 Twelve new Academy for Global Engagement fellows take on global challenges

They are focused on the food and pharmaceutical supply chain and emerging plasma science. Their expertise is in improving soil health and smart sensing systems. Twelve new fellows in the Michigan State University Academy for Global Engagement (AGE) are already at work to become the next generation of international research experts at Michigan State University.

The 2018 AGE fellows represent MSU’s expanding research partnerships around the world. The newest cohort members are from the colleges of Agriculture and Natural Resources, Engineering, and Natural Science, and the Axia Institute (Broad College of Business). They began their fellowship year in January.

Now in its fifth year, the academy is designed to “create a new generation of international research experts at MSU by offering early- to mid-career faculty the opportunity to expand their scholarship on a global level,” said AGE director Andrew Gerard.

Gretchen Neisler is one of two AGE senior advisors.

“This nationally recognized program was created to strengthen MSU’s global networks and introduce faculty to new global resources,” Neisler said. “The end result is an innovative faculty development program model and undeniable return on investment that benefits the faculty and the MSU community as a whole.”

Mary Anne Walker, the other AGE senior advisor, said the academy helps fellows launch large-scale, high-impact international research programs by creating a growing cohort of global problem solvers.

“Fellows are trained to leverage connections, resources, knowledge, and skills obtained throughout their fellowship to advance their own global research,” Walker explained. “They are also positioned to serve as future mentors, helping to preserve MSU’s legacy as a dynamic and collaborative academic institution of higher learning.”

Throughout the year, AGE fellows participate in monthly seminars that include enhancing global research networks,
engaging with mentors to develop new skills, communicating their science more effectively, and navigating the global grant system. Funding provided by AGE allows fellows to take their work into the world through travel aimed at building international partnerships. They also have an opportunity to learn from seasoned research faculty and through the program’s mentoring component.

The 2018 AGE fellows are:

**Bahar Aliakbarian**, research associate professor of supply chain management and chemical and process engineering. Her research interests include food and pharmaceutical supply chain, food safety and sustainability, waste management and circular economy, nutraceuticals, functional food, intelligent and active packaging. Her mentor is Dave Frayer, MSU Executive Development Programs.

**Yiming Deng**, associate professor of electrical and computer engineering. His research interests are nondestructive evaluation, sensors and sensing systems, damage diagnostics, prognostics and health management, and data analytics and reliability analysis. His mentor is Renfu Lu, Biosystems and Agricultural Engineering.

**Emily Huff**, assistant professor of forestry. Her research interests are sustainable forest management, natural resource decision-making, stakeholder analysis in Latin America, Scandinavia and other northern European countries, and Japan. Her mentor is Nathan Moore, Geography, Environment and Spatial Sciences.

**Weiyi Lu**, assistant professor of civil and environmental engineering. His research interests are multifunctional nanomaterials/composites, energy absorption materials and new protection mechanisms, high strain rate behavior of multi-scale material systems, solid-nanofluid interactions, and advanced biomaterials. His mentor is Vilma Yuzbasiyan-Gurkan, Veterinary Medicine.
Jason Nicholas, associate professor of chemical engineering and materials science. His research interests are metal-to-ceramic joining, processing-structure-property relationships, solid oxide fuel cells, and nano-composite electrode tailoring. His mentor is Thomas Schuelke, Chemical Engineering and Materials Science.

Michelle Rutty, assistant professor of community sustainability. Her research interests are sustainable tourism, climate (change) and coastal communities, tourism development and impacts in The Caribbean, Latin America, Kenya, Rwanda, and other sub-Saharan African countries. Her mentor is Emilio Moran, Geography, Environment and Spatial Sciences.

Janice Siegford, associate professor of animal science. Her research interests are animal welfare, applied ethology, and precision livestock farming technology in Europe. Her mentor is Kalyan Deb, Electrical and Computer Engineering.

Lisa Tiemann, assistant professor of plant soil and microbial sciences. Her research interests are soil ecology and biochemistry in agrosystems, improving soil health by managing soil microbes, farmer soil management and decision-making in Malawi, Uganda and other sub-Saharan African countries, and India. Her mentor is John Kerr, Community Sustainability.

Ming Yan, assistant professor of computational mathematics, science and engineering. His research interests are image and signal processing, convex and nonconvex optimization, parallel and distributed computing. His mentor is Chunqi Qian, Radiology.

Dong Zhao, assistant professor of planning, design and construction. His research interests are global construction, human-centered engineering and construction, integrating artificial intelligence and human factors with green building techniques in China, Singapore, Korea, India and other Asian countries, along with Australia and Germany. His mentor is Venkatesh Kodur, Civil and Environmental Engineering.
Mi Zhang, assistant professor of electrical and computer engineering and biomedical engineering. His research interests are mobile health, mobile and ubiquitous computing, smart sensing systems, and applied machine learning. His mentor is Christopher Contag, Biomedical Engineering.

Peng Zhang, assistant professor of electrical and computer engineering. His research interests are theory and modeling of nano-electronics, electromagnetic fields, compact radiation sources, emerging plasma science, and accelerator technology. His mentor is Chong-Yu Ruan, Physics-Astromony.

Returning to the AGE Fellows program after a leave of absence last year is:

Annick Anctil, assistant professor of civil and environmental engineering. Her research topics include the sustainability of energy material extraction and photovoltaics/solar energy in sub-Saharan Africa. Her mentor is Laura Schmitt-Olabisi, Community Sustainability.

The Academy has trained 39 fellows, the first cohorts have secured more than $8.5 million in research funding from dozens of new sources. Fellows have authored 124 joint research publications with international partners in the last four years.

For more information on MSU’s AGE, contact coordinator Janet Fierro at fierroja@anr.msu.edu

Read about the 2017 AGE Fellows, 2016 AGE Fellows and 2015 AGE Fellows.

Related Website: Academy for Global Engagement
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