Biographical Sketch

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Xiangming Xiao is a Professor of Ecology and Remote Sensing at the Department of Microbiology and Plant Biology (http://mpbio.ou.edu). He had B.Sc. in Biology from the Xiamen University, Xiamen, China (1982), M.Sc. in Ecology from the Graduate College, the University of Science and Technology, Beijing, China (1987), and Ph.D. in Ecosystem Science from the Colorado State University, Fort Collins, Colorado, USA (1994). Prior to his position at OU, he worked at the Marine Biology Laboratory at Woods Hole, Massachusetts; the Joint Program on the Science and Policy of Global Change, MIT; and the University of New Hampshire. He currently serves as a Subject-Matter Editor of Ecological Applications journal, and a Review Editor of EcoHealth journal. He has authored or co-authored 170 peer-reviewed journal papers and book chapters. He teaches Environmental Remote Sensing, Computational Remote Sensing, and Field Methods in Geospatial Technologies courses at OU. Dr. Xiao has been involved in diverse research areas of geospatial technologies, land cover and land use changes, terrestrial carbon cycle, wild bird ecology, water quality, hydrology, and climate as well as ecology and epidemiology of infectious diseases. For example, through the support of the NASA Land Cover and Land Use Change Program, he leads various projects that map paddy rice, forests and plantations in Asia and the globe. He has developed the satellite-based Vegetation Photosynthesis Model (VPM) that estimates gross primary production of vegetation across the world. He has collaborated with many researchers from USA and 20+ other countries. Dr. Xiao also leads an effort in crowd sourcing and citizen science to address the grand challenges in our dynamic and rapidly changing planet Earth and the society, and manages a crowd sourcing and citizen science data portal (http://www.eomf.ou.edu) with 1+ petabyte online data storage, including the Global Geo-Referenced Field Photo Library (http://www.eomf.ou.edu/photos) where researchers, stakeholders and citizens share, visualize and archive geo-referenced photos from the fields. As PI or Co-I, Dr. Xiao has been involved in 60 projects receiving a total of ~$82 million from federal agencies (e.g. NIH, NSF, NASA, DOI, NOAA, and USDA) since 1994; many of them are multi-institution and interdisciplinary projects, including the NIH-funded avian influenza projects (2007-2012, 2013-2017, $5 million), the DOI-funded South-Central Climate Science Center (~$4 million, 2011-2016), the NSF-funded CyberCommons for Ecological Forecasting (~$6 million, 2009-2013), the NSF-funded adapting socio-ecological systems to increased climate variability project (~$20 million, 2013-2018), the USDA-funded beef cattle production and climate change project (~$10 million, 2013-2018) and the microbe-climate interactions in croplands and grasslands project ($3 million, 2016-2020). The EOMF focuses on land cover and land use change, spatial ecology, and epidemiology; and employs advanced computing and visualization technology and geospatial technology. It operates at annual expenditure of ~$1.2 to $1.5 million federal grants.