

Jien Zhang

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EDUCATION

Ph.D. in Environmental Science, 08/2012-01/2017. Department of Earth and Environmental Sciences, College of Arts and Sciences, **Lehigh University**, Bethlehem, PA, USA

M.S. in Ecology, 2012. School of Life Sciences, **Beijing Normal University**, Beijing, China

B.S. in Ecology, 2009. School of Life Sciences, **Inner Mongolia University**, Hohhot, China

Excellent-Student-Exchange Program, 09/2007-01/2008. School of Urban and Environmental Sciences, **Peking University**, Beijing, China

PROFESSIONAL EMPLOYMENT

Research Assistant, 08/2012-01/2017. Department of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA, USA

Teaching Assistant, January-May 2016. Department of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA, USA

Teaching Assistant, June-August 2015. Department of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA, USA

Teaching Assistant, August-December 2014. Department of Earth and Environmental Sciences, Lehigh University, Bethlehem, PA, USA

Research/Teaching Assistant, 2009-2012. School of Life Sciences, Beijing Normal University, Beijing, China

PUBLICATIONS

Jien Zhang, Ping-Shi Wu, and Benjamin Felzer. Detection of Extreme Temperature using Functional Data Analytic Approach: A Case Study in California, United States, 1950-2014. *In Review*.

Jien Zhang, Benjamin Felzer, and Tara Troy. Extreme Precipitation Drives Groundwater Recharge: the Northern High Plains Aquifer, Central United States, 1950-2010. *Hydrological Processes*. 30.14(2016): 2533-2545.

Jien Zhang, Tianming Wang, and Jianping Ge. Assessing Vegetation Cover Dynamics Induced by Policy-Driven Ecological Restoration and Implication to Soil Erosion in Southern China. *PlosOne*. 10.6 (2015): e0131352.

Mingkai Jiang, Benjamin, Felzer, Bruce Hargreaves, and **Jien Zhang**. Improved Understanding of Climate Change Impact to Pennsylvania Dairy Pasture. *Crop Science*. 55.2 (2015): 934-949.

Lixin Wang, Huamin Liu, Jie Yang, Cunzhu Liang, Wei Wang, and **Jien Zhang**. 2010. Climatic Change of Mu Us Sandy Land and Its Influence on Vegetation Coverage. *Journal of Natural Resources* (Chinese Core Journal). 25(12): 2030-2039.

Jien Zhang, Cunzhu Liang, et al. 2009. Seed Germination Characteristics and Ecological Adaption of Annual Plants in Alashan Region. *Arid Land Resources and Environment* (Chinese Core Journal). 23(2):175-179.

PROFESSIONAL SERVICES

Journal Referee

- Journal of Hydrology

CONFERENCE PRESENTATIONS/ABSTRACTS

- Jien Zhang** and Benjamin Felzer. Not every extreme climate event is equal: Ecosystem response to extreme rainfall in the Southern Great Plains, United States. The 2016 Ecological Society of America (ESA) Annual Meeting, Fort Lauderdale, Florida, USA (Poster)
- Jien Zhang** and Benjamin Felzer. The Effects of Extreme Precipitation on Ecosystem Rain-Use-Efficiency in a Tall Grassland, Southern Great Plains. The 2015 American Geophysical Union (AGU), Fall Meeting, San Francisco, CA, USA (Poster)
- Jien Zhang** and Ping-Shi Wu. *Detection of Climate Extremes with Functional Data Analytic Approach*. 2015, the 100th Ecological Society of America (ESA), Baltimore, MD, USA (Oral)
- Jien Zhang** and Benjamin Felzer. Effects of Climate Extremes on Groundwater Recharge in the High Plains Aquifer, Central USA, 1950-1999. The 2014 American Geophysical Union (AGU), Fall Meeting, San Francisco, CA, USA (Poster)
- Mingkai Jiang, Benjamin Felzer, Bruce Hargreaves, and **Jien Zhang**. Biogeochemical parameterizations of Pennsylvania dairy pasture – implications for ecosystem modeling under climate change. 2014, the 99th Ecological Society of America (ESA), Sacramento, CA, USA (Poster)
- Jien Zhang**, Tianming Wang, Pu Mou, and Jianping Ge. *Vegetation Change in the South of China after the Grain-for-Green*. 2013, the 98th Ecological Society of America (ESA), Minneapolis, MN, USA (Poster)
- Jien Zhang**, Tianming Wang, Pu Mou, and Jianping Ge. *Human-induced Vegetation Dynamics in the South of China after the Grain-for-Green*. 2011, the 8th International Association for Landscape Ecology (IALE) World Congress, Beijing, China (Oral)

