

JOANNA R. BLASZCZAK

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ACADEMIC APPOINTMENTS

- Department of Natural Resources and Environmental Science** 2019 - Present
University Nevada, Reno
Assistant Professor
- Flathead Lake Biological Station, University of Montana** 2018 - 2019
Postdoctoral Research Associate, Advisor: Robert O. Hall, Jr.

EDUCATION

- Duke University** 2013 - 2018
Ph.D., University Program in Ecology, Certificate in College Teaching
- Cornell University** 2008 - 2011
B.S., Science of Natural & Environmental Systems, Honors Distinction in Research

PUBLICATIONS: (†) REU student co-mentored by Blaszczyk

9. **Blaszczyk, J.R.**, Delesantro, J.M., Zhong, Y., Urban, D.L., & E.S. Bernhardt. 2019. Watershed urban development controls on urban streamwater chemistry variability. *Biogeochemistry*, 144(1): 61-84. <https://doi.org/10.1007/s10533-019-00572-7>.
8. Rocca, J.J., Simonin, M.S., **Blaszczyk, J.R.**, Ernakovich, J.G., Gibbons, S.M., Midani, F.S., & A.D. Washburne. 2019. Microbiome Stress Project: towards a global meta-analysis of environmental stressors and their effects on microbial communities. *Frontiers in Microbiology*, 9: 3272. <https://doi.org/10.3389/fmicb.2018.03272>.
7. **Blaszczyk, J.R.**, Delesantro, J.M., Urban, D.L., Doyle, M.W., & E.S. Bernhardt. 2018. Scoured or suffocated: Urban stream ecosystems oscillate between hydrologic and dissolved oxygen extremes. *Limnology & Oceanography*. 64(3): 877-894. <https://doi.org/10.1002/lno.11081>.
6. **Blaszczyk, J.R.**, Steele, M.K., Badgley, B.D., Heffernan, J.B., Hobbie, S.E., Morse, J.L., Rivers, E.N., Hall, S.J., Neill, C., Pataki, D., Groffman, P.M., & E.S. Bernhardt. 2018. Sediment Chemistry of Urban Stormwater Ponds and Controls on Denitrification. *Ecosphere*, 9(6): e02318. <https://doi.org/10.1002/ecs2.2318>.
5. Baruch, E.M.[†], Voss, K.A., **Blaszczyk, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. 2018. Not all pavements lead to streams: Variation in impervious surface connectivity affects urban stream ecosystems. *Freshwater Science*, 37(3): 673-684. <https://doi.org/10.1086/699014>.
4. Fork, M.L., **Blaszczyk, J.R.**, Delesantro, J.M., & J.B. Heffernan. 2018. Engineered headwaters can act as sources of dissolved organic matter and nitrogen to urban stream networks. *Limnology & Oceanography Letters*, 3(3): 215-224. <https://doi.org/10.1002/lol2.10066>.
3. Bernhardt, E.S., **Blaszczyk, J.R.**, Ficken, C.D., Fork, M.L., Kaiser, K., & E.C. Seybold. 2017. Control Points in Ecosystems: Moving beyond the hot spot hot moment concept. *Ecosystems*, 20(4): 665-682. <https://doi.org/10.1007/s10021-016-0103-y> *All authors contributed equally
2. Baalousha, M., Yang, Y., Vance, M.E., Coleman, B., McNeal, S., Xu, J., **Blaszczyk, J.R.**, Steele, M., Bernhardt, E.S., & M.F. Hochella Jr. 2016. Outdoor urban nanomaterials: the emergence of a new,

integrated, and critical field of study. *Science of the Total Environment*, 557: 740-753.
<https://doi.org/10.1016/j.scitotenv.2016.03.132>.

- de Wit, H.A., Granhus, A., Lindholm, M., Kainz, M.J., Lin, Y., Braaten, H.F.V., & **J.R. Blaszcak**. 2014. Forest harvest effects on mercury in streams and biota in Norwegian boreal catchments. *Forest Ecology and Management*, 324: 52-63. <https://doi.org/10.1016/j.foreco.2014.03.044>.

RESEARCH GRANTS & FELLOWSHIPS

National Science Foundation Doctoral Dissertation Improvement Grant (\$20,660) , <i>Pulsed and Pressed: The Interactive Effects of Disturbance Intensity and Complex Chemical Exposure on the Productivity of Urban Stream Ecosystems</i>	2016-2018
National Science Foundation Graduate Research Fellowship (\$132,000)	2013-2018
Cary Institute for Ecosystem Studies, Bentley-Holden Scholarship (\$2,300)	2016
Millbrook, New York Garden Club Association Scholarship (\$1,500)	2015
Fulbright Scholar , Norwegian Institute for Water Research, Oslo, Norway	2011-2012

