2019-2022 FSI News Events

2021 FSI In the News

• A new paper, "Implications of new technologies for future food supply systems" has been published in The Journal of Agricultural Science. This publication resulted from our first Future of Food Forum, and is authored by numerous presenters and panelists from that event. The article is available at: Implications of new technologies for future food supply systems (December 6, 2021)

• The 2022 University of Florida International Center 'Global Fellows' have been announced! The Fellows include Dr. Trent Blare (Food and Resource Economics), Dr. Ziynet Boz (Agricultural and Biological Engineering), and Dr. Razieh Farzad (Food Science and Human Nutrition), all faculty members of the UF Food System Institute. (November 3, 2021)

• "Pedro Sanchez celebrates and pays homage to his Hispanic heritage and cultural history each day by crediting the Latin roots he came from for the passion that inspired him to lead a life’s work dedicated to fighting food insecurity as a pioneer in the field of tropical soils." Read the UF/IFAS blog post at "Celebrating Hispanic Heritage through the legacy of a 2021 Great Immigrant at UF/IFAS". (October 14, 2021)

• "Typically, researchers collect data and use them only for their own original experiments. UF/IFAS and Food Systems Institute professor Gerrit Hoogenboom, the principal investigator on the project, believes scientists can gain far more value from data if they were combined across locations, time and conditions." Read the UF/IFAS blog post at "UF researchers lead effort to streamline, reuse data to help feed the world". (October 11, 2021)

• More than 3 million Florida residents are food insecure and receive food assistance. During Food Week, Oct. 11 to 16, units across UF/IFAS will join hands to raise awareness about hunger issues and engage students and the public in solving hunger across the state. Read the blog post at "Hunger in Florida: A problem with a size and scope hard to digest". (October 4, 2021)

• The first DSSAT European Training Course was held from August 30 through September 4, 2021 at the Technical University of Munich. The workshop was hosted by Professor Senthold Asseng, Chair Digital Agriculture and Director of the Hans Eisenmann Forum of the Technical University of Munich, with co-sponsorship by the University of Florida and the DSSAT Foundation. The instructors of the workshop included Professor Ken Boote, Mrs. Cheryl Porter, and Professor Gerrit Hoogenboom, University of Florida. Read the blog post at "DSSAT 2021 European Training Course at the Technical University of Munich, Germany" (September 17, 2021)

• "Agricultural Research Data Network Increases Access to Historical Crop Data" - Crop researchers are hungry for data to feed their crop models. There is a wealth of historical data that’s inaccessible because today’s crop model software applications cannot easily interpret it. USDA’s National Agricultural Library (NAL) is working with the University of Florida and the Agricultural Research Data Network (ARDN) to solve this problem. Gerrit Hoogenboom of the Food Systems Institute is PI on this project. (September 8, 2021)
• "Heat stress in dairy cows damages health of calves" (Science Daily): As scientists continue to explore the wide-ranging effects of heat stress on the health of dairy cattle, a new study adds to the growing understanding of the negative influences of heat stress, not just throughout the lifespan but across generations. Senior author Geoffrey E. Dahl, PhD, of the University of Florida/Food Systems Institute explains that "Calves, like all young animals, are prone to elevated rates of mortality and morbidity in the neonatal period, and preterm birth may further exacerbate that problem. Early-life losses may result from organ immaturity and dysfunction, notably of the gastrointestinal tract and the immune system." (August 26, 2021)

• The 15th Decision Support System for Agrotechnology Transfer (DSSAT) Development Sprint, organized by Dr. Gerrit Hoogenboom of the Food Systems Institute, was hosted by IFDC on July 26 to July 30, 2021. Read the blog post at "IFDC Hosts 15th Crop Modelling Development Sprint" (August 9, 2021)

• Dr. Arie Havelaar of the Food Systems Institute has been noted as a "Top 10% Most Cited Author" for PLOS ONE papers published in 2016. His publication "World Health Organization Estimates of the Relative Contributions of Food to the Burden of Disease Due to Selected Foodborne Hazards: A Structured Expert Elicitation" has been cited 113 times! (July 29, 2021)