HONORS AND AWARDS

- The Best Oral Presentation Award, Annual Graduate Symposium, Department of Earth and Environmental Sciences, Lehigh University, March 2016
- The Excellent Student Presenter Award, The 6th International Symposium on Modern Ecology Series and the 2nd International Young Ecologist Forum, Nanjing, China, August, 2010
- Graduate Scholarship for Excellent Academic Performance, School of Life Sciences, Beijing Normal University, 2009-2012
- The Best Graduation Thesis Award, Department of Ecology and Environmental Sciences, Inner Mongolia University, June 2009
- Undergraduate Scholarship for Excellent Performance, Department of Ecology and Environmental Sciences, Inner Mongolia University, 2006-2009
- Triple-A Outstanding Student, Department of Ecology and Environmental Sciences, Inner Mongolia University, 2006 and 2007

INVITED PRESENTATIONS

Jien Zhang et al. Climate Extremes: Observation and Impacts. School of Grassland, Resources and Environment, Inner Mongolia Agricultural University, Huhhot, Inner Mongolia. June, 2016.

Jien Zhang and Benjamin Felzer. Effects of Climate Extremes on Groundwater Recharge in the High Plains Aquifer, Central USA, 1950-1999. Joint Program on Global Change, Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts. November, 2014.

WORKSHOPS

Exploratory Data Analysis using R, January 2016. Coursera Online Course. Johns Hopkins University

Groundwater Recharge Estimation, May, 2014. National Groundwater Association, Denver, CO, USA

Scientific Programming with IDL, October, 2014. Herndon, VA, USA

19th CESM annual workshop (through teleconference), 2014, NCAR, Breckenridge, USA

INTERNSHIPS AND VOLUNTEER EXPERIENCES

07/2014-03/2015, Volunteer, Master Watershed Steward Program, Pennsylvania State University Extensions, Allentown, PA, USA

12/2014, Student Volunteer, 2014 AGU Fall Meeting, San Francisco, CA, USA

11/2010-02/2011, Internship Student, Foreign Economic Cooperation Office, Ministry of Environmental Protection of P.R. China, Beijing, China

12/2011-01/2012, Internship Student, Beijing Arker International Education Co. Ltd., Beijing, China

PROFESSIONAL ORGANIZATIONS

The Ecological Society of America (ESA), Member (2013-Present)

The American Geophysical Union (AGU), Member (2014-Present)

The Sigma Xi, The Scientific Research Society, Elected Full Member (2013-2014)

PROPOSAL/FUNDING EXPERIENCE

2015–October, Earth and Environmental Sciences Department, Lehigh University, travel grant to attend 2015 AGU (American Geological Union) annual meeting, \$650

2015–June, College of Arts and Sciences, Lehigh University, travel grant to attend 100th ESA (Ecological Society of America) Annual meeting, \$300

2015–June, Graduate Student Life Office, Lehigh University, travel grant to attend 2015 ESA annual meeting, \$150

2014–October, Earth and Environmental Sciences Department, Lehigh University, travel grant to attend 2014 AGU (American Geological Union) annual meeting, \$600

- 2014–November, College of Arts and Sciences, Lehigh University, travel grant to attend 2014 AGU Fall meeting, \$300
- 2014–November, Graduate Student Life Office, Lehigh University, travel grant to attend 2014 AGU Fall meeting, \$150
- 2014–May, Earth and Environmental Sciences Department, Lehigh University, travel grant to attend 2014 NGWA (National Groundwater Association) Annual meeting, \$600
- 2013–May, Earth and Environmental Sciences Department, Lehigh University, travel grant to attend 98th ESA (Ecological Society of America) Annual meeting, \$500
- 2013–March, College of Arts and Sciences, Lehigh University, travel grant to attend 98th ESA (Ecological Society of America) Annual meeting, \$300
- 2013–February, Graduate Student Life Office, Lehigh University, travel grant to attend 98th ESA (Ecological Society of America) Annual meeting, \$150
- 2007–February, Innovation Foundation to Undergraduate Student, Inner Mongolia University, ¥ 3500

UNIVERSITY SERVICES

- 2012–2014 Organizer of Earth and Environmental Sciences departmental seminar series, Lehigh University
- 2015–2016 Coordinator of Earth and Environmental Sciences departmental traveling fund, Lehigh University

COMPUTER AND PROFESSIONAL SKILLS

ENVI/IDL, ArcGIS, R, ERDAS, C++, Groundwater Vistas, SPSS, SAS, Linux

LI-COR 6400XT Portable Photosynthesis System

LI-COR 8100A Automated Soil Flux System

LI-COR 2200 Plant Canopy Analyzer

Soil and Peatland Core Sampler

Picarro Carbon Isotope Analysis Systems

Dynamite Weather Station Data Managing

HOBBIES AND PERSONAL SKILLS

Photographer of landscape, wedding, street, and portrait (<https://www.flickr.com/photos/90986132@N08/>)

Professional skills on Photoshop CS and Adobe Lightroom

Player of ski, electric guitar, and other sports