

July 2018

Sophie Jurgensen

[LinkedIn](#) | [Twitter](#) | [ResearchGate](#)

Graduate Student

Email: sjurge2@lsu.edu

Cell Phone: 571-340-2714

Education

<u>Institution</u>	<u>Degree</u>	<u>Dates</u>
Louisiana State University <i>Advisor: Jennifer R. Brum, Ph.D. Studying viruses, viral infections of microbes, and their effects on biogeochemical cycling in seven globally-distributed oxygen minimum zones.</i>	Ph.D. Oceanography	2018-present
James Madison University <i>Honors Thesis: A CURE for Salmonella engaging students in pathogen microbiology and bioinformatics. Advisor: James B. Herrick, Ph.D.</i>	B.S. Biology <i>Magna Cum Laude</i> <i>Phi Beta Kappa</i>	2018
James Madison University	B.A. Modern Foreign Languages, <i>Magna Cum Laude</i> <i>Phi Kappa Phi</i>	2018

Employment History

PASS (Peer Assisted Study Sessions) Program Observation Leader, James Madison University, Spr. 2018

- Worked with program coordinator to develop and facilitate pre-semester training and ongoing professional development meeting for 36 student leaders.
- Conducted observations of PASS sessions as a form of professional development for leaders and ensure successful implementation of PASS model across the program.

PASS Program Research Assistant, James Madison University, Fall 2017

- Collaborated with program coordinator to create, implement, and assess program-wide learning objectives, as well as apply for program certification by the International Center for Supplemental Instruction.
- Worked with program coordinator to develop and facilitate pre-semester training for 36 student leaders.

Peer Assisted Study Sessions (PASS) Leader, James Madison University, 2015-2017

- PASS is a Supplemental Instruction program that is part of the Learning Centers at JMU which works to support traditionally challenging courses across disciplines (DFW rate >30%).
- Facilitated group learning as a Supplemental Instructor for first year biology classes by acting as a teacher's aide in class as well as facilitating twice weekly review sessions with students. Supported a total of 550 students across 5 semesters and 3 different courses.
- Collaborated with professors to generate review material, mock exams, and extensive lesson plans to foster students' academic success.

Virginia Science Olympiad Test Writer, 2017

- Helped write, proctor, and score tests for an event on invasive species for middle and high school students.

Resident Adviser, James Madison University, 2015-2016

- Fostered a healthy and inclusive community of 24 students in a first year residence hall on campus by facilitating community, academic, and multicultural programs in the hall. Ensured the safety of residents while on duty.

Research Experience

Dr. Jennifer Brum, Graduate Research Assistant, 2018-present

Project: Studying viruses, viral infections of microbes, and their effects on biogeochemical cycling in seven globally-distributed oxygen minimum zones.

Dr. Alison Buchan, REU Summer Intern, University of Tennessee, 2017

Project: characterization of the Tennessee Aquarium microbiome

- Collected water samples from various tanks at the aquarium and cultured for aerobic and anaerobic community members biochemically relevant to the nitrogen cycle
- Adapted and implemented gDNA extraction protocols and quality control to prep samples for DNA sequencing

Dr. James Herrick, Undergraduate Researcher, James Madison University, 2016-2018

Project: molecular characterization of environmental *Salmonella*

- Followed and adapted FDA protocols for the isolation of *Salmonella* from stream sediment and poultry litter
- Used WGS data to for assembly and characterization of AMR profiles, serotypes, etc. of isolates

Teaching Experience at James Madison University

Course

Viral Discovery lab (BIO 203, 2cr., TA)

Foundations of Biology I and II lab (BIO 140/150, 1cr., TA)

Organisms lecture (BIO 114, 3cr., PASS Leader)

Foundations of Biology I lecture (BIO 140, 3cr., PASS Leader)

Foundations of Biology II lecture (BIO 150, 3cr., PASS Leader)

Bacterial Discovery lecture (BIO 346, 2cr., TA)

