

ABE UPDATE

FALL 2018

International Activities

SHOWCASING INTERNATIONAL
ACTIVITIES FROM FACULTY,
STUDENTS, AND ALUMNI

Mentoring

PEER-TO-PEER MENTORING
PROGRAM FOR ABE
GRADUATE STUDENTS

Alumni Spotlights

CATCHING UP WITH OUR
ALUMNI WORKING IN
ACADEMIA AND INDUSTRY

UF | IFAS
UNIVERSITY of FLORIDA



AGRICULTURAL & BIOLOGICAL
ENGINEERING

UF/IFAS Agricultural and
Biological Engineering
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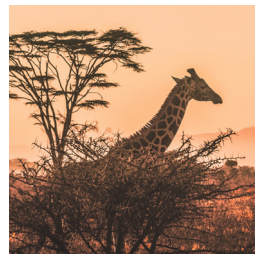
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ON THE COVER

UF/IFAS ABE faculty and students traveled to Naibor in Laikipia, Kenya for collaboration on agriculture projects with Mpala's research facilities.

Photo by Harshil Gudka on Unsplash

HOT OFF THE PRESS

Climate change impact and adaptation for wheat protein

When consumers buy wheat products, such as bread or pasta, they expect to get protein with their purchase.

A global study with crop simulation models linked with field experimental data showed that future temperature-induced yield losses can be mitigated in many wheat-growing environments across the world with new crop traits through breeding. But, while this is a success for yield, unfortunately, grain protein concentration will decline with these traits and future elevated atmospheric carbon dioxide.

This latest research comes as part of a larger international research project co-lead by UF, called the Agricultural Model Intercomparison and Improvement Project – or AgMIP.

Global Change Biology 25(1): 155-173

DOI: 10.1111/gcb.14481

ABE Contributors: **Dr. Senthold Asseng** and **Dr. Gerrit Hoogenboom**

Letter from the Department Chair

Dear ABE friends,

As I begin to write this letter for our ABE UPDATE, I am amazed by the accomplishments of the past semester. The department was filled with activity including curriculum accreditation review, administrative review, advisory board meetings, student three-minute competitions, advertising and interviewing for six new faculty positions, junior preview for potential graduate students, club meetings and field trips, senior design projects, and the list goes on.

The end of 2018 also resulted in the graduation of our Fall 2018 class of graduate students from the ABE department. As I completed exit interviews of those finishing their degrees, most were excited to be entering the workforce with offers from companies such as Arcadis, Merck and Co. Inc., and Southwest Florida Water Management District. Others were headed to graduate school or faculty positions across the globe. We congratulate the biological engineering and the agricultural operations management students who are moving to the next stage in their profession and look forward to hearing about their success!

The employment of our students nationally and abroad is no surprise, and this issue highlights department activities that develop our students into global thinkers. The ABE department has had continual international involvement for all aspects of the land grant mission. In fact, global programs have become the 'norm' as our world faces incredible challenges with climate change, water scarcity, food scarcity, migration, and natural disasters. Agricultural and biological engineers are in the trenches searching for innovative solutions that balance immediate needs with long term sustainability. As we move forward in a global society, agricultural and biological engineers will provide solutions to how our world will function and thrive. Our agricultural operation managers will provide the technical and business expertise to manage and implement new concepts for our systems. Thus, we are proud to provide international perspectives and knowledge to the next generation of engineers and scientists as part of their academic experience at UF.

We hope you enjoy learning more about the ABE department and its international programs in this issue. Stay tuned as the spring issue will focus on programs closer to home. Go Gators!

Kati Migliaccio

Professor and Chair

 @hydroKati



Kati Migliaccio, Professor and Chair

ABE IS INTERNATIONAL

UF/IFAS Agricultural and Biological Engineering embraces the importance of international collaboration, research and studies. Our faculty and students are involved in activities across the globe on nearly every continent. Explore the map below and read more about ABE's international activities.

