

Commercial Aquaponics Workshop

April 9-11, 2019

8:30 am - 4:30 pm

Auburn University

Center for Advanced Science, Innovation and Commerce (CASIC)

Aquaculture & Fisheries Business Institute

Aquaponic System Engineering

- Systems Overviews
- Aquaponic Design and Components
- Coupled and Decoupled Systems

Fish Production and Management

- Species Selection and Health Management
- Water Quality and Optimizing Production
- Economic Considerations

Plant Care in Aquaponics

- Nutrient Dynamics
- Crop Selection
- Integrated Pest Management
- Propagation Techniques
- Alternative Crops

Production

- Planning
- System Management and Harvesting

Economics

- Financing and Business Plans
- Defining and Developing Markets

Aquaponics Trends

- Sustainability and Regulatory Issues
- Emerging Technologies

Best Management Practices

- Good Agricultural Practices (GAP)
- Hazard Analysis and Critical Control Point (HACCP)



Speakers



James Rakocy

Retired, Univ. of Virgin Islands

**“Father of Aquaponics”
Research Professor of
Aquaculture**

After obtaining his PhD from Auburn University in 1980, Dr. Rakocy spent the next 30 years at the University of the Virgin Islands (UVI) as a Research Professor of Aquaculture and Director of the Agricultural Experiment Station. His research emphasized water conservation and reuse and nutrient recycling for the intensive production of fish and vegetables in commercial aquaponic systems. He and his team developed the well-known UVI aquaponic system. After retiring from UVI in 2010, he founded The Aquaponics Doctors, an aquaponics consulting company.



Huy Tran

Apopka Aquaponic Farms

**Aquaculture and Aquaponics
Expert**

Huy Tran has more than 26 years experience. After graduating with a degree in agriculture/aquaculture from the University Of Hawaii, Huy managed several area farms rearing shrimp and numerous marine/freshwater fish species. This included managing a 20 acre farm producing 47 different aquatic species used in aquatic toxicology testing. In 1997, he began work at Aquatic Eco-System (AES) where he remained for 19 years. As Sales and Marketing Officer, he was responsible for production of 16 of the AES master catalogs and oversaw all technical sales and all marketing for the company. Currently, Huy owns his own facility, Apopka Aquaponic Farms, and consults/designs for many aquaponic and aquaculture facilities world wide.



Jesse Chappell

Auburn University

**Associate Professor
Extension Specialist**

Much of Dr. Chappell’s developmental effort over the last 12 years has involved work in controlled environment aquaculture systems coupled with horticulture.

Intensified aquaculture systems featuring robust water and nutrient conservation approaches for commercially viable application in the U.S. have been the heart of his work.



Amy Stone

Aquatic Equipment and Design

**Aquaculture and Aquaponics
Expert**

Amy Stone has over 21 years of experience with designing, building and managing aquaculture and aquaponics greenhouses. She managed hatcheries, live feeds and grow-out for marine finfish as well as an aquaponics greenhouse that demonstrated several methods of culture for workshops. She worked at Aquatic Eco-systems for 14 years before opening her own company. Her current focus is on business marketing and management as well as effective equipment selection.

Speakers



Fred Petitt

Director, Walt Disney World

Animal and Science Department

Fred Petitt is the Agricultural & Water Sciences Director for Walt Disney Parks & Resorts. Fred joined Epcot® during its construction phase and worked to turn The Land pavilion from vision into reality. He developed and implemented The Land's Integrated Pest Management Program, with emphasis on the use of biological controls for insect pests. Fred is currently responsible for Agricultural Sciences, which focuses on developing the show greenhouses and growing over 100 crops in The Land at Epcot. He also leads the Water Sciences team, which ensures healthy aquatic environments for animals across Walt Disney Parks & Resorts. Fred's work at Disney has resulted in over 50 scientific publications and presentations. He has a Ph. D. degree from the University of Florida and is currently an adjunct faculty member.

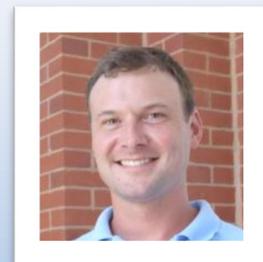


Terry Hanson

Auburn University

**Professor
Extension Specialist**

Dr. Hanson conducts economic analyses for many fish and shellfish aquaculture species and associated production systems. His primary focus in aquaponics is on cost of production, including fixed and operating costs, cash flow and return on investment. Complete analyses provide breakeven vegetable and fish prices and quantities required for profitability.



