

Katelyn Smith

smitka20@wfu.edu

EDUCATION

Wake Forest University, Winston-Salem, NC
Doctor of Philosophy Student, Biology Department

2020 - Present

- Investigating phage manipulation of marine *Synechococcus* cell physiology

Maine Maritime Academy, Castine, ME
Bachelor of Science, Corning School of Ocean Studies

2016-2020

RESEARCH EXPERIENCE

Research Cruise, Duke University Marine Laboratory, Gulf Stream Current

February 2022

NSF Research Assistantship, Wake Forest University, Winston-Salem, NC

2020 - 2022

Senior Research Thesis, Maine Maritime Academy, Castine, ME

January 2019 - October 2019

REU Internship, Bigelow Laboratory for Ocean Sciences, East Boothbay, ME

May 2019 - August 2019

Keller BLOOM Program, Bigelow Laboratory for Ocean Sciences, East Boothbay, ME

May 2015

AWARDS AND GRANTS IN SUPPORT OF RESEARCH

Vecellio Grant for Graduate Research, Wake Forest University

October 2022

PUBLICATIONS

Gray P.C., Savelyev I, Cassar N, Levy M, Boss E, Lehahn Y, Bourdin G, **Thompson K.A.**, Windle A, Grønniger J, Floge S, Hunt D, Silsbe G, Johnson Z.I., Johnston D.W. 2023. *Evidence for kilometer-scale biophysical features at the Gulf Stream front*. bioRxiv. doi:10.1101/2023.09.25.559383.

PRESENTATIONS

Smith, K. A., Booker, A. E., Orcutt B. N. Identifying redox potentials used by microbes within crustal fluid of the Juan de Fuca Ridge flank. The Ocean Sciences Meeting; 2020 February 16-21; San Diego, California. Poster presentation.

Smith, K. A., Baer, S. E. Sediment oxygen demand in the Penobscot and Bagaduce estuaries. CAS Research Symposium at the University of New England; December 2020; Biddeford, Maine. Poster presentation.

Smith, K. A., Booker, A. E., Orcutt B. N. Identifying redox potentials used by microbes within crustal fluid of the Juan de Fuca Ridge flank. Bigelow REU Symposium; August 2019; East Boothbay, Maine. Oral presentation.

ATTENDED CONFERENCES & WORKSHOPS

Prochlorococcus and Synechococcus Festival; 2022; virtual.

10th Annual Aquatic Virus Workshop; 2021; virtual.

Ocean Carbon & Biogeochemistry Summer Workshop; 2021; virtual.
The Ocean Sciences Meeting; 2020; San Diego, California.

OUTREACH & COMMUNITY INVOLVEMENT

Guest Lecturer, Wake Forest University Introductory Biology Course, Winston-Salem, NC	<i>April 2023</i>
Guest Lecturer, Wake Forest University Microbiology Course, Winston-Salem, NC	<i>April 2022</i>
Science Instructor, Boothbay Sea and Science Center, East Boothbay, ME	<i>2018-2019</i>
Program Organizer, Bigelow Laboratory for Ocean Sciences Annual Open House, East Boothbay, ME	<i>2019</i>

MENTORING

Mentored (1) undergraduate student in Gulf Stream cruise analysis	<i>Fall 2022</i>
Mentored (1) undergraduate student in Gulf Stream cruise analysis	<i>Summer 2022</i>
Mentored (2) undergraduate students in viral photosynthesis study	<i>2020-2022</i>

PROFESSIONAL SERVICES

Organizer of Ecology and Evolutionary Biology (EEB) Seminar	<i>Fall 2023 - Present</i>
Graduate Student Representative for the Graduate Committee	<i>Fall 2021 - Spring 2022</i>
Floge Laboratory Twitter Manager (@FlogeLab)	<i>Summer 2021 – Spring 2023</i>
Floge Laboratory Website Manager (https://floges.sites.wfu.edu)	<i>Summer 2021 – Spring 2022</i>

RESEARCH SKILLS

- Proficient with scaling and maintaining laboratory cultures (*Synechococcus*, *Ochromonas* sp., *Ostreococcus* sp.) as well as marine phage stocks (*Myoviridae*)
- Experienced with aseptic and anaerobic work
- Experienced with flow cytometry, spectrophotometry, and various forms of microscopy (fluorescence, confocal, SEM)
- Versed in R coding language