Haiti

Deforestation and the subsequent soil erosion are some of the most critical environmental and agricultural problems in Haiti. **M.S. student Redjino Mompremier** and his advisor **ABE Assistant Professor Young Gu Her** are working together to demonstrate the effects of reforestation on agriculture and water resources in Haiti. They have been monitoring streamflow and sediment coming from a mountainous area suffering deforestation. They are also preparing mathematical models to simulate water and sediment transport processes occurring in upstream areas and dry bean growth affected by the amount of water delivered to downstream agricultural areas.



WE
ARE
HERE

Paraguay

Crop insurance is one of the risk management tools available to farmers to cover crop losses caused by adverse weather. To help small growers in Paraguay mitigate risk associated with drought, **ABE Professor Clyde Fraisse** developed a weather-based index that quantifies plant water stress on a daily basis and is significantly more effective to represent crop losses due to drought than indices that rely only on rainfall.



Costa Rica

ABE Professor Rafael Muñoz-Carpena and his research team are conducting environmental studies of the Palo Verde National Park wetlands in hopes of determining the effects of the dams and how to reverse the damage. Due to a lack of historical data, it is difficult to sort through the interconnected factors to determine the cause of the environmental degradation. With the help of local partners, Dr. Muñoz-Carpena and his team have been able to gather information for a collection of non-systematic studies. The team also uses remote sensing sources for time-series data for land-use and vegetation change. The goal is to build an overlap of previous data along with the new data sources collected by the team to give a detailed overview of the situation.



Read more about
ABE's international
activities on our blog
at abe.ufl.edu/blog

England

ABE alumna **Rachel Lo** was selected for the 2018 Frost Scholarship Programme at the University of Oxford. This program funds students of the State University System of Florida and University of Miami that allows them to study full-time for one year in master's courses in science, technology, engineering and mathematics. Rachel started her program at Oxford studying Biodiversity, Conservation, and Management where she is learning about biodiversity conservation, particularly in a social science context, such as how management and policy decisions are made in different socioeconomic and cultural environments.



Germany

The UF in Osnabrück study abroad group travels to Germany during the summer to learn about engineering technologies and to further understand sustainability in engineering and planning. They also competed in a design/build class with amphibious vehicles using 3D printed components or created virtual reality environments. This study abroad is a 6-week program with the University of Applied Sciences in Osnabrück, Germany. Biological engineering student Erin Guby, along with 12 students from various fields of engineering participated in this unique opportunity. ABE **Senior Lecturer and Undergraduate Coordinator James Leary** has been involved with this program since 2006.



Kenya

University of Florida faculty and students were invited to collaborate on agriculture projects in the semi-arid lands of Naibor in Laikipia, Kenya, taking advantage of UF's notability with extension and Mpala's research facilities, which traditionally have been geared towards conservation and wildlife research. The data collected is a baseline for future projects in this collaboration between UF and Mpala. Furthermore, data on soil and water quality, along with interpretations, were shared with the participating farmers, who appreciated obtaining information about their fields and recommendations to improve crop productivity and increase financial results from nutrient applications. ABE faculty involved in this project includes **Research Professor Cheryl Palm, Professor Rafael Muñoz-Carpena, and Professor Greg Kiker.**



Israel

ABE undergraduate **Sirapoom Peanusaha** will be attending an education exchange program in the Spring 2019 semester with Technion Israel Institute of Technology in Haifa, Israel. Most of the classes that he will be taking are engineering electives and one cultural class. Sirapoom is an international student from Thailand studying biosystems.



China

ABE Associate Professor **Eric McLamore** and his team are working to research applications of biosensor technology for monitoring plant and animal physiology in China. Dr. McLamore works with colleagues at Beijing Forestry University and Chinese Academy of Sciences-Botany to measure small molecule transport near plant and animal tissues. Dr. McLamore's teaching activities involve training workshops for students from Beijing Forestry University, the Beijing Innovation Center, and Chinese Academy of Sciences-Botany. The two main focus areas are i) sensor construction/data analysis and ii) science writing (in English).



Taiwan

The Center for Remote Sensing in the UF/IFAS ABE department hosts a two-week intensive course in Remote Sensing and GIS in Hydrology in the summer for delegates from Taiwan to teach state-of-the art remote sensing techniques for agricultural applications and discuss their applicability to water resource management in Taiwan. **ABE Professor Jasmeet Judge** leads this intensive course that has been offered for 21 years.



