

William West  
*Postdoctoral Research Associate*

(574) 239-5364  
westwill@msu.edu

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*Education & Research*

**Michigan State University –  
Kellogg Biological Station** June 2015- Current  
Postdoctoral Research Associate  
Advisor: Sarah Evans

**University of Notre Dame** 2011- May 2015  
Ph.D., Biological Sciences  
Advisor: Stuart E. Jones

**University of Maine** 2005- 2009  
B.S. Zoology, Honors College  
Suma Cum Laude

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*Publications*

- Vizza C, **West WE**, Jones SE, Hart JA, Lamberti GA. (In Review) Regulators of coastal wetland methane production and responses to simulated global change, *Biogeosciences Discuss.*, doi:10.5194/bg-2016-314
- Crawford JT, Loken LC, **West WE**, Crary B, Spawn SA, Dornblaser MM, Gubbins N, Stanley EH. (In Review) The geomorphic template as a driver of spatial variability in lotic methane concentrations.
- Flagel D, Belovsky GE, **West WE**. (2016) Digging Further into Wolf-Deer Interactions: Food Web Effects on Soil Nitrogen Availability in a Great Lakes Forest. *American Midland Naturalist*. 176(1):147-151.
- **West WE**, Creamer KP, Jones SE. (2015) Productivity and depth regulate lake contributions to atmospheric methane.
- **West WE**, McCarthy SM, Jones SE. (2015) Phytoplankton lipid content influences freshwater lake methanogenesis. *Freshwater Biology*. 60: 2261-2269.
- **West WE**, Coloso JJ, Jones SE. (2012) Effects of algal and terrestrial carbon on methane production rates and methanogen community structure in a temperate lake sediment. *Freshwater Biology* 57:949-955.

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*Invited Oral Presentations*

- **2016 First World Congress of Undergraduate Research** Doha, Qatar, November 15<sup>th</sup>.  
West WE, Evans S, Jones SE. *Connecting Microbial Scale Processes to Ecosystem*

*Function: A Story of Eutrophication Driven Increase of Freshwater Lake Methane Production and Emissions.* NSF funded trip with three undergraduate students.

- **2016 Association for the Sciences of Limnology and Oceanography**, Santa Fe, New Mexico, June 9<sup>th</sup>. West WE, Evans S, Jones SE. *Connecting Microbial Scale Processes to Ecosystem Function: A Story of Eutrophication Driven Increase of Freshwater Lake Methane Emissions.*
- **2015 Kent State University** Kent Ohio, February 23<sup>rd</sup>. West WE, Jones SE. *The influence of freshwater lake trophic status on methanogen community structure and function.*

#### *Oral Presentations*

- **2013 Midwestern Ecology and Evolution Conference (MEEC)** University of Notre Dame, March 23<sup>rd</sup>. *Drivers of methane production from lakes in forested and agriculturally dominated landscapes.*
- **2013 Association for the Society of Limnology and Oceanography (ALSO)** New Orleans, Louisiana. February 20<sup>th</sup>. *Landscape-informed strategies for estimating contributions to the global methane cycle.*
- **2012 Ecological Society of America Conference (ESA)** Portland, Oregon. August 9<sup>th</sup>. *Effects of algal and terrestrial carbon on methane production rates and community structure in temperate lake sediment.*
- **2012 Midwestern Ecology and Evolution Conference (MEEC)** University of Cincinnati. March 24<sup>th</sup>. *Effects of algal and terrestrial carbon on methane production rates and methanogen community structure in temperate lake sediment.*

#### *Poster Presentations*

- **2014 Global Lakes Ecological Observatory Network (GLEON) 16 Conference and Workshop** Orford, Canada, October 27<sup>th</sup>. *Productivity and morphometry regulate lake contributions to atmospheric methane*
- **2014 Joint Aquatic Sciences Meeting (JASM)** Portland, Oregon, May 23<sup>rd</sup>. *Landscape drivers of lake methane emissions*

