



Research interests: Soil physics, soil health, vadose zone hydrology, surface-ground water interactions, carbon and nitrogen cycling, greenhouse gas emission, climate change impact, soil and water conservation, irrigation scheduling, and agroecosystem modeling.

Dr. Gary Feng holds a B.S. degree in soil chemistry, M.S. degree in soil physics, and a PhD degree in soil and water sciences. He is a Research Soil Scientist at USDA-ARS Genetics and Sustainable Agriculture Research Unit, and an adjunct faculty at Mississippi State University. Prior to joining USDA-ARS, he worked at Oregon State University, University of California at Riverside, Washington State University, and Idaho State Department of Environmental Quality. Dr. Feng has 24 years of working experience in field, lab and modeling research on soil erosion mechanism; water balance, dynamic and hydrological process; nutrients fate and transport; as well as development of water management strategy and irrigation scheduling, soil and water conservation practices, and nutrients management under diverse weather conditions in arid, semi-arid and humid regions. The technologies that he utilized are remote sensing, drone and UAVs as well as digital sensors and decision support systems for water and nutrients management. He organized 14 international workshops and conferences in those research areas. Dr. Feng developed, modified, calibrated, evaluated, or applied 11 agrometeorology, crop growth, soil and water erosion, hydrology, and agroecosystem models. He has led, collaborated, and participated in a number of interdisciplinary research projects at the local, national, and international levels.

Research endeavors undertaken during his career have resulted in 112 peer-reviewed journal manuscripts, 22 conference proceeding papers and book chapters, and 118 published meeting abstracts. Dr. Feng has been invited to give 35 presentations at national and international research institutes and universities which sponsored his invited travels. He served on the selection committee for SSSA Fellows in 2012 and 2013. Dr. Feng was a Soil Science Society of American Journal (SSSAJ) Associate Editor from 2011-2018 and served as a reviewer for 38 scientific journals, PhD thesis, and proposals. He was elected as 2016 Leader of ASA Model Applications in Field Research Community, 2017 Leader of ASA US-Sino Agriculture Research Forum, 2018 Leader of the Soil-Plant-Water Relations Community, 2019 Leader of the Soil and Water Management Professionals Community, 2020 Leader of ASA Soil Health Community, 2021 Chairs of ASA Climatology and Modeling Section, and Agroclimatology and Agronomic Modeling Community. He won distinguished career achievements award from the Association of Chinese Soil & Plant Scientists in North America in 2018. Dr. Feng received a certificate of appreciation as an Associate Editor of SSSAJ for 8 years in 2018. USDA-ARS headquarter awarded him an ARS competitive research associate position fund \$140,000 in 2015. The

headquarter also awarded him innovation fund in 2019 to help advance his research goals, strengthen the importance of his science and assist technology transfer of his innovative research. He was also funded \$187,462 by MSPB for improving soybean water use efficiency (2014-2019). Currently, Dr. Feng along with his colleagues conduct team-based research on a 5-year [appropriated](#) project “Closing the Yield Gap of Cotton, Corn, and Soybean in the Humid Southeast with More Sustainable Cropping Systems” from 2018-2023.