

Sarah B. Whorley
Daemen College
swhorley@daemen.edu

Natural Sciences Department, Duns Scotus 337B
4380 Main Street, Amherst, NY 14226
Office (716) 839-8564; Fax (716) 839-8242

EDUCATION

- Ph.D. 2016 Fordham University; Bronx, NY (Biological Sciences)
Dissertation: *Bioassessment of agricultural effects on streams using biochemical compounds in benthic algae*
- M.S. 2008 Eastern Michigan University; Ypsilanti, MI (Ecology & Organismal Biology)
Thesis: *Rapid measurements of periphytic responses to nutrients using PAM fluorimetry*
- B.S. 2004 University of California, Riverside; Riverside, CA
(Biology, Botany)

SCIENTIFIC EXPERTISE

Ecology of freshwater algae in rivers, lakes, and wetlands
Impacts of nutrient enrichment on freshwater algae
Water quality monitoring
GIS development and use
Biostatistical analysis

PROFESSIONAL POSITIONS

- 2016 – Pres. Assistant Professor, Natural Sciences Department, Daemen College
2015 – 2016 Adjunct Professor, Biology Department, Fordham University
2014 – 2015 Senior Teaching Fellow, Biology Department, Fordham University
2009 – 2014 Teaching Assistant, Biology Department, Fordham University
2008 – 2009 Lecturer, Life Sciences Department, Washtenaw Community Coll.
2008 – 2009 Lecturer, Biology Department, Eastern Mich. University
2006 – 2008 Teaching Assistant, Biology Department, Eastern Mich. University
2005 – 2009 Research Associate, Biology Department, Eastern Mich. University
2001 – 2004 Laboratory Assistant, Botany Department, UC Riverside

TEACHING EXPERIENCE

Assistant Professor

Biostatistics	Natural Sciences, Daemen College
Environmental Toxicology	Natural Sciences, Daemen College
Introductory Biology II	Natural Sciences, Daemen College

Adjunct/Lecturer

Life Science for Elementary Teachers	Biology, Eastern Michigan University
Methods for Teaching Secondary Biology	Biology, Eastern Michigan University
Concepts of Biology	Life Sciences, Washtenaw Community Coll.

Ecology, A Human Approach
Ecology Lab
People and the Living Environment

Biological Sciences, Fordham University
Biological Sciences, Fordham University
Natural Sciences, Fordham University

Teaching Assistant

Introductory Biology for Non-Majors
Life Science for Elementary Teachers
Foundations of Biology
Ecology, A Human Approach
Human Biology
Introductory Biology
Microbiology
Ecology

Biology, Eastern Michigan University
Biology, Eastern Michigan University
Biological Sciences, Fordham University
Biological Sciences, Fordham University
Biological Sciences, Fordham University
Biological Sciences, Fordham University
Biological Sciences, Fordham University
Biological Sciences, Fordham University
Biological Sciences, Fordham University

PUBLICATIONS

- Whorley, S.B.**, and J.D. Wehr. 2018. Multiyear patterns in benthic algal fatty-acid compounds under agricultural stress. *Freshwater Science* 37:534–550.
- Smucker, N.J., A. Kuhn, M.A. Charpentier, C.J. Cruz, C.M. Elonen, **S.B. Whorley**, B.H. Hill, and J.D. Wehr. 2016. Quantifying urban watershed stressor gradients and evaluating how different land cover datasets affect stream management. *Environmental Management* 57:683-695.
- Whorley, S.B.**, and J.D. Wehr. 2016. Connecting algal taxonomic information to essential fatty acid content in agricultural streams. *Phycologia* 55:531-542.
- Whorley, S.B.**, and J.D. Wehr. 2016. Flood events can reduce key fatty acid content of early-stage benthic algal assemblages in an urban stream. *Journal of Urban Ecology* 2:juw002.
- Whorley, S.B.**, and S.N. Francoeur. 2013. Active fluorimetry improves nutrient-diffusing substrata bioassay. *Freshwater Science* 32:108-115.
- Francoeur, S. N., S. T. Rier, and **S. B. Whorley**. 2013. Methods for sampling and analyzing wetland algae. Chapter 1 in *Wetland Techniques: Volume 2 Organisms* (J. T. Anderson and C. A. Davis, eds.) pp 1-58.

In Preparation –

- Whorley, S.B.**, N.J. Smucker, A. Kuhn, and J.D. Wehr. 2018. Urbanization Alters Fatty Acid Concentrations of Stream Food Webs Within the Narragansett Bay Watershed (*Submitted: Freshwater Biology*).
- Whorley, S.B.**, and J.D. Wehr. 2018. Stable Isotopes. (*Submitted: Environmental Monitoring and Assessment*).