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#### *Grants/Awards*

- University of Notre Dame Center for Environmental Science and Technology Fellowship (2014) (Stipend support for a semester)
- University of Notre Dame Center for Aquatic Conservation Fellowship (2013) (Stipend support for a semester)
- University of Notre Environmental Change Initiative Grant (2012) (\$5000 USD, to support DNA sequencing of freshwater lake sediment microbial communities)
- University of Notre Dame Environmental Research Center (UNDERC) Fellowship (2011-2014) (\$9000 per annum to support dissertation research, and summer stipend)

### *Undergraduate Research Projects Mentored*

- (Kathryn Bloodworth, Eastern University)
- *The effects of nitrogen limitation and subsequent algal carbon quality on methanogenesis in freshwater lake sediment* (Shayna McCarthy, Kyle Murphy, Patricia Amorado, University of Notre Dame)
- *Temporal and spatial patterns in methane production and emissions across freshwater lakes of varying morphology* (Elyssa Schwendy and Michael Kipp).  
**2013 Geological Society of America, 2013**, Denver, Colorado October 28<sup>th</sup>, Positive feedbacks in global biogeochemistry: Methane from freshwater lakes, Oral Presentation.
- *Methane storage in freshwater lakes* (Celeny Rios, University of Puerto Rico)
- *Productivity and depth regulate lake contributions to atmospheric methane* (Kevin Creamer, University of Notre Dame, Freshwater Biology 2015)
- *The effects of nutrient limitation on lake productivity and subsequent methanogenesis* (Anastassia Ryan, University of New Mexico)
- *The role of methane supply in controlling methane oxidation rates* (Scott Baker, Fort Berthold Community College). Awarded 1<sup>st</sup> place for original Undergraduate Oral Research at the 2012 American Indian Science & Engineering Society (AISES) Conference.
- *Effects of nitrate and acetate, on nitrification in Morris Lake, Wisconsin* (Naomi Iglesias, Escuela Central de Artes Visuales, Puerto Rico)
- *Methanogenesis rates of acetate and nitrate amended freshwater lake sediment* (Patrick Revord, University of Notre Dame)

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### *Teaching Assistantship Experience*

- BIOS21201 - General Biology A Laboratory Spring 2015
- BIOS404211 - Biostatistics Spring 2014
- BIOS31420 - Aquatic Ecology Laboratory Fall 2011, 2013
- BIOS31341 - Cell Biology Laboratory Spring 2012
- BIOS40428 - Practical Public Health Microbiology Spring 2011
- BIOS21201 - General Biology A Laboratory Fall 2010

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### *Journals Reviewed For*

- Freshwater Biology
- Limnology & Oceanography (ASLO journal)
- Water Resources Research (WRR, an AGU journal)

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### *Professional Societies*

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- Association of Limnology and Oceanography (ASLO)
  - Ecological Society of America (ESA)
  - Global Ecological Observatory Network (GLEON)
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### *Analytical Skills*

- R Statistical Programming Language, Python
  - Qiime, Mothur, Xander, Prokka, MG-Rast, and others
  - Illumina Sequencing, (16S, ITS, functional genes, metagenomics)
  - Quantitative Polymerase Chain Reaction (qPCR)
  - Stable Isotope Probing (SIP)
  - Delta V IRMS Pre-Con: CH<sub>4</sub> and DIC stable isotopes
  - Gas Chromatography: GC setup, GC repair, and analysis of CH<sub>4</sub>, CO<sub>2</sub>, N<sub>2</sub>O
  - ArcGIS watershed tool modeling
  - 3D printing: RepRap development, repair, and CAD modeling
  - Ion Liquid Chromatography: Volatile Fatty Acids, nutrients, etc.
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### *Personal References*

- Stuart Jones, Assistant Professor, Ph.D. Advisor, University of Notre Dame
  - Phone Number: 574-631-5703
  - Email: [sjones20@nd.edu](mailto:sjones20@nd.edu)
- Sarah Evans, Assistant Professor, Postdoctoral Mentor, Kellogg Biological Station
  - Phone Number: 574-631-7775
  - Email: [evanssa6@msu.edu](mailto:evanssa6@msu.edu)
- Gary Belovsky, Professor, Committee Member, Director of University of Notre Dame Environmental Research Center
  - Phone Number: 574-631-0172
  - Email: [belovsky.1@nd.edu](mailto:belovsky.1@nd.edu)