AWARDS & PROGRAMS

Harvard Graduate School of Design, Penny White Project Fund, Advisor, (\$1,469) , <i>Newborn Lakes in Glacier National Park: Investigating the Succession of Lakes Created by the Acceleration of Glacial Melting</i>	2019
Duke University Preparing Future Faculty Fellow	2017-2018
Annual Conference Travel Awards, Duke University Graduate School	2014-2017
NASA-MSU Professional Enhancement Award (\$755)	2016
SFS Best Student Oral Presentation in Applied Research (\$400) , Joint Aquatic Sciences Meeting (JASM), <i>Portland, Oregon</i>	2014
NSF Research Experience for Undergraduates (REU) , Harvard Forest (\$4,000)	2010
New York Soil & Water Conservation Society Award (\$1,000)	2010
NSF Research Experience for Undergraduates (REU) , University of Idaho (\$4,000)	2009

TEACHING EXPERIENCE & TRAINING

Instructor of Record	
Selected Topics in Biology: Ecology of Urban Environments (BIO 190), Duke University	Summer 2017
Teaching Assistant	
Microbiology, Duke University	Spring 2016
Landscape Ecology, Duke University	Fall 2015
Civil & Environmental Engineering Field Course, Duke University	Spring 2014 & 2015
International Conservation, Cornell University	Fall 2010
Outdoor Education Instructor, Cornell University	Spring 2009-2011
Training	
College Teaching and Course Design (GS 755), Duke University	Spring 2017
Fundamentals of College Teaching (GS 750), Duke University	Fall 2015
Guest Lectures	
“Water Quality: Dissolved Oxygen & Nutrients”, Course: Water Quality Monitoring, Salish Kootenai College	Spring 2019
“Hydrology in an Urbanizing World”, Course: Into the Woods, Duke University	Spring 2014 & 2015

SELECTED CONFERENCE PRESENTATIONS

- Blaszczak, J.R.**, Yackulic, C.B., & R.O. Hall, Jr. (Poster). Regulation and disturbance of productivity in metabolically dynamic stream ecosystems. Gordon Research Seminar & Conference on Catchment Science, *Andover, NH*, June 22-28, 2019.
- Blaszczak, J.R.** & R.O. Hall, Jr. (Oral). Estimating stream metabolism using diel variation in stable carbon dioxide isotopic signatures. Society for Freshwater Science, *Salt Lake City, UT*, May 19-24, 2019.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., Doyle, M.W., & E.S. Bernhardt. (Oral). Too much or too little: the bimodal dynamics of urban streams. Association for the Sciences of Limnology & Oceanography, *Victoria, B.C., Canada*, June 10-15, 2018.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Oral). The freshwater salinization syndrome in southeastern urban streams. Society for Freshwater Science, *Detroit, MI*, May 20-24, 2018.
- Blaszczak, J.R.**, Rocca, J., Rosi, E.J., & E.S. Bernhardt. (Oral). Do hydrologic disturbances exacerbate or mitigate the effects of contaminants in urban streams? Society for Freshwater Science, *Raleigh, NC*, June 4-8, 2017.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Poster). Chemically Flashy Streams in Urban Catchments. 4th Symposium on Urbanization and Stream Ecology, *Haw River State Park, NC*, May 31-June 3, 2017.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Oral). Benthic Habitat Susceptibility to Perturbations Influences Urban Stream Metabolism. Society for Freshwater Science, *Sacramento, CA*, May 21-26, 2016.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Oral). Disentangling the Landscape Drivers Behind Urban Stream Degradation. US-International Association for Landscape Ecology, *Asheville, NC*, April 2-6, 2016.
- Blaszczak, J.R.**, Steele, M., Badgley, B., Hobbie, S., Heffernan, J., Bernhardt, E.S., & Groffman, P. (Poster). Nitrous Oxide Yields from Urban Stormwater Ponds Across US Cities. Ecological Society of America, *Baltimore, MD*, August 9-14, 2015.
- Blaszczak, J.R.**, Steele, M., Badgley, B., Hobbie, S., Heffernan, J., Bernhardt, E.S., & Groffman, P. (Oral). Nitrous Oxide Yields from Urban Stormwater Ponds Across US Cities. Society for Freshwater Science, *Milwaukee, WI*, May 17-22, 2015.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Oral) Is all impervious cover created equal? A study of variation in stream chemistry across 10% impervious surface watersheds. Joint Aquatic Sciences Meeting, *Portland, OR*, May 18-23, 2014. ***Best Student Oral Presentation in Applied Research**
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Poster) Moving beyond impervious surface cover in predicting the impacts of development on urban streams. 3rd Symposium on Urbanization and Stream Ecology, *Portland, OR*, May 15-17, 2014.
- Blaszczak, J.R.**, Delesantro, J., Urban, D.L., & E.S. Bernhardt. (Poster) Is all impervious cover created equal? A study of variation in stream chemistry across 10% impervious surface watersheds. Water Resources Research Institute Annual Conference, *Raleigh, NC*, March, 2014.
- Blaszczak, J.R.**, de Wit, H.A., & H.F.V. Braaten. (Poster) Boreal wetland porewater and stream mercury dynamics in two Norwegian catchments. BIOGEMON 7th Symposium on Ecosystem Behavior, *Maine*, July 15-20, 2012.