Semester

Fall '15, '17

Fall'16-Spr.'17

Fall'15

Fall'16

Spr.'16-Fall'17

Spr.'18

Awards and Honors

2018	National Science Foundation Graduate Research Fellow
2018	Richard A. Lipsey and Joseph Lipsey Jr. Graduate Student Scholarship Incentive Award, LSU
2018	Outstanding Undergraduate Thesis Award, Department of Biology, JMU
2018	Excellence in Teaching Award, Department of Biology, JMU
2018	Outstanding Senior Award, Department of Biology, JMU
2018	Excellence in PASS Program award, JMU
2018	Sigma Delta Pi, JMU
2017	1 st place, poster presentation (Biological Sciences), UMBC CNMS Symposium
2017	Excellence in Spanish Scholarship, Department of Modern Foreign Languages, JMU
2016	Phi Kappa Phi
2016	Phi Beta Kappa
2015, 16, 17	Dean's List, JMU
2014	President's List, JMU

Contributed Conference Presentations

Poster presentation unless otherwise indicated

* = equal contribution

Jurgensen, SK* and Muller, MP*. 2018. *Impact of co-culture on growth and physiology of Microcystis aeruginosa*. ASLO Summer Meeting. June 12.

Holmes, CP* and Jurgensen, SK*. 2018. *Whole-Genome Epidemiology of Environmental Salmonella: Monitoring Potential Threats to Public Health*. Shenandoah ASM chapter meeting. April 14.

Holmes, CP* and Jurgensen, SK*. 2018. *Whole-Genome Epidemiology of Environmental Salmonella: Monitoring Potential Threats to Public Health*. National Council on Undergraduate Research. April 6.

Holmes, CP and Jurgensen, SK. 2017. *Whole-Genome Epidemiology of Environmental Salmonella: Monitoring Potential Threats to Public Health*. Virginia ASM Meeting. November 3-4.

Jurgensen, SK. and Holmes, CP. 2017. *Developing a Course-based Undergraduate Research Experience in Salmonella Genomic Epidemiology*. Virginia ASM Meeting. November 3-4.

Jurgensen, SK. 2017. *Characterization of the Tennessee Aquarium Microbiome*. Virginia ASM Meeting. November 3-4.

Jurgensen, SK. and Holmes, CP. 2017. *Whole-genome epidemiology of environmental Salmonella: optimization and integration into an undergraduate course*. University of Maryland, Baltimore County CNMS Symposium, October 14.

Jurgensen, SK*. and Holmes, CP. 2017*. *Whole-genome epidemiology of environmental Salmonella: optimization and integration into an undergraduate course*. Shenandoah ASM chapter meeting. April 1.

Jurgensen, SK. and Cresawn, SG. 2015. *Bioinformatic and Virologic Evidence Suggests a Novel Scheme for Lysogeny in a Mycobacteriophage*. SEA-PHAGES Symposium, June 10-12. Poster and oral presentations.

Jurgensen, SK*., Aldkheil, E* and Cresawn, SG. 2015. *Bioinformatic and Virologic Evidence Suggests a Novel Scheme for Lysogeny in a Mycobacteriophage*. William and Mary Phage Phaire. Oral Presentation

Leadership

2018 Future is Female leadership 8-wk workshop series participant
2017 Working with English Language Learners 8-wk workshop series participant
2017 TEDx JMU presenter
2014 Make Your Mark on Madison leadership workshop series participant

Outreach

2017 Volunteer for JMU Arboretum Science Exploration Day
2017 “Invasive Species” Event Supervisor and Test Writer, Virginia Science Olympiad
2016 Spanish translator for “Science Night”, Mountain View Elementary School

Student Mentoring

2018 As part of Undergraduate Thesis, helped 17 students (5 groups) create and present posters at the JMU Department of Biology annual symposium.
2017 Rachel Davis, Maxwell Maza, Alexis Schneider, Emma Eisemann, Emily Williams, Avery Myers: mentored Herrick lab undergraduate students.

Professional Memberships

- American Society for Microbiology (ASM)
- American Society for Limnology and Oceanography (ASLO)