational industry presentations, ,
- Industry-focused legislative update
- Plenary Keynote
- Biotech Leader of the Year award presentation
- Networking reception
- 1:1 meeting scheduler

The 2023 IBSC will address various questions in how to feed the world with a challenging, and changing set of circumstances, from climate change, to rapid population growth, rising food costs, and even war. Can innovation keep the pace?

The biotechnology industry is a natural leader in this space, and Iowa is a breeding ground for innovators that are advancing the unlimited opportunities to create sustainable, biological solutions to advance food security, and respond to global food supply and human nutritional needs. The IBSC will closely examine Iowa's role in biotechnology and innovation on the local and global stage.

Background

Food security, as defined by the United Nations' Committee on World Food Security, means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.

According to the [State of Food Security and Nutrition in the World report](#), nearly 750 million people experienced severe food insecurity in 2019 and the number of undernourished or food-insecure people is rising.

Over the coming decades, a changing climate, growing global population, rising food prices and environmental and geopolitical stressors will have significant yet uncertain impacts on food security. The interconnectedness of the world's food supply and its fragility, have come to light, particularly with the pandemic and the ongoing war in Ukraine.

The 2023 IBSC will evaluate both the challenges faced and advancements made by the biotech sector in innovative ways to meet global demand for affordable, sustainable, and nutritious food.

Request for Presentations

IowaBio invites you to submit a proposal to present/speak during the educational industry presentations on Day 2 of the 2023 IBSC (March 8, 2023), as we bring together professionals from industry, government and academia to navigate feeding the world in Iowa's biotechnology sector.

This event draws a diverse audience and will aim to provide high-caliber content geared toward addressing global food security and nutrition through innovation across Iowa's biotech industries. We invite companies and individuals representing **food & agriculture, human health, industry & environment, and animal health** to present at IBSC.

When crafting proposals, we encourage applicants to create an opportunity for dialogue and interaction with the audience—panels or multi-speaker formats are welcomed. IowaBio may approach solo presenters to join a panel for a theme. These presentations will take place during the second day of IBSC and may potentially run concurrently with other presentations.

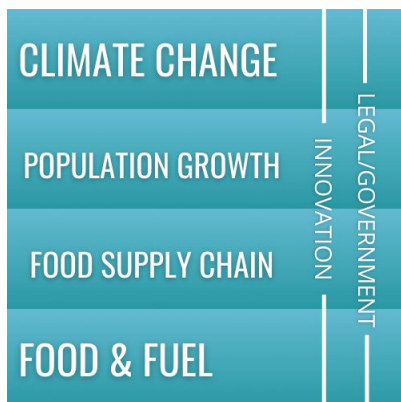
Structure of Presentations

In order to focus on specific areas of this complex issue, four main themes will be the guideposts for presentations on Day 2. IowaBio envisions the Day 2 format will consist of an issue/challenge framing session, followed by presented solutions and innovations, that will help solve the identified challenges. We encourage presentations that will allow the audience to participate, ask questions and make comments to further engagement.

Common Threads/Verticals

In addition to the four themes, IowaBio will also look for presenters representing two "Common threads" reaching vertically through all four themes. A) **Innovation**--Looking at the challenges facing the global food supply, and Iowa's role as a leading agricultural state, how will innovation play a part in solving complex issues surrounding food security and supply? How quickly must we act?

A second vertical thread is B) **Legal/Governmental**: How do legal, regulatory, and trade hurdles impact the ability for new technologies to reach the market? How does trade and governmental/political concerns effect the food supply and our ability to meet the challenges we face? How can barriers be streamlined to ensure innovations can help the world food system?



Theme 1: Climate Change

Climate change is a major threat to global food production. According to the United Nations Foundation, yield growth for wheat, maize, and other crops has been declining in many countries due to extreme heat, severe weather, and droughts. By some estimates, in the absence of effective adaptation, global yields could decline [by up to 30 percent by 2050](#). The UN Foundation also warns that unless urgent action is taken, climate change will increase food prices, decrease food availability, and exacerbate instability and conflict because of competition over water and fertile land.

Climate change presenters might examine: Climate impacts on the globe and here in Iowa—what are the specific challenges we are facing now and in the future related to climate change? How has Iowa's climate already changed and what are the trends? How is ag and biotech industry responding to these challenges?

Topics may include: New innovations in seeds, pollen and crop production. Animal health innovations for protecting food supply. Ag tech contributions to solving animal and crop production issues. Sustainable agriculture. Innovative solutions for ag inputs such as fertilizer or water supply. Carbon capture and renewable energy.

Theme 2: Population Growth

According to the UN World Population Prospects Report 2019, from an estimated 7.7 billion people worldwide in 2019, the medium-variant projection indicates that the global population could grow to around 8.5 billion in 2030, 9.7 billion in 2050, and 10.9 billion in 2100. Global food production must meet this growing demand on our food and food production resources. Ideally, this population has good health and nutrition.

Presenters for this theme might examine: What are the trends in population growth worldwide? How will those trends create food demand and how will the world food system respond? Challenges in rising food cost and inflation. What are potential effects of food insecurity globally? Locally? Who is most at risk? How will Iowa's biotech and ag tech industries participate in feeding the world?

Some topics could include new protein sources, protecting crops/plant science advancements food production and animal health and efficiency of production processes. Advancement in nutrition and population health, especially nutrition-related chronic diseases such as obesity, diabetes, cardiovascular disease, and some forms of cancer, or conversely health conditions related to malnutrition.

Theme 3: Food Supply Chain

The Economist reports that only ten countries export 90 percent of key commodities. Iowa is well-known for the abundant food commodities it produces and its world-leading position in the development of cutting-edge food technology. Iowa produces one-eleventh of the nations'

food supply and is the largest producer of corn, pork and eggs, and second in soybeans in the United States. According to the Iowa Corn Growers Association, 31 percent of farm income is attained directly from exports, reflected in the fact that one out of every three acres in the United States is planted for crops that will be shipped out of the country in some form.

Presenters might explore: How is the global food supply chain connected and what are the pressure points/bottlenecks? How does Iowa fit into the supply chain? What are Iowa's pressures and opportunities? What were lessons learned from Covid-19?

Topics could include changing consumer demands and biotech industry response/innovation. Changes to growing, processing, transporting, storing and selling food. Food testing and security and its increasing importance. Innovations in transparency throughout the supply chain. Cost of food and consumer/local and global population food access. Transportation and sustainability. Trade agreements, protectionism, imports/exports. Impacts of conflicts like the War in Ukraine.

Theme 4: Food and Fuel

This theme will explore the linkages between food production and renewable fuels, two large sectors of Iowa's ag economy. According to Iowa Corn Growers Association. Iowa leads the nation in ethanol production, creating nearly 30 percent of all U.S. ethanol. Iowa's ethanol industry can produce **more than 4.1 billion gallons annually**, using more than 1.3 billion bushels of corn. This comes from the 42 corn ethanol plants and two cellulosic plants operating across the state. Over half the corn in Iowa goes to ethanol production.

Presenters might explore: How are food (crop/animal) production and biofuels production linked? What are the effects of biofuels production on food prices? Where is biofuels production headed –cellulosic/new technologies. How can food and biofuels production co-exist, and benefit consumers? What are the ties to climate change?

Topics might include biotech innovations in renewable fuels. The evolving landscape for carbon capture and how Iowa is leading. Climate impacts of biofuels vs. fossil fuels.

Questions or comments?

Please submit questions regarding the Request for Presentations or the IBSC to Ashley Parrish at ashley@iowabio.org.