• Inaugural issue of the Food Systems Institute Connections Newsletter has been released, read at: FSI Connections July 2021! (July 13, 2021)

• Dr. Pedro Sanchez of the Food Systems Institute is a 2021 Great Immigrants Recipient! Every Fourth of July, Carnegie Corporation of New York celebrates the exemplary contributions of immigrants to American life. In 2021, the Corporation honors 34 naturalized citizens who have enriched and strengthened our nation and our democracy through their contributions and actions. Read the full story on Dr. Sanchez at 2021 Great Immigrants Recipient (July 6, 2021)

• “DSSAT is one of the most widely used crop models in the world,” said Gerrit Hoogenboom, a DSSAT developer who is a professor of agricultural and biological engineering at the University of Florida and a faculty member of the UF Food Systems Institute. “The software itself was originally developed for researchers, but it is now also being used as a teaching tool. The model, which is the key component of DSSAT, can be used by farmers.” Read the full story at Computer software helps solve what-if questions in agriculture (June 10, 2021)

• Agriculture in sub-Saharan Africa has improved greatly over the past two-decades, according to data from the World Bank, but more work is needed. That is the message from Dr. Pedro Sanchez, a research professor of tropical soils in the UF/IFAS soil and water sciences department and the UF/IFAS Food Systems Institute. He and Dr. Thomas Jayne, a colleague at Michigan State University, recommend several policies the region must undertake to improve sustainability. Read the full story at UF/IFAS professor’s agricultural productivity plan for sub-Saharan Africa published in the journal Science (June 4, 2021)

• Congrats to Dr. Kathleen Colverson on being named a 2021-2022 Fulbright Scholar! Dr. Colverson will be working in conjunction with Dr. Myriam Paredes at FLACSO-Ecuador (Facultad Latinoamericana de Ciencias Sociales) to address issues related to malnutrition
in Indigenous populations. **Joel Correia and Kathleen Colverson named Fulbright Scholars** (June 2, 2021)

- Dr. Karen Garrett of the Food Systems Institute was the US "drafting author" on the newly released **Scientific review of the impact of climate change on plant pests** (FAO) (June 1, 2021)
- Dr. Arie Havelaar from the University of Florida/Food Systems Institute will support WHO on the activities related to the Foodborne Disease Burden Epidemiology Reference Group (FERG) as a senior advisor. He was a former chair of the FERG and led the compilation of the first global report on the global burden on foodborne diseases. For more information on the FERG, visit **Terms of Reference for the Foodborne Disease Burden Epidemiology Reference Group** (May 26, 2021)
- The DSSAT 2021 International Training Program was held on May 17-22 2021 at the University of Georgia with Dr. Gerrit Hoogenboom of the UF Food Systems Institute. For more details visit **DSSAT 2021 International Training Program at the University of Georgia** (May 21, 2021)
- A new article in the Washington Post, **Plant pandemics and how they could endanger our food supply. Scientists sound alarm on growing menace** is on a new PNAS paper coauthored by FSI faculty member Karen Garrett. (May 14, 2021)
- Dr. Kathleen Colverson, FSI faculty member, was awarded the “UF/IFAS International Fellow Award” for her service to internationalizing UF and providing opportunities for faculty and students to engage in international activities. Dr. Colverson has provided technical expertise to numerous international efforts on the integration of gender and youth dimensions and how they impact project and program outcomes. She has developed and implemented training programs in SE Asia, East Africa and Latin America and currently provides support to various USAID Innovation Labs on gender and youth integration. Learn more at: **UF/IFAS research awards ceremony honors 2020 accomplishments and adaptability**. (May 14, 2021)
- FSI faculty member Dr, Mathews Paret is the recipient of the "2021 UF/IFAS International Achievement Award". This recognizes his program focused on improving surveillance for critical pathogens and diagnostics relevant to food security for small-holder farmers in Africa (Benin, Togo, Niger, Cote D’Ivoire) and Asia (China, Philippines, India). As a mentor of numerous international scientists, students, post-doctoral fellows, and interns he has provided hands-on trainings on improving their research capabilities on characterization, biology, spread, and management of plant pathogens affecting vegetable crops. Learn more at: **UF/IFAS research awards ceremony honors 2020 accomplishments and adaptability**. (May 14, 2021)
- The University of Florida named animal sciences assistant professor Antonio Faciola as the 2020-2021 Undergraduate Faculty Advisor/Mentor of the Year in their annual teaching and advising awards for faculty and staff. Dr. Faciola is a core faculty member of the UF Food Systems Institute. “Dr. Faciola facilitates an exceptional academic environment for his students, ensuring their future success,” said John Arthington, animal sciences professor and chair. “He believes the main components of mentorship are leading by example, being relatable, compassionate and genuinely committed to student success, and fostering a work environment that is conducive to excellent
If you have ever brought home seemingly fresh produce from the grocery store only to find it wilted and moldering a few days later, Tie Liu feels your pain. Funded by a nearly half-million dollar, four-year grant from the USDA National Institute of Food and Agriculture’s (NIFA) Agriculture and Food Research Initiative (AFRI), the project, called FreshID, also tackles a global problem: food waste and loss. Learn more at "How UF scientists use AI to dodge yellow broccoli, mushy avocados" (May 13, 2021)

