



**THE OHIO STATE
UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES



**North East Ohio
Innovates**



**ENTREPRENEURIAL
ENGAGEMENT OHIO**

**The Ohio State University Ohio Agricultural Research & Development Center
STEM Commercialization, Innovation & Entrepreneurship Forum
Shisler Conference Center, 1625 Wilson Road, Wooster, Ohio 44691
Tuesday, November 28, 2017**

Timetable of Activities

Time	Location	Program
9:00	Shisler Center Main Entrance	Check in
9:30	Conference Hall	Program begins – Introduction and Opening Session <ul style="list-style-type: none"> • Opening video – “Are you ready for the future? Do you believe in Ohio?” (6 min) • Introduction – Why students are here, review agenda – John Klipfell (5 min) • OARDC Welcome – Dr. Shauna Brummet, President & CEO, BioHio Research Park (6-8 min)
9:55	Conference Hall	Dr. Thomas Mitchell will speak about “ <i>Fungi – they do more than you think</i> ” <ul style="list-style-type: none"> • Speaker presentation (15 min) Q & A (5 min)
10:15	Conference Hall	Dr. Reed Johnson will speak about “ <i>Solving the problems facing honey bees and other pollinators</i> ” <ul style="list-style-type: none"> • Speaker presentation (15 min) Q & A (5 min)
10:35		Five-minute stand and break in place
10:40	Conference Hall	Dr. Katrina Cornish will speak about “ <i>US rubber, waste-derived fillers and biodegradable plastics</i> ” <ul style="list-style-type: none"> • Speaker presentation (15 min) Q & A (5 min)
11:00	Conference Hall	Dr. Victor Ujor will speak about “ <i>Bio-derived chemicals: from the lab to the plant</i> ” <ul style="list-style-type: none"> • Speaker presentation (15 min) Q & A (5 min)
11:20	Conference Hall	Working lunch & Brainstorm Session (OARDC students/faculty join students at tables) <ul style="list-style-type: none"> • Social lunch & break (10 min) • OARDC student/faculty lead student brainstorm sessions to develop new product, service or problem solution or opportunity using Believe in Ohio Roadmap (25 min)
11:55	Conference Hall	Students present their ideas to their peers using their Roadmaps (1 minute each)
12:40	Conference Hall	Brief closing program
1:00		Program ends – Students go to buses and transport

Note: The speakers may speak in a different sequence from that noted above.

Funding for this event has been provided by Burton D. Morgan Foundation.

Principal Speaker Bios

Dr. Katrina Cornish will speak about “US rubber, waste-derived fillers and biodegradable plastics”

Dr. Cornish is the leading U.S. scientific expert, and is internationally recognized as a principal authority, on alternative natural rubber production, properties and products, and on natural rubber biosynthesis in general. She currently leads a program in bioemergent materials including domestication of rubber dandelion for Ohio farmers, allergy -are high performance products from guayule latex, and exploitation of opportunity feedstocks from agriculture and food processing wastes for value-added products and biofuels. She currently is CEO of two start-up companies EnergyEne, Inc and DamSafe LLC, spin-offs of technology she invented at OSU. She has >240 papers and > 20 patents and pending applications, and has received numerous awards. , including her guayule latex received the Connect 2005 Most Innovative New Product Award, Medical Devices & Diagnostics. Dr. Cornish is an elected Fellow of the National Academy of Inventors and of the American Association for the Advancement of Science. Dr. Cornish received a first-class honors degree in biological sciences and a Ph.D. in plant biology from the University of Birmingham, England.

Dr. Reed Johnson will speak about “Solving the problems facing honey bees and other pollinators”

Dr. Reed Johnson is an Assistant Professor in the Department of Entomology in the College of Food, Agricultural and Environmental Sciences at The Ohio State University, Ohio Agricultural Research & Development Center in Wooster Ohio. Dr. Johnson earned a B.A. in Biology at Wabash College, a M.S. in Biology at Wake Forest University, and a Ph.D. in Entomology from the University of Illinois in Urbana-Champaign. His principal interests are in Apiculture, Pollinator toxicology and Genomics. Research areas include: Insect pollinators which are vital for the production of many fruits, nuts and vegetables, including apples, blueberries, almonds, tomatoes and pumpkins. These crops are vulnerable to pests and diseases, which are often controlled through the use of pesticides. However, pesticides may be toxic to insect pollinators, setting up a conflict between the need for pollination and the need for pest and disease control. In his lab they are seeking to understand how to protect pollinators from the pesticides and other toxins they encounter. The managed European honey bee, *Apis mellifera*, serves as a model pollinator for toxicological testing. While the honey bee is the most economically important pollinator in the U.S. and serves as an excellent model species, Dr. Johnson is also interested in understanding pesticide toxicity in other pollinating insects as well.

Dr. Thomas K. Mitchell will speak about “Fungi – they do more than you think”

Dr. Mitchell earned his B.Sc. in Plant Sciences at Penn State University, a M.S in Plant Pathology at Clemson University, and a Ph.D. in Plant Pathology at North Carolina State University. His work spans the realms of basic biology, tool and technology development, functional and evolutionary genomics, and the application of molecular biological tools in support of applied research. His lab works closely with scientists studying several fungi important to agronomic crops and grasses. With regard to biomass conversion and bio-based products, fungi have long been used to perform the difficult work of converting complex plant carbohydrates into basic sugars. Dr. Mitchell works to use bioinformatic and genome based tools to identify and clone hydrolytic enzymes from plant pathogens and mobilize them into production grade fungal isolates for industrial applications.

Dr. Victor Ujor will speak about “Bio-derived chemicals: from the lab to the plant”

Dr. Ujor received a Bachelor of Science degree in applied microbiology and brewing from Enugu State University of Science and Technology, Enugu, Nigeria. He subsequently earned his Master of Science in applied microbiology and biotechnology from the University of Westminster, London, England. He then earned his Ph.D. degree in applied microbiology/fungal biotechnology at the University of Westminster. While working toward his Ph.D. degree, he earned a postgraduate certificate in support of learning from the University of Westminster in which he had intensive training in teaching undergraduate students in technical programs in both classroom and laboratory settings. He conducted research as a post-doctoral associate at the OARDC Wooster campus for four years focusing on waste remediation and bioenergy production using fermentation technologies. Currently, his teaching and research endeavors are focused on bioconversion of agricultural, industrial and municipal wastes to liquid fuels and bio-derived chemicals, and wastewater treatment at the Ohio State University’s Agricultural Technical Institute (ATI).