FUNDING & AWARDS

- \$5,900 Jan 2018: Student Think Tank Grants, Daemen College
- \$2,900 Apr 2017: Faculty Research Award, Daemen College
- \$1,000 May 2014: Louis Calder Center Support Grant, Fordham University
- \$4,000 Apr 2013: Summer Research Fellowship, Fordham University
- \$1,000 May 2013: Graduate Endowment Grant, Society for Freshwater Science
- \$1,000 Dec 2012: Greller Graduate Student Research Award for Conservation of Local Flora and Ecosystems, Torrey Botanical Society
- \$1,000 May 2012: Louis Calder Center Support Grant, Fordham University

\$1,000	Oct 2011: Grant-in-Aid, Sigma Xi Society
\$30,500 (2yr)	Apr 2011: Clare Boothe Luce Fellowship, Fordham University
\$5,000 (2yr)	Apr 2011: Clare Boothe Luce Professional Development, Fordham University
\$375	Dec 2010: Research Support, Fordham University
\$250	May 2008: Poster Emphasizing New Methodology, Society for Freshwater Science
\$4,000	Apr 2006: Meta Hellwig Graduate Research Fellowship, Eastern Michigan University
\$500	Apr 2006: Meta Hellwig Graduate Special Study Award, Eastern Michigan University

RESEARCH PRESENTATIONS

International Association for Great Lakes Research

- 2018: Effects of Multiple Anthropogenic Stressors on Lake Erie and Associate Streams' Algal Assemblages

International Society of Limnology

- 2007 Poster: Rapid Measurements of Periphytic Responses to Nutrients Using PAM Fluorimetry

Northeast Algal Society

- 2016: Urbanization Alters Fatty Acid Concentrations of Stream Food Webs Within the Narragansett Bay Watershed
- 2015: Periphyton Community Composition and Carbon and Nitrogen Stable Isotope Patterns in Agriculturally Impacted Streams.
- 2014: Interannual Variation of Periphyton Taxonomic Composition and Fatty Acid Profiles Under Agricultural Stress
- 2013: Effects of Agricultural BMPs on Periphyton Communities and Nutritional Quality in Stream Ecosystems
- 2012: Effect of Agricultural Best Management Practices on Stream Periphyton Nutritional Quality and Community Composition
- 2011: Periphyton colonization patterns in a suburban stream affected by grazing pressure

Society for Freshwater Science

- 2018: Conducting Freshwater Research at a Primarily Undergraduate Institution: The Research Course Sequence
- 2017: Freshwater Science Outside the University Gates: Bringing Science Engagement Opportunities to the Public
- 2015: Stream Water and Periphyton Carbon and Nitrogen Stable Isotopes Indicate Insufficient Protection from Agricultural Influences
- 2014: Interannual Variation of Periphyton Fatty Acid Profiles Under Agricultural Stress
- 2013: A Novel Approach to Assess Best Management Practices for Stream Restoration
- 2012: How Agricultural Best Management Practices Affect Stream Periphyton Nutritional Quality

- 2011: Periphyton colonization patterns in a suburban stream affected by grazing pressure
- 2009: Incorporating rapid, fluorimetric measurements into nutrient enrichment assays
- 2008: Trends in Periphyton Community Composition as an Effect of Nutrients

INVITED PRESENTATIONS

- 2018 University of Buffalo, EEB Program: From Streams to Lakes: Human Influence on Algal Nutritional Quality
- 2017 Louis Calder Center Undergraduate Research Symposium:
- 2017 Newstead Public Library: Climate Change and “Arctic Drift”
- 2015 Finger Lakes Institute: Variations in Periphyton and Stream Water Stable Isotopes Under Agricultural Stress
- 2015 Fordham University, Biology Department Colloquium: Variations in Periphyton and Stream Water Variables Under Agricultural Stress
- 2015 Fordham University, GISc II class speaker: Building a Watershed Analysis
- 2014 Fordham University, Ecology class speaker: Aquatic Restoration Ecology
- 2013 Manhattan Country School Farm: Basic Stream Ecology
- 2012 Fordham University, Microbiology class speaker: Utilizing Algae in Microbiological Research

PROFESSIONAL SOCIETIES

International Association for Great Lakes Research
Northeast Algal Society
Phycological Society of America
Sigma Xi, Scientific Research Society
Society for Freshwater Science (*formerly NABS*)
Tri-Beta Biological Honors Society

PROFESSIONAL SERVICE

Daemen College

- 2018 – Pres.: Tri-Beta Theta Upsilon Co-Advisor
- 2018 – Pres.: Educational Policy Committee, Subcommittee
- 2017 – 2019: Faculty Research Committee
- 2017 – Pres.: Library Committee
- 2017 – Pres.: Natural Science Department Marketing Committee
- October 29th, 2016: Prospective Student Day Faculty Guide

Fordham University

- 2011 – 2013 Biology Graduate Student Association, Vice President
- 2012 Graduate Student Association, Fr. John McCloskey Graduate Summer Fellowship review committee

New York Women in STEM

- 2013 – 2014 Fordham University Representative, Networking Committee

Northeast Algal Society

- 2016 – 2019 Executive Board, Member at Large

Society of Freshwater Science

- 2018 – Pres. Constitution Committee
- 2012 – 2015 Graduate Resource Committee
 - 2012 – 2015 Merchandise Committee
 - 2014 – 2015 Treasurer