Dr. Quentin Sprengelmeyer

Education

Ph.D. Genetics 2021

University of Wisconsin-Madison, Madison, WI

Advisor: Dr. John Pool

Committee: Drs. Sean Schoville, Bret Payseur, Jill Wildonger and Karl Broman

M.S. Biology 2014

Northern Michigan University, Marquette, MI

Advisor: Dr. Alec Lindsay

Committee: Drs. Neil Cumberlidge, Kurt Galbreath

Thesis: A phylogentic reevaluation of the genus Gavia using next-generation sequencing

B.S. Biology, Magna Cum Laude
Northern Michigan University, Marquette, MI

College-Level Academic Staff Experience

Interim Assistant Director-TRIO Student Support Services Dept. of Equity and Inclusion, UW-Platteville, Platteville, WI

2022-Present

Student recruitment, tracking of student data, prepare and submit Dept. of Education annual report, supervisor full-time advisors, academic coaches, and tutor coordinators. Provide students individualized support and coaching with any academic, career or personal matters during the academic year.

Director & Advisor-Fostering Success

Dept. of Equity and Inclusion, UW-Platteville, Platteville, WI

2022-Present

In Charge of tracking funding, administration, and management of the Fostering Success program. Provide students individualized support and coaching with any academic, career or personal matters during the academic year. Supervise student peer mentor.

College-Level Teaching Experience

Visiting Assistant Professor

Dept. of Biology, Beloit College, Beloit, WI

2021

Instructor for *Prep for Basic Biology*, covering biological and physical sciences. Developed syllabi, lesson plans for a course designed to teach fundamental principles of biology. Delivered content through online course tools. Wrote and graded weekly quizzes and exams. Created laboratory experiments and weekly discussions to further illustrate biological concepts. Maintained office hours.

Adjunct Instructor

Dept. of Biology, Madison College, Madison, WI

2016-2020

Instructor for *Prep for Basic Biology*, and *Environmental Issues* covering biological and physical sciences. Developed syllabi, lesson plans for a course designed to teach fundamental principles of

biology. Delivered content both in-person and through online course tools. Wrote and graded weekly quizzes and exams. Created laboratory experiments to further illustrate biological concepts. Maintained office hours.

Teaching Assistant

Dept. of Genetics, UW-Madison, Madison, WI

Fall 2015

Teaching Assistant for upper-level course, *Genetics*. Led discussion and review sessions to help explain basic and advanced genetic principles. Attended weekly meetings with faculty, instructors, and teaching assistants to discuss best pedagogical practices. Maintained office hours and graded exams.

Teaching Assistant

Dept. of Biology, Northern Michigan University, Marquette, MI

2012-2014

Teaching Assistant for upper-level course, *Genetics*. Led laboratory experiments and demonstrations aimed to illustrate fundamentals of genetics. Facilitated a semester long *Drosophila melanogaster* chromosome mapping experiment. Maintained office hours and attended weekly meeting with faculty and teaching assistants.

Teaching Assistant

Dept. of Biology, Northern Michigan University, Marquette, MI

Fall 2012

Teaching Assistant for undergraduate course, *Principles of Ecology*. Led field-based and laboratory exercises aimed to demonstrate ecological principles. Wrote and graded exams and maintained office hours.

Other Teaching Experience

ABE Teacher-New Lisbon Correctional Institution, New Lisbon, WI May 2021-present Taught Adult basic education GED prep classes for Science, Social Studies, Reading and Writing. Developed syllabi, curriculum, and lesson plans for classes designed to prepare students to take GED subject exams.

Substitute Teacher-Ishpeming School District, Ishpeming, MI

2014

Instructed Science and Math classes for grades 7-12. Followed lesson plans, proctored test, and assisted students with assignments.

Tutoring & Mentoring

Research Mentor 2014-2021

Helped Design research projects for Genetics undergraduate students Provided guidance throughout the projects Taught generating and analyzing genomic data skills and techniques

Student Support Services, Northern Michigan University, Marquette, MI

2009-2014

STEM Tutor for TRiO-funded student success programs. Worked with first-generation, non-traditional and at risk students. Tutored students in Math, Chemistry and Biology coursework. Attended tutor training.

Moose Wood Nature Center, Marquette, MI

2010-2012

Naturalist for a non-profit nature center. Led a field-based summer course, *Beach*, *Bog and Forest*, for students K-5.

Dept. of Biology, Northern Michigan University

2010-2011

Event Supervisor for Science Olympiad. Administered and assessed ornithology tests to high school and middle school students.

