Minjin Lee

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Education

Princeton University, Princeton, NJ
Civil and Environmental Engineering — PhD 2015
MA 2013
MSE 2012

Ewha Womans University, Seoul, Republic of Korea
Environmental Science and Engineering — BSE 2010
Management for Science and Technology — BA 2010

Honors and Awards

Travel Award for AGU Chapman Conference on Extreme Climate Events on Aquatic Biogeochemical Cycles and Fluxes, San Juan, PR, US Department of Agriculture: 2017
University Administrative Fellowship, Princeton Survey Research Center: 2014
Fulbright Scholarship: 2010-2012
Mary and Randall Hack '69 Graduate Award, Princeton Environmental Institute: 2012
Honor Scholarship, Ewha Womans University: 2009

Research Grants

Lee M & Jaffe P R. Impact Assessment of Climate Change on Water Quality in a Regional Scale Using a Land Surface Model. Korean National Environmental Institute, Incheon, Republic of Korea, USD $228,000: 2013-2015

Academic Experience

Associate Research Scholar, Princeton University: 2018-present
Postdoctoral Research Associate, Princeton University: 2015-2018
Research Assistant, Princeton University: 2013-2015
Teaching Assistant, Fundamentals of Environmental Studies, Princeton University: 2011
Summer Research Assistant, NOAA Geophysical Fluid Dynamics Laboratory, Princeton, NJ: 2011
Undergraduate Research Assistant, Ewha Womans University: 2009

Publication

Liu X, Stock C A, Dunne J, **Lee M**, Shevliakova E, Malyshev S, & Milly P C D (2021). Global coastal ecosystem responses to a half-century increase in river nitrogen loads. resubmitted.
Lee M, Stock C A, Shevliakova E, Malyshev, S, & Milly P C D (2021). Globally prevalent land nitrogen memory amplifies water pollution following drought years. ***ERL***, 16, 014049.
Lee M, Shevliakova E, Stock C, Malyshev, S., & Milly P C D (2019). Prominence of the tropics

in the recent rise of global nitrogen pollution. ***Nat Commun***, 10, 1437.

Lee M, Jung C, Shevliakova E, Malyshev S, Milly P C D, Han H, Kim S, Kim K, & Jaffé P R (2018). Control of nitrogen exports from river basins to the coastal ocean: Evaluation of basin management strategies for reducing coastal hypoxia. ***J Geophys Res Biogeosci***, 123, 3111-3123.

Lee M, Shevliakova E, Malyshev S, Milly P C D, & Jaffé P R (2016). Climate variability and extremes, interacting with nitrogen storage, amplify eutrophication risk. ***Geophys Res Lett***, 43, doi:10.1002/2016GL069254.

Lee M (2015). Interactions between nitrogen and hydrological cycles: implications for river nitrogen responses to climate and land use within the model LM3-TAN. Ph.D. thesis, Department of Civil and Environmental Engineering, Princeton University.

Lee M, Malyshev S, Shevliakova E, Milly P C D, & Jaffé P R (2014). Capturing interactions between nitrogen and hydrological cycles under historical climate and land use: Susquehanna Watershed analysis with the GFDL Land Model LM3-TAN. ***Biogeosciences***, 11, 5809-5826.

Conference Presentations

2019 CERF Biennial Conference, Mobile, AL: **Lee M**, Shevliakova E, Stock C A, Malyshev S, Milly P C D. Long-term Dynamic Global River Nitrogen Loads to the Coastal Ocean.

2019 AGU Fall Meeting, San Francisco, CA: **Lee M**, Shevliakova E, Stock C A, Malyshev S, Milly P C D. Escalation of Future River Nitrogen Pollution under Land Use and Emission Scenarios based on the Shared Socioeconomic Pathways.

2017 AGU Chapman Conference, San Juan, PR: **Lee M**, Shevliakova E, Malyshev S, Milly P C D, Jaffe P R, Stock C A. Increased Climate Variability and Extremes Amplify Risks of Coastal Hypoxia Worldwide: Implications of Enhanced Basin Memory Effects on River Dissolved Nitrogen in the GFDL Earth System Modeling Framework.

2016 Ocean Sciences Meeting, New Orleans, LA: **Lee M**, Shevliakova E, Malyshev S, Milly P C D, Jaffe P R, Stock C A. Climate Variability and Extremes, Interacting Nitrogen Storage, Amplify Risks of Coastal Eutrophication

2014 Energy and Environment Corporate Affiliates, Princeton, NJ: **Lee M**, Shevliakova E, Malyshev S, Jaffe P R. Increasing Climatic Variability and Extremes Amplify Risks of Severe Eutrophication Events.

2013 American Geophysical Union, San Francisco, CA: **Lee M**, Malyshev S, Shevliakova E, Jaffe P R. Perturbations to the River Nitrogen Cycling from the Historical Land Use and Climate Changes: the Susquehanna River Case Study with GFDL Land Model LM3-N.

2012 Energy and Environment Corporate Affiliates, Princeton, NJ: **Lee M**, Malyshev S, Shevliakova E, Jaffe P R. Perturbations to the River Nitrogen Cycling from the Historical Land Use and Climate Change.

2012 CCMP Chesapeake Modeling Symposium, Annapolis, MD: **Lee M**, Malyshev S, Shevliakova E, Jaffe P R. Adapting a Dynamic Land Model, LM3V, to Simulate Nitrogen Exports and Transformations in the Susquehanna River.

2011 American Geophysical Union, San Francisco, CA: **Lee M**, Malyshev S, Shevliakova E, Jaffe P R. Simulation and Evaluation of the Nitrogen Cycle in the Dynamic Land Model LM3V: The Nitrogen budget of the Susquehanna River Watershed.

Other Presentations

2019 **GFDL External Review**
Land-coastal Ocean Interactions: Insights from the GFDL Land Model

2018 **Utrecht University, Utrecht, Netherlands**
Terrestrial and Freshwater Nitrogen Dynamics: Insights from the NOAA/GFDL Earth System Modeling Framework

2018 **NOAA Great Lakes Environmental Research Laboratory, Ann Arbor, MI**
Terrestrial and Freshwater Nitrogen Dynamics: Insights from the NOAA/GFDL Earth System Modeling Framework