

# Commercial Aquaponics Workshop

October 23-25, 2018

8:30 am - 4:30 pm

Auburn University

Center for Advanced Science, Innovation and Commerce (CASIC)

## Aquaculture & Fisheries Business Institute

### Aquaponic System Engineering

- System 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
- Species 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.

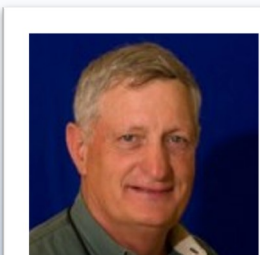


**Huy Tran**

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. has 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 after AES was acquired. 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



**Bradley Todd**

AgGrist Inc.

Aquaponics Expert

Bradley Todd managed Lucky Clays Fresh. Brad also spent five years in the Marine Corps. After completing service, he received a Bachelor of Science Degree in Geology and Earth Science from the University of North Carolina at Charlotte. While overseas in the military, Brad began his research in the fundamentals, engineering, and science of aquaculture and hydroponics, which ultimately lead him to learn about the process of combining the two into an efficient and sustainable farming system. Brad intends to incorporate bio-floc technology, Vermiculture, and mycology into an all-encompassing production flow with AgGrist, Inc.



**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



**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 the 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 ft<sup>2</sup> 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 applications to investigate new bioproduct revenue streams for these industries.

# Speakers



**Jim Fah**

Autopot Integrated Farm Solu-

Entrepreneur, Inventor

Jim is an entrepreneur and the inventor of the [Autopot System](#), an innovative plant-driven hydroponic/aquaponic system with more than 1 million units sold. He created the Autopot Integrated Farm Solution, that goes beyond current Aquaponics implementations growing leafy greens to live commercial applications with additional components such as poultry and fruit trees to create an integrated “waste to treasure” approach.

Each Autopot Integrated Farm has up to 100,000 thousand planting points (under greenhouses and open planting), 1,000 cubic culture of water for fish, 10 acres of fruit trees, free range poultry production and special housing for 100 employees. His recent projects involved the design and execution of more than 10 Autopot Integrated Farms. He has a Master Degree in Aquaculture from Deakin University Australia and is an entrepreneur.



**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.

## Registration Information

The Workshop will be held October 23-25, 2018 at Auburn University at the Center for Advanced Science, Innovation and Commerce (CASIC). The group of participants will also visit the commercial scale aquaponics facility at the world-renowned E. W. Shell Fisheries Center for a day of hand-on instruction.

Early Registration price - \$1,000.00 until **9/14/18** .

Regular Registration price - \$1,200.00 beginning **9/15/18**.

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.

### **Where to Stay:**

You can search for hotels in Auburn using [Travelocity.com](http://Travelocity.com) or similar service to get the best price around. The closest hotels to the meeting venue include:

#### [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 S. College St.  
Auburn, AL 36832  
334-821-7011