Mentoring Positive, INC., Madison, WI

2008

Mentor and tutor for non-profit referral-based mentoring program. Worked one-on-one with atrisk youth focusing on science education. Tutored students in science and math coursework.

Publications

Sprengelmeyer, Q. D., Lack, J.B., Braun, D.T., Monette, M.J., & Pool, J. E. (2022). The evolution of larger size in high altitude Drosophila melanogaster has a polymorphic genetic architecture. G3, 12(3).

Sprengelmeyer, Q. D., & Pool, J. E. (2021). Ethanol resistance in *Drosophila melanogaster* has increased in parallel cold-adapted populations and shows a variable genetic architecture within and between populations. Ecology and Evolution, 11(21), 15364-15376.

Sprengelmeyer, Q. D., Mansourian, S., Lange, J. D., Matute, D. R., Cooper, B. S., Jirle, E. V., ... & Pool, J. E. (2020). Recurrent Collection of *Drosophila melanogaster* from Wild African Environments and Genomic Insights into Species History. Molecular biology and evolution, *37*(3), 627-638.

Lack, J. B., Yassin, A., **Sprengelmeyer, Q. D**., Johanning, E. J., David, J. R., & Pool, J. E. (2016). Life history evolution and cellular mechanisms associated with increased size in high-altitude Drosophila. Ecology and Evolution, 6(16)

Lack, J. B., Monette, M. J., Johanning, E. J., **Sprengelmeyer, Q. D.**, & Pool, J. E. (2016). Decanalization of wing development accompanied the evolution of large wings in high-altitude Drosophila. Proceedings of the National Academy of Sciences, 113(4)

Conferences & Presentations

Midwest Populations Genetics Meeting, Chicago, IL

2019

Oral Presentation; Discovery of *Drosophila melanogaster* from Wild African Environments and Genomic Insights into Species History

Population, Evolutionary and Quantitative Genetics Conference, Madison, WI 2018 Poster Presentation; Discovery of *Drosophila melanogaster* from Wild African Environments and Genomic Insights into Species History

Annual Drosophila Research Conference, Philadelphia, PA

2018

Poster Presentation; Discovery of *Drosophila melanogaster* from Wild African Environments and Genomic Insights into Species History

Midwest Populations Genetics Meeting, Chicago, IL

2016

Oral Presentation; Parallel Evolution of Ethanol Tolerance found in Four Populations of *Drosophila melanogaster*

ICQG5, Madison, WI

2016

Poster Presentation; Parallel Evolution of Ethanol Tolerance found in Four Populations of *Drosophila melanogaster*

Midwest Population Genetics Meeting, Ann Arbor, MI

2015

Poster Presentation; Parallel Evolution of Ethanol Tolerance found in Four Populations of *Drosophila melanogaster*

International Loon and Diver Workshop, Hanko, Finland

2013

Oral Presentation; Revising the phylogeny of Gavia with second-generation sequencing data

Michigan Bird Conservation Initiative, Tustin, Michigan

2013

Poster Presentation; The historical, current and future status of the phylogeny of the genus Gavia

Laboratory of Genetics, University of Wisconsin-Madison

2013

Poster presentation, titled: "The historical, current and future status of the phylogeny of the genus *Gavia*"

Student Research and Academic Service Learning, Northern Michigan University 2011

Poster presentation, titled: "Distributional Patterns of Arctic Disjunct Flora in Relation to Geology, Topography, and Microclimate on the Slates Islands, Lake Superior"

Trainings & Certifications

Security Basics for Non-Uniform Staff- WI Dept. Of Corrections

Principles of Subject Control- WI Dept. Of Corrections

Trauma Informed Care- WI Dept. Of Corrections

CPR/AED- WI Dept. Of Corrections

Motivational Interviewing- WI Dept. Of Corrections

Inclusive Teaching-Evidence and Practice Retreat - University of Wisconsin- Madison

Bias Training Workshop - University of Wisconsin- Madison

Faculty Quality Assurance System (FQAS) – Wisconsin Technical College System

Substitute Teaching Permit - Marquette-Alger Regional Educational Service Agency

International Tutor Training Program - College Reading and Learning Center Association

Rising Star Leadership and Management Training

Crisis Prevention Institute Certified

Committees

Assessment Oversight Commission University of Wisconsin - Platteville	2022
Complete College America (CCA) advisory team University of Wisconsin - Platteville	2022