Jeremy Pickens

Auburn University

**Extension Specialist and
Research Scientist**

Dr. Jeremy Pickens is an Extension Specialist and Research Scientist with Auburn University in the areas of nursery and greenhouse production. He holds a MS in Horticulture and a PhD in Aquaculture both from Auburn University. Dr. Pickens research focuses on plant nutrition, pest management, and reducing plant stress in various production systems.

Speakers



David Cline

Auburn University

Extension Specialist II

David is an aquaculture specialist with the Alabama Cooperative Extension System and Past President of the United States Aquaculture Society. He specializes in aquaculture education, freshwater fish production, small-scale marketing, pond management and aquaponics. He has been actively involved in both the commercial and educational sectors of aquaculture for over 27 years and has a broad perspective of the issues and opportunities facing the aquaculture industry.



Mollie Smith

Auburn University

Administrator, Outreach Programs

Mollie is the Outreach Programs Coordinator for the School of Fisheries, Aquaculture and Aquatic Sciences at Auburn University, where she manages the 12,000 ft² aquaponics system. Her primary work is further integrating the various production systems, harvesting and processing the various fish and vegetable products resulting from the system, and harvesting and utilizing the various waste streams for use as agricultural byproducts.



David Blersch

Auburn University

Assistant Professor
Biosystems Engineering

Dr. Blersch's research and teaching focuses on ecological engineering and waste treatment involving recovery of nutrient elements using biological processes, including algae cultivation, microbial fermentation and digestion, and phytoremediation. He has applied this work to aquaculture and aquaponics to investigate new bio-product revenue streams for these industries.

Speakers



Glenn Loughridge

Auburn University

Director, Dining Services

Glenn Loughridge serves as Auburn University's Director of Campus Dining. Mr. Loughridge has worked tirelessly to forge relationships with the Auburn dining contractor, student groups, faculty and staff. He is using his innovative, creative and forward-thinking skills to create a campus dining experience that is dynamic and responsive to changes in students' dining needs and tastes.

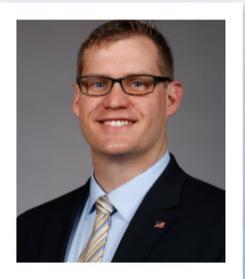


Daniel Wells

Auburn University

Assistant Professor

Dr. Wells is an Assistant Professor in the Department of Horticulture at Auburn University where he directs a research program focused on specialty crop production and teaches classes on vegetable production and plant nutrition. His research program has specifically focused on improving vegetable production in controlled environments in the Southeastern U.S. in both hydroponic and aquaponic systems.



D. Allen Pattillo

Auburn University

PhD Student

Allen Pattillo is a PhD student in the Auburn University School of Fisheries, Aquaculture, and Aquatic Sciences. His focus is on the economics of commercial aquaponics with the goal of fostering profitable production strategies to the aquaponic industry.

Registration Information

The Workshop will be held April 9-11, 2019 at Auburn University at the Center for Advanced Science, Innovation and Commerce (CASIC Building) at 559 Devall Drive, Auburn AL 36849. The group of participants will also visit the commercial scale aquaponics facility at the world-renowned E. W. Shell Fisheries Center at 2101 North College Street for a day of hands-on instruction.

Registration is limited to the first 30 people so secure your spot early! The registration fee is \$1000 and includes a notebook with speaker presentations, hands-on activities, snack breaks and a USB drive with additional digital content. T

The deadline to register is midnight on March 31st. Don't delay register today!!

Snacks and drinks will be available all day and lunch will be provided each day. As a special last evening dinner treat, a Genuine Southern Catfish Fry complete with hushpuppies will be furnished.

Attendees will receive a USB Key with course material.

Transportation and hotel are not included with registration fee.

[Towne Place Suites by Marriot](#)

1117 South College Street
Auburn, AL 36832
334-466-8390

[Microtel Inn & Suites by Windham](#)

2174 South College St.
Auburn, AL 36832
334-826-1444

[Holiday Inn Express Hotel and Suites Auburn](#)

2013 South College Street
Auburn, AL 36832
334-502-1090

[Clarion Inn & Suites University Center](#)

1577 South College St.
Auburn, AL 36832
334-821-7011