Prof. Shuijin Hu

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Professional Preparation

University of California at Berkeley
Ecosystem Ecology **1996-1999**

University of California at Davis
Soil Microbial Ecology **1994-1996**

University of Georgia
Ecology (Soil) **PhD, 1994**

Nanjing Agricultural University, China
Plant Genetics **MSc, 1987**

Hefei Institute of Economics & Tech., China
Agronomy **BS, 1983**

Professional Experience

1999-Present: Assistant (1999), Associate (2006) and Full Professor (2013), Plant Pathology & Biology, NC State University

1996-1999: NSF Postdoctoral Fellow, Integrative Biology/ESPM, UC Berkeley

1994-1996: Postdoctoral Scholar, Microbial Ecology, Plant Pathology, UC Davis

Major Research Interests

Climate change and plant-microbial interactions;

Microbial controls over ecosystem C sequestration and nutrient cycling;

Biodiversity and ecosystem functioning;

Soil trace gas emissions from agroecosystems

Synergistic Activities and Honors

Chair, 2013-2015, Asia Ecology Section, Ecological Society of America

Panel Member for evaluating research proposals submitted to: DOE, 2012; NSF-USA, MO-MIP, 2008; USDA-NRI, Soil Processes 2007; US EPA/USDA, Climatic Change, 2007.

Editorial Board: *PLoS One*; *Journal of Plant Ecology*; *ISRN Ecology*

Three Most Significant Awards:

2002: William Boright Hewitt Award, American Phytopathological Society;

2002: NSF China: Outstanding Young Scientist Fellowship;

1996: NSF Postdoctoral Fellowship in Bioscience Related to the Environment.

Ad Hoc Proposal Reviewer: NSF, USDA-NRI, DOE, National Sciences & Engineering Research Council of Canada, NSF China; The Netherlands Organisation for Scientific Research

Manuscript Reviewer for journals: *Applied Environ. Microb., Ecology, Ecol. Appl., Global Ch. Biol., Nature, New Phytol., Plant Physiol., PNAS, Science, Soil Biol. Biochem., SSSAJ.*

These Advisor, Postdoctoral And Visiting Scholar Sponsor

Graduate Students: 8

Postdoctoral Scholars: 6

Visiting Scholars: 16

Publications

Ten publications most closely related to the areas of Climate change/Soil Microbial Ecology

1. **Hu S**, Chapin FS, Firestone MK, Field CB, Chiariello NR. 2001**.** Nitrogen limitation of microbial decomposition in a grassland under elevated CO_2. *Nature* 409, 188–191.
2. *Cheng L, Booker FL, Tu C, Burkey KO, Zhou L, Shew HD, Rufty TW, **Hu S**. Arbuscular mycorrhizal fungi increase organic carbon decomposition under elevated CO2. *Science* 337, 1084-1097.
3. **Hu S**, Firestone MK and Chapin FS III. 1999. Soil microbial feedbacks to atmospheric CO_2 enrichment. *Trends in Ecology & Evolution* 14, 433-437.
4. **Hu S**, Wu JS, Burkey KO, Firestone MK. 2005. Plant-microbial N partitioning under elevated atmospheric CO_2 in two mesocosm experiments with annual grasses. *Global Change Biology* 11, 213-223.
5. Booker FL, Prior SA, Torbert HA, Fiscus EL, Pursley WA, **Hu S**. 2005. Influence of elevated CO_2 and O_3 on soybean residue chemistry and decomposition. *Global Change Biology* 11, 685-698.
6. *Chen X, Tu C, Burton M, Watson D, **Hu S**. 2007. Plant nitrogen acquisition and interactions under elevated CO_2: impact of mycorrhizae and endophytes. *Global Change Biology* 13, 1238-1249.
7. *Cheng L, Zhu J, Chen G, Zheng X, Oh NO, Rufty TW, Richter DB, **Hu S.** 2010. Atmospheric CO_2 enrichment facilitates cation release from soil. *Ecology Letters* 13, 284-291.
8. *Liu L, King JS, Booker FL, Giardina CP, Allen HL, **Hu S**. 2009. Enhanced litter input rather than changes in litter chemistry drive soil carbon and nitrogen cycles under elevated CO2: a microcosm study. *Global Change Biology* 15: 441-453.

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