India

ABE Assistant Professor **Aditya Singh** along with scientists and researchers from the University of Wisconsin-Madison and local collaborators in India are attempting to utilize mathematical models to explore interrelated causal factors in a holistic manner to produce spatial estimates of the causes and consequences of land use/land cover change that affect key indicators of food security in India.



Vietnam

ABE Chair **Kati Migliaccio** and Professor Emeritus **Dorota Haman** had the opportunity to participate in a joint UF-AGU Symposium, meet with the ministry of agriculture in An Giang, and visit Thu Dau Mot University. They also visited agricultural production areas including large mango plantations, vegetable production, ornamental nursery production, and fish production. ABE signed a memorandum of understanding with AGU in early 2018 with plans to collaborate including country visits, faculty and student exchanges, short courses and study abroad opportunities.



Read more about ABE's international activities on our blog at abe.ufl.edu/blog

The GRADUATE STUDENT Column

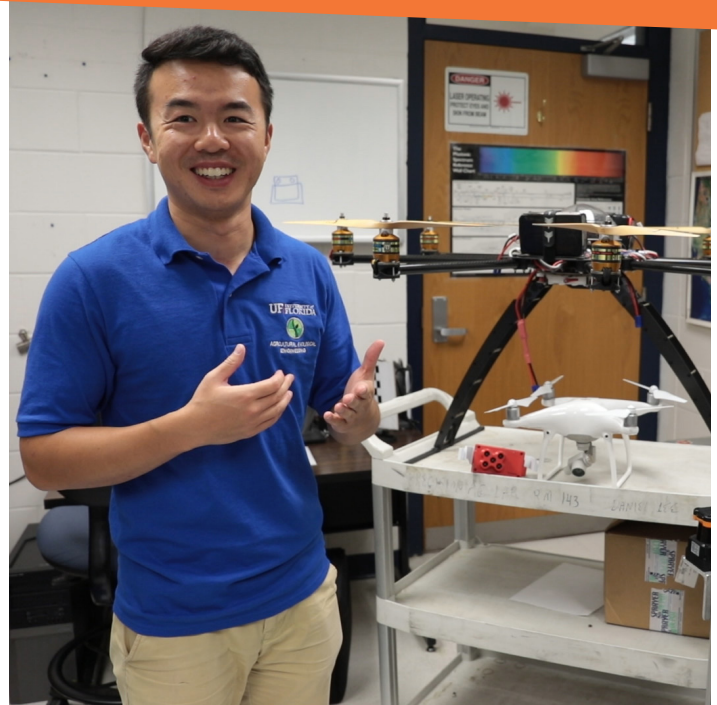
By Hao Gan

I joined the UF/IFAS ABE department at the UF in May 2015 to start my Ph.D. study. The great reputation and top ranking of this department along with the perfect match between Dr. Daniel Lee's research and my own research interests are the main reasons that I chose to come to UF and ABE.

During the three and a half years, I was provided with resources to focus on my research, which was developing a robot for autonomously creating yield maps of immature citrus fruit.

I also had the opportunities to do many activities related to teaching, mentoring, professional development and service. For example, I had a great interest in building a robotics teams to compete in the American Society of Agricultural and Biological Engineers (ASABE) robotics competitions. I expressed my willingness and plans to our department chair. She not only agreed but also provided abundant support. Because of that, I was able to build teams three years in a row and mentored them to win eighth, fourth and third places in the robotics competitions in 2016, 2017 and 2018. The support and opportunities played an important role in my own personal development as a more well-rounded person. I found those experience became invaluable and much appreciated during my job interviews.

I am very lucky to receive the best education from the ABE department and I hope to return it to the next generation. Now, I have accepted a position as an assistant professor at the University of Tennessee, where I will continue working in the area of precision agriculture. But more importantly, I will apply my experience and knowledge gained at this department to ensure the success of my future students. ■



Hao Gan graduated with his Ph.D. from UF/IFAS ABE in Fall 2018. Hao studied Machine Vision under his advisor Dr. Wonsuk "Daniel" Lee. Hao has accepted a position as an assistant professor at the University of Tennessee.