Arie Havelaar of the UF Food Systems Institute, Preeminent Professor of Global Food Safety and Zoonoses in the Animal Sciences Department, and the Emerging Pathogens Institute has coauthored two recent publications on Salmonella in Florida which are highlighted in a new article "Understanding Salmonella Infections in Florida" (April 22, 2021)

The UF/IFAS Office of the Dean for Research is pleased to announce the recipients of the UF/IFAS Awards of Excellence for Graduate Research, recognizing the best thesis and best dissertation completed during the last calendar year. This year, in addition to identifying an overall best thesis and overall best dissertation, we also identified a best thesis and best dissertation in each of our major focus areas: (1) Agricultural Systems, (2) Natural Resources, and (3) Human Systems. Recipients of these awards include Jordan Moor (advised by Dr. Jim Anderson) for Best Thesis in Human Systems, and Dr. Achilles Vieira Neto (advised by Dr. Jose Eduardo Santos) for Best Dissertation in Agricultural Systems and OVERALL BEST DISSERTATION:, both members of the UF Food Systems Institute. (March 22, 2021)

FSI is pleased to bring to your attention a Special Section in Marine Policy dedicated to application of the ‘new metrics,’ the Fishery Performance Indicators (FPIs). Jim Anderson has been working with Frank Asche (UF-IFAS, SFRC), Taryn Garlock (UF-IFAS, FSI), Chris Anderson (U Washington), Jingjie Chu (World Bank) and many others for more than a decade to develop and apply the FPIs to fisheries systems around the world. The FPIs are designed for evaluating and comparing the performance of the world’s fisheries management systems in aligning ecosystem health and human well-being (Anderson, Anderson, Chu, Asche et al. 2015 and Asche, Garlock, Anderson et al. 2018). Emphasis is on the triple bottom line of environmental sustainability, economic performance, and community well-being. (March 2021)

Congrats to Frank Asche, Jim Anderson and Taryn Garlock on receiving funding from Sea Grant for "Economics of Risk in U.S. Aquaculture Production and Markets" Sea Grant awards $4.7 million to strengthen economics of U.S. aquaculture. (January 27, 2021)