PRESENTATIONS - *invited*

- Blaszczak, J.R.** Aquatic biogeochemistry under stress. Systems Ecology Seminar Series, University of Montana. March 2019.

- Blaszczak, J.R.** Freshwater ecosystem toxicology in the Anthropocene. University of Nevada, Reno. February 2019.
- Blaszczak, J.R.** Freshwater ecosystem function in the Anthropocene. University of Illinois, Urbana-Champaign. January 2019.
- Blaszczak, J.R.,** Delesantro, J., Urban, D.L., & E.S. Bernhardt. Chemically Flashy Streams in Urban Catchments. Gordon Research Seminar and Conference, *Lewiston, ME*. June 2017.
- Blaszczak, J.R.** Linking Urban Landscapes to Aquatic Ecosystem Processes. Research in Progress Seminar Series, *Eastern Carolina University, NC*. March 2016.

MENTORING EXPERIENCE

Victoria Green, Duke University undergraduate, now at AmeriCorps at Ossipee Watershed Association
 Kelly Shen, Duke University undergraduate, Honor's Thesis completed
 Zane Anthony, REU student at Duke University
 Ethan Baruch, Duke University undergraduate and REU student, now Ph.D. student at Arizona State University
 Brynn O'Donnell, Undergraduate research assistant, now M.S. student at Virginia Tech
 Lillian McGill, Research assistant, now M.S. student at Washington University
 Erin Vanderjuegd, Research assistant, now research assistant at the Plum Island LTER

PROFESSIONAL MEMBERSHIPS, SERVICE & TRAINING

Reviewer:

Anthropocene, Ecosystems, Environmental Microbiology, Freshwater Science, Global Change Biology, Royal Society Open Science, Scientific Reports, Water Resources Research

Conference Sessions Convened:

"Heterotrophic regimes in rivers: technical and conceptual advances". 2019. Society for Freshwater Science Special Session. Co-convenor: Lauren Koenig
 "Stressing the "Eco" in Freshwater Ecotoxicology". 2017. Society for Freshwater Science Special Session. Co-convenors: Marie Simonin and Jessica Brandt
 "Cities and streams: What are the biogeochemical symptoms of urban stream syndrome?". 2016. Society for Freshwater Science Special Session. Co-convenors: Alex Reisinger, Sylvia S. Lee, Peter S. Levi, and Emma J. Rosi

Professional Memberships:

Society for Freshwater Science
 Association for the Sciences of Limnology & Oceanography
 Ecological Society of America
 AAAS

Training:

Implicit Bias Workshop, led by Dr. Devine & Dr. Cox from the University of Wisconsin, Madison	April 2018
Rising TIDE (Training for Inclusion & Diversity in the Environment) Workshops	2015 & 2016
Duke International House Global Engagement Program	Fall 2014

Outreach & Society Service:

Consortium of Universities for the Advancement of Hydrologic Science, Inc. (CUAHSI) 2019 Fall Cyber-seminar Series: <i>Beyond Grad School: A Guide to Landing Your Dream Job</i> , Invited Panelist	2019
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Gordon Research Seminar for Catchment Science Discussion Leader	2019
Salish-Kootenai College Strategies for Ecology Education, Diversity and Sustainability (SEEDs) Coffee Hour: Women in Science	2019
Skype-A-Scientist, Ms. Makenna Moreland's 5 th grade class	2018
Letters to a Pre-Scientist	2017 & 2018
NC School of Science & Math Aquatic Ecology Course	2014-2018
Society for Freshwater Science, Board of Directors Student Representative	2016-2017
4 th Symposium on Urbanization and Stream Ecology Planning Committee	2016-2017
Nicholas Student Administrative Council, Co-treasurer	2014-2017
Duke Ecology Oosting Lecture Committee	2014-2017
Hillside High School Science Fair Judge	2016 & 2017
Society for Freshwater Science, Student Resource Committee Chair	2015-2016
Duke Ecology Seminar Co-Coordinator	2014-2016
Hope Valley Elementary Science/Career Day, NC	April 2016
Invite-A-Scientist Day, Chatham Middle School, NC	March 2016
Society for Freshwater Science Instars Application Reviewer	Spring 2016
North Carolina International Science Challenge Judge	2014 - 2016
North Carolina Science Teachers Association (NCSTA) Professional Development Institute Workshop Presentation: <i>All Urban Streams are Not Created Equal</i>	November 2015
Society for Freshwater Science (SFS) Live Auction Sub-Committee Chair	Spring 2015
Hillside High School Science Fair Preparation Workshop	Fall 2014
FEMMES (Females in Math, Science, & Engineering) Capstone Day	February 2014

Last updated: September 2019