BONUS QUESTION

What was your favorite part about studying in Agricultural and Biological Engineering at the UF?

The abundant support from staff at the department in my research, my studies, academic/professional activities, and my life. We also have a wonderful graduate student organization that provided numerous opportunities for me to participate in many service projects, and events.

ADVISORY BOARD VISIT

BY RAYCHEL RABON



The UF/IFAS ABE advisory board gathered in December for their bi-annual meeting and department visit.

With a wide variety of new advisory board members present, overviews and updates on all the aspects of the ABE department including research programs; Extension programs; and curriculum updates for biological engineering, agricultural operations management, and the Smart Ag Certificate were presented throughout the two-day visit.

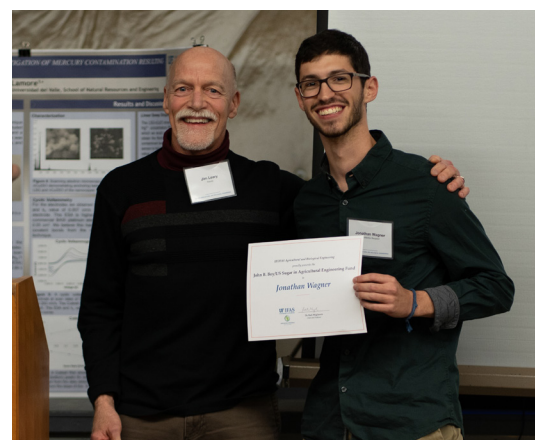
ABE also hosted a Awards and Recognition Dinner to highlight the ABE advisory board, distinguished alumni, student leadership, and scholarship recipients. This dinner included a welcome from UF/IFAS Senior Vice President **Dr.**

Jack Payne and a presentation from ABE advisory board member Robert Horton.

As the meeting closed, the ABE advisory board presented actionable items that were identified to further improve the ABE department, including increasing brand recognition, enhancing FE exam support, informational materials development, student internship program development, and more frequent advisory board members communication.

ABE advisory board members include Dr. Aavudai Anandhi, Assistant Professor at Florida Agricultural and Mechanical University; Del Bottcher, President for Soil and Water Engineering Technology, Inc.; Joe Collins, Vice

President for Lykes Brothers, Inc.; Mike Ferrari, from Ferrari Innovation Solutions LLC; Evan Frisch, Senior Vice President of Supply Chain for Beachbody, LLC; Robert Horton, Vice President for Environmental Affairs Department at Dallas Fort Worth International Airport; Forrest Izuno, Professor and Head of the Southern Research and Outreach Center; Allison Mica, Project Manager at Bacardi; Dr. Alicia Modenbach, Lecturer and Student Coordinator Services at University of Kentucky; Eldon Muller, Worldwide Safety for Walt Disney Parks and Resorts; Dr. Evan Shane Williams, Stormwater Engineer at Alachua County Environmental Protection; and Jeff Yenisch, Senior Packaging Engineer for Refresco North America. ■



(Top) UF/IFAS Senior Vice President Dr. Jack Payne begins the ABE Recognition and Awards Dinner with a welcome address. (Bottom Left) ABE Advisory Board member Robert Horton presents at the ABE Recognition and Awards Dinner on his team's environmental work at the Dallas Fort Worth International Airport. (Bottom Right) Senior Lecturer and Biological Engineering Undergraduate Coordinator Dr. Jim Leary presents John B. Boy/US Sugar in Agricultural Engineering Fund to ABE undergraduate Jonathan Wagner at the ABE Recognition and Awards Dinner.

THE IMPACT OF MENTORING



Since its conception in 2014, the UF/IFAS ABE Graduate Student Mentoring Program has been connecting the community of ABE graduate students with one another. With average number of 75 graduate students in ABE, this program seeks to build lasting connections within the department.

This year-long program matches incoming graduate students with experienced students during the department's graduate student orientations. Housed within the ABE Graduate Student Organization, this program was developed by **Shannon Noble**, Education Coordinator in ABE, along with three graduate students in 2014.

The mission of this program is to provide a support network between incoming and current graduate students to encourage academic and personal success, communication, collaboration and involvement within the department, university and community.

The program year kicks-off with the mentor/mentee pairs meeting at graduate student orientation where they meet and establish goals for the year. Throughout the year, the pairs meet one-on-one once a month along with monthly group events the Mentoring Program committee plans that all the pairs attend.

Since 2014, 96 mentor and mentee

pairs have been matched and the impact of these relationship has gone far past peer-to-peer advice. Noble has seen higher involvement and engagement from graduate students in departmental activities, lasting connections after graduation, and the formation of true friendships.

"I think the mentoring program means a lot to the students. It helps them to feel connected in that when they mentor they are giving back," Noble said. The students say "This department has done so much for me. I was mentored and I want to do the same for the next student." They take it on as a passion to give back. I think that says a lot for their comfort level here, it really is a family." ■



(Bottom Left) Mentor and mentee pairs creating handmade cards for one another at the end of their mentor year together. (Bottom Right) The ABE Graduate Student Organization organizes an annual Halloween party each year where mentor and mentee pairs plan coordinating costumes. This year, graduate students Madison Keller and Shubham Shirbhate dressed as Tide Pods and a washing machine.

ALUMNI SPOTLIGHT



Dr. Anna (Cathey) Linhoss

**Assistant Professor,
Environmental Engineering,
Water Resources
Mississippi State University
Agricultural and Biological
Engineering**

**Ph.D., Agricultural and
Biological Engineering,
University of Florida, 2011**

**Postdoctoral Associate in
Agricultural and Biological
Engineering, University of
Florida, Oct. 2011 - Dec.
2012**

alinhoss@abe.msstate.edu

Specialization Areas: Hydrodynamic, hydrological, and ecological modeling; model sensitivity and uncertainty analysis; multi-criteria decision analysis; model applications to management

Research Interests: Water and the environment interaction; modeling environmental and hydrological systems; assigning reliability to model results; decision-making based on imperfect and dissimilar data and model results

Why did you pursue this field of engineering?

I wanted to work to develop responsible solutions to environmental problems that incorporate the complexity and uncertainty in the world around us. Engineering is a solution-oriented and problem-solving discipline. Where biologists want to understand how systems works, engineers work to design systems that produce a stated objective. However, given the complexity of environmental systems, solutions do not always turn out the way we expect. Engineers must move forward with designs given that there is inherent uncertainty in the outcomes. This makes my field operationally relevant while retaining the uncertainty and complexity that exist within the identified problems.

Why did you choose ABE at UF?

UF ABE helped me to prepare for my career by 1) teaching me the fundamentals of hydrologic and environmental processes, 2) helping me to understand how technology and numerical models can be used to understand and forecast these systems, and 3) encouraging my critical thinking skills to solve complex engineering problems. Additionally, I worked with numerous students and faculty from other disciplines to understand how science, engineering, and law integrate to make environmental decisions in today's society. Most importantly, my professors had high expectations of me and encouraged me, within a positive supportive environment, so that I could reach those expectations.

What do you hope to do in the future?

I hope to continue my academic career in hydrological and ecological engineering. I seek to find new solutions to complex questions. I want these solutions, and their inherent uncertainty, to be communicated to managers and policy makers in a transparent and understandable way. And, as I was encouraged and supported in my education through the UF ABE department, I am excited to encourage and support students throughout my career.

ALUMNI SPOTLIGHT



Drew Scatizzi

Program Manager, Energy Efficiency, CenterPoint Energy

M.S., Agricultural and Biological Engineering, University of Florida, 2017

B.S., Agricultural Operations Management, Agricultural and Biological Engineering, University of Florida, 2016

andrew.scatizzi@centerpointenergy.com

[linkedin.com/in/drew-scatizzi/](https://www.linkedin.com/in/drew-scatizzi/)

What do you do in your role as a Program Manager?

I manage our residential and commercial portfolio of energy efficiency programs for a large Texas electric utility. In Texas, electric utilities are required to reduce 10% of their annual load growth, which we accomplish through cash incentives for energy efficient construction, equipment retrofits, and building optimization consulting. My work supports our reliability of our electric grid – 50% of our summer peak demand is from air conditioning, and 30% of our electric generation comes from interruptible sources like wind, it's imperative we have these programs in place to avoid brown-outs and other interruptions to power.

Why did you choose to work in this field?

As part of my AOM and ABE curriculum, I took a lot of classes on the managements of inputs (translation: costs) on a farm, and I fell in love with the energy portion of the curriculum. As many farmers know, energy in all of its forms such as diesel, electricity, propane, etc. are a huge part of O&M in agricultural operations! I was able to use my academic experience to land a job performing energy audits on poultry and dairy farms, and then made the jump to residential and commercial after I graduated. The rest is history, and I'm forever grateful for Dr. Porter and the AOM classes for exposing me to an industry I truly enjoy working in.

Why did you choose ABE at UF?

This is an easy one – I wouldn't have a career if it wasn't for Dr. Porter! He knew I had a keen interest in the energy side of things from our AOM class Global Sustainable Energy, and when a part time job posting came across his desk for an agricultural energy auditor he recommended me for the position. The flexibility of my graduate program in ABE served me really well, I was able to tailor my classes and out of class work to learn how to evaluate and analyze energy management in agricultural operations and rural residential buildings, something that is very unique and laid the groundwork for me to successfully transition to the private sector. The flexibility offered to me by ABE to tailor my studies to the exact industry I wanted to work in proved invaluable.

What do you hope to do in the future?

I hope to always work in energy, but I've got my eye on working again in the agricultural field! Agriculture is and will always be a passion of mine, and I hope to apply my experience in utilities in helping out our farmers and everyone else who lives and works at the grid edge manage their energy consumption. I would not be surprised if I ended up at a co-op utility or the Department of Energy.

Student Organizations



AOM CLUB

By Valentino Collazo, AOM Club President

This semester, the Agricultural Operations Management Club hosted several guest speakers, attended agricultural expos and visited several successful companies in the industry.

The first event of the semester was the ABE departmental tailgate before the Gators defeated the CSU Rams.

During the semester, the AOM Club hosted Jason Draughon, owner of Draughon Cattle Co. and Lead Production Specialist from Smithfield Foods, the world's largest pork processor and hog producer, and Kim Walden a Recruitment Manager from Ag-Pro, the fastest growing John Deere dealer in North America. Both guest speakers gave students valuable insight into their industry and career opportunities within their companies.

The AOM Club organized several tours this semester including; the Sunbelt Agricultural Expo, which had over 1200 exhibitors showcasing some of the latest innovations in the agricultural technology; a tour of First Magnitude, one of Gainesville's most prominent local breweries; a tour of Trader Hills, the largest aquaponics farm in Florida; and, along with our friends from ASABE, we toured the Anheuser-Busch Jacksonville Brewery.

Having elected three new officers, the AOM Club is excited for our next semester and has plans to visit Adena Farms, hold Career and Professional Development workshops before the CALS career showcase, and raise funds to start a vertical farm on campus! ■



ASABE

By Briana Pizzano, ASABE Club President

The Florida Student Branch of the ASABE had a jam-packed semester with events benefiting our members and reaching out with others in both CALS and the College of Engineering. We tabled at various events to boost recruitment and participated in many social events including an ABE department tailgate with ABEGSO, AOM Club, and Packaging Club; bonfire with the American Society of Civil Engineers; and study socials during midterms and finals weeks.

Speakers hosted by FSB ASABE this semester included Sandra Chavez on career showcase and resume advice; Barry Jacobson, president of solar impact; and ABE Chair, Dr. Kati Migliaccio on the international ASABE professional organization and the importance of being involved. We also coordinated an Anheuser-Busch behind-the-scenes tour with a networking and Q&A session with the AOM Club.

The organization looks forward to another successful semester next year with more speakers and industry tours, a springs trip, travel to North Carolina for ASABE Southeastern Regional Student Rally, design competitions, and prepping for the summer regional and international conferences in Delray Beach and Boston, respectively. ■

🐦 FL Stdnt Brnch ASABE, @FSB_ASABE



GRADUATE STUDENT ORGANIZATION

By Victoria Morgan, ABE GSO Club President

In the most recent semester, ABE GSO has participated in service events such as Grace Market Place, Hurricane Relief Drive, and a kayak river clean up! We have had professional development experiences from our annual Graduate Poster Competition and Three-Minute Thesis (3MT), to guest speakers discussing how to improve our leadership, communication, and presentation skills. We have hosted social events that include a student Lake Wauberg Event, Friday Socials, and joined forces with the other ABE clubs, staff, and faculty to throw a wonderful ABE departmental tailgate.

Our mentoring program is as strong as ever with our annual Halloween Mentoring Costume Party and social events such as our table tennis tournament to help engage mentors with mentees. Read more about this program on Page 9.

At the start of the spring semester we plan to bring back our faculty, staff, and student social at Dr. Greg Kiker's house with lab Olympic games to kick off the new year and introduce new faculty, students, and postdocs coming in the spring semester! We hope to also have more undergraduate and graduate interaction to enhance mentoring skills, professional development, lab experience, and more! ■



PACKAGING CLUB

By Ashley Owens, Packaging Club President

This was a busy semester for the Packaging Club, from hosting speakers, to going on industry tours and playing kickball with ASABE.

The biggest event of the Fall 2018 semester that the Packaging Club participated in was Pack Expo International 2018. Pack Expo International is the world's largest packaging trade show with over 2,500 exhibitors. This show was a great learning and networking experience for all who attended.

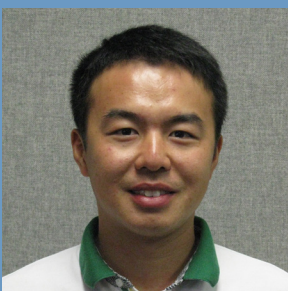
Next semester the Packaging Club is planning on participating in multiple student design competitions including 48 Hour Repack and the Paperboard Packaging Alliance Student Design Challenge. Several members of the club will also be attending packaging conferences occurring in Orlando, Florida. These conferences include DSCOOP (Digital Solutions Cooperative) 2019 and Snaxpo 2019. ■



CONGRATULATIONS TO OUR

GRADUATING STUDENTS

FALL 2018



HAO GAN

*Doctor of Philosophy
Machine Vision
Advisor: Dr. Daniel Lee*



JOSE GUARIN

*Doctor of Philosophy
Crop Modeling
Advisor: Dr. Senthold Asseng*



(Top to Bottom, Left to Right) LEFT PAGE: Dr. Adam Watson’s Agri-Food Systems Innovation class visits the UF Dairy Research Unit. | Graduate Students Victoria Morgan, Raminder Kaur and Shirin Ghatrehsamani compete in the ABE Three-Minute Thesis competition. | The ASABE Florida Student Branch hosted free professional headshots for use on LinkedIn by members prior to Career Showcase. | The ASABE Florida Student Branch sets up breakfast available in the Frazier Rogers entrance atrium. | Dr. Richard Scholtz’s Irrigation and Drainage Engineering class learn how to take soil samples. | RIGHT PAGE: The AOM Club and ASABE Florida Student Branch traveled to Jacksonville to tour the Anheuser-Busch Brewery. | Dr. Richard Scholtz’s Biological Engineering Design class builds a project that sorts ping pong balls by color that was created with citrus in mind and the idea of sorting ripe vs. unripe fruits. | Dr. Aditya Singh received the International Educator Awards for Junior Faculty for the College of Agricultural and Life Sciences. | The AOM Club attended the Sunbelt Agricultural Expo.