National Study Refines Proportion of Illness Due to Microbes in Food, Water. UF researchers led a comprehensive study estimating the proportion of food- and waterborne diseases in the US attributable to five major transmission pathways. University of Florida food safety expert Arie Havelaar, a microbiologist in UF's Institute of Food and Agricultural Sciences (Food Systems Institute) who specializes in microbial risk assessment and food safety, is the study’s senior author.(January 5, 2021)
- **Introduction Food Systems Institute at the University of Florida** YouTube (October 14, 2020)
- **Four UF/IFAS faculty members elected AAAS fellows, breaking previous record.** Four UF/IFAS faculty members have been named 2020 Fellows of the American Association for the Advancement of Science (AAAS). This surpasses the record set last year when three UF/IFAS faculty members became fellows in a single year. One of these new AAAS fellows, Geoffrey Dahl, is a faculty member of the UF Food Systems Institute. (November 24, 2020)
- Ricardo Alcala-Briseno, UF plant pathology grad student (Garrett Lab) with the UF Food Systems Institute and Emerging Pathogens Institute, had a top-viewed poster at the International APS virtual meeting - his project includes new 'AI' approaches to virome analyses within samples and across continents - to view his poster visit: [Top Viewed ePosters of Plant Health 2020](#) (October 21, 2020)
- Arie Havelaar of the UF Food Systems Institute, Preeminent Professor of Global Food Safety and Zoonoses in the Animal Sciences Department, and the Emerging Pathogens Institute has accepted a position on the Scientific Advisory Board of the EU-funded Versatile Emerging Infectious Disease Observatory (VEO), for more information on their mission and activities, visit: [VEO](#) (October 7, 2020)
- The $7.265 million, four-year grant awarded by the United State Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA), involves what the project’s lead scientist considers a “dream team” of food safety researchers from 10 universities across the country and the USDA Agricultural Research Service. **UF researchers receive a multi-million grant to improve food safety in fresh produce** (Sept 17, 2020)
- The University of Florida has announced the creation of the UF/IFAS Food Systems Institute, which will bring together the university’s top researchers to find solutions to feeding the world in a way that is economically and environmentally sustainable. **New institute to address food production and sustainability at global scale** (July 10, 2020)
- Congratulations to Gerrit Hoogenboom on a new publication "**Agronomic data and the coronavirus epidemic**" in The Journal of Agricultural Science (August 13, 2020)
- Arie Havelaar was interviewed by Adam Ragusea "**Where foodborne illness happens**" via YouTube. (Aug 10, 2020)
- UF Emerging Pathogens Institute Blog " **Evaluating Global Crop Risks: How Crop Landscapes Affect Disease**" on a new publication in BioScience authored by Karen Garrett and a team of international researchers. Current disease and pest risks to potato, cassava, sweet potato, yam and banana/plantain were reviewed. In addition, they also proposed a new model for assessing the risk from pathogens and pests to these crops globally and prioritized key areas for surveillance and mitigation. When it comes to managing risks to food crops from pathogens, landscape connections may be just as key to the spread of diseases as are networked trade routes and a changing climate. (Aug 5, 2020)
- Congratulations to Senthold Asseng and coauthors on a new publication "**Wheat yield potential in controlled-environment vertical farms**" in the journal PNAS (July 27, 2020)
Congratulations to Greg Kiker and coauthors on a new publication "Network analysis of regional livestock trade in West Africa" in the journal PLOS ONE. (May 14, 2020)

Blog on the recent workshop "Scientists from IITA, Wageningen and University of Florida are Optimizing Crop Models for Improved Predictions". The African Cassava Agronomy Initiative (ACAI) project scientists are working on optimizing crop models to improve the prediction of the AKILIMO decision support tools. The team, including Gerrit Hoogenboom from the University of Florida, is evaluating the performance of the Light Interception and Utilization (LINTUL) and Decision Support System for Agrotechnology Transfer (DSSAT) to predict the attainable yield of cassava under well managed agronomic field trial. (June 22, 2020)

Blog on the recent "Hackathon For Building the Agricultural Research Data Network", part of a project called the Agricultural Research Data Network (ARDN), which was funded by a NIFA FACT grant (2019-67021-29921). This hackathon was led by a team from UF Agricultural and Biological Engineering/Institute for Sustainable Food Systems including Gerrit Hoogenboom and Cheryl Porter. (May 9, 2020)

Congratulations to Frank Asche on his achievement of exceeding 10,000 career citations in his Google Scholar profile. This reflects a substantial and impactful body of work, especially in the field of natural resource economics! To learn more about Frank Asche's body of research publications, visit his Google Scholar Profile.

Congratulations to Karen Garrett and coauthors on a new publication "Effective Altruism as an Ethical Lens on Research Priorities" in the journal Phytopathology. (February 19, 2020)

Congratulations to Frank Asche and coauthors on a new publication "Seasonal Harvest Patterns in Multispecies Fisheries" in the journal Environmental and Resource Economics. (January 29, 2020)

The Future of Food Forum livestream recording is now available for online on-demand viewing. "Future of Food Forum"

2019 In the News

UF researchers are developing ways to combat food insecurities in Africa. The African Cassava Agronomy Initiative is a five-year project to advance cassava farming by offering decision support tools. "Cultivating Food Security in Africa" (online article: Dec 5, 2019)

Congratulations to Senthold Asseng and Karen Garrett of the ISFS who have been elected 2019 Fellows of the American Academy for the Advancement of Science: "Three UF/IFAS Faculty Members Elected 2019 AAAS Fellows, Largest Number Yet"

Congratulations to Arie Havelaar and coauthors on a new publication: "Animal source foods: Sustainability problem or malnutrition and sustainability solution? Perspective matters" in Global Food Security (available online October 2019).

Congratulations to Frank Asche and coauthors on a new publication: "Eco-labels and product longevity: The case of whitefish in UK grocery retailing" in Food Policy (August 2019).

Congratulations to Cheryl Palm and coauthors on a new publication: "Long-term application of low C:N residues enhances maize yield and soil nutrient pools across Kenya" in Nutrient Cycling in Agroecosystems (July 2019).

Final Report on the Food from the Sea Workshop held May 14-16 2018 in Newport, Oregon, participants included Dr. James L. Anderson, Director of the Institute for Sustainable Food Systems, IFAS/UF.

Congratulations to Frank Asche and coauthors on a new article: "A model system to evaluate the economic performance of two different dietary feeding strategies in farmed Atlantic salmon (Salmo salar L.)" in the journal Aquaculture (27 July 2019).

"11th DSSAT Development Sprint at IFDC" The 11th DSSAT Development Sprint was held from July 15-19, 2019, at the International Fertilizer Development Center (IFDC) in Muscle Shoals, Alabama. One of the main goals of the DSSAT Development Sprints is to improve both the science and the tools of the DSSAT crop modeling ecosystem using a “hackathon” approach. University of Florida participants included Dr. Gerrit Hoogenboom, Dr. Vakh Shelia, Meng Zhang, and Patricia Moreno.

Congratulations to Karen Garrett and coauthors on a new article: "A global surveillance system for crop diseases" in Science (28 June 2019).

Congratulations to James Anderson, Frank Asche, and Taryn Garlock on a new publication: "Economics of Aquaculture Policy and Regulation" in the journal Annual Review of Resource Economics (to be published October 2019).

Congratulations to Dr. Senthold Asseng who has been appointed director of the Florida Climate Institute: "Achievers" in the Gainesville Sun (24 May 2019).

WWF Common Oceans Global Think Tank has released outputs on a WWF Project Page titled: Incentivizing Sustainable Fishing on the High Seas.


DSSAT 2020 International Training Program will be held May 18-23, 2020 at the University of Georgia at Griffin, see link for more information: DSSAT 2020 International Training Program.

Congratulations to Jim Anderson, Frank Asche, and Taryn Garlock (all affiliated with the ISFS/IFAS) and coauthors on a new review article: U.S. seafood consumption in the Journal of the World Aquaculture Society (May 2019).

DSSAT 2019 International Training Program @ Thailand will be held Aug 19-24, 2019 at Chiang Mai University, see link for registration information: DSSAT 2019 International Training Program @ Thailand.

Congratulations to Gerrit Hoogenboom and coauthors on a new publication: "A multi-objective approach to water and nutrient efficiency for sustainable agricultural intensification" in the journal Agricultural Systems (July 2019).

• Congrats to Frank Asche and coauthors on a new publication in the journal Land Economics: "Where Are the Fish Landed? An Analysis of Landing Plants in Norway" (May 2019).

• Congratulations to Arie Havelaar and coauthors on a new review article: One Health - Cycling of diverse microbial communities as a connecting force for soil, plant, animal, human and ecosystem health in the journal Science of The Total Environment. (May 2019).

• Congratulations to ISFS Director James L. Anderson and coauthors on a new publication: "The fishery performance indicators for global tuna fisheries" in the journal Nature Communications (April 2019).

• DSSAT participates in the Agricultural Model Exchange Initiative at the University of Florida April 9-11, 2019: "DSSAT participates in the Agricultural Model Exchange Initiative".