**IXCHEL
HERNANDEZ
OCHOA**

*Doctor of Philosophy
Crop Modeling
Advisors: Dr. Senthold Asseng and Dr. Clyde Fraisse*



KIRSTEN PAFF

*Doctor of Philosophy
Crop Modeling
Advisors: Dr. Senthold Asseng and Dr. Gregory Kiker*

AWARDS & ACCOMPLISHMENTS

- Dr. **Bin Gao** received a Highly Cited Researcher award by Clarivate Analytics.
- Dr. **Aditya Singh** received the International Educator Award for Junior Faculty for the College of Agricultural and Life Sciences.
- Dr. **Nikolay Bliznyuk** received the University Term Professorship award.
- Dr. **Eric McLamore** received the University Term Professorship award.
- Dr. **Clyde Fraisse** received the University Term Professorship award.
- Graduate student **Thiago Onofre** received 2018 UF International Center Certificate of Excellence for College of Engineering.
- Graduate student **Hao Gan** received 1st Place for the 2018 Alec Courtelis Award from the UF International Center.
- Undergraduate student **Sirapoom Peanusaha** received the UF International Center Certificate of Excellence for 2018 for UF Engineering.
- **Satbyeol Shin** received the Everglades Foundation ForEverglades Scholarship 2018.
- Graduate student **Hao Gan** received the International Student Outstanding Achievement Award from the College of Agricultural and Life Sciences.
- Graduate student **Hao Gan** received the A.S. Herlong, Sr. Scholarship from the College of Agricultural and Life Sciences.
- Graduate student **Raminder Kaur** received the A.S. Herlong, Sr. Scholarship from the College of Agricultural and Life Sciences.
- Graduate student **Miles Medina** received the 2018 Sanford N. Young Scholarship from American Water Resources Association, Florida Section.

Graduating Students

BACHELOR OF SCIENCE

- **Matthew Archer**
Biological Engineering
- **Griffin Battel**
Biological Engineering
- **Julianne Chechanover**
Biological Engineering
- **Peyton Crosby**
Agricultural Operations Management
- **Evan Francisco**
Agricultural Operations Management
- **Nicholas Gabri**
Agricultural Operations Management
- **Natalie Garcia**
Biological Engineering
- **Chelsea Goodman**
Biological Engineering
- **Dennis Lopez**
Agricultural Operations Management
- **Tanner Loyd**
Agricultural Operations Management
- **John Nemenyi**
Biological Engineering
- **Peter Tsirnikas**
Agricultural Operations Management
- **Carlos Vera**
Agricultural Operations Management



DEPARTMENT NEWS

DEPARTMENTAL NOTES

- **Professor Emeritus Rush Choate** turned 100 years old.
- **Dr. Aavudai Anandhi**, Assistant Professor at Florida Agricultural and Mechanical University, joins the ABE Advisory Board.
- **Mike Ferrari**, from Ferrari Innovation Solutions LLC, joins the ABE Advisory Board.
- **Dr. Forrest Izuno**, Professor and Head of the Southern Research and Outreach Center, joins the ABE Advisory Board.
- **Allison Mica**, Project Manager at Bacardi, joins the ABE Advisory Board.
- **Dr. Alicia Modenbach**, Lecturer and Student Coordinator Services at University of Kentucky, joins the ABE Advisory Board.
- **Eldon Muller**, Worldwide Safety for Walt Disney Parks and Resorts, joins the ABE Advisory Board.
- **Dr. Evan Shane Williams**, Stormwater Engineer at Alachua County Environmental Protection, joins the ABE Advisory Board.
- **Jeff Yenisch**, Senior Packaging Engineer for Refresco North America, joins the ABE Advisory Board.

Welcome to ABE

We are happy to welcome our new faculty and staff members:



DR. SANDRA GUZMÁN

Dr. Sandra Guzmán joined ABE as an assistant professor in November. Dr. Guzmán's research is focused on evaluating and implementing mathematical models to better understand agricultural water supply and demand and to make a more efficient use of water for irrigation.

sandra.guzmangut@ufl.edu

[@watersan17](https://twitter.com/watersan17)



JUAN BRICENO

Juan started on October 30 as an Engineering Technician supporting water resources related research. Juan previously joined the ABE department in the spring as an OPS technician, and he is a graduate of our Biological Engineering bachelor's program. His efforts will be concentrated on setup and maintenance of field projects and equipment in the Water Resources Lab.

GIVING

Your generous donation to the UF/IFAS Agricultural and Biological Engineering program will provide support for our students, faculty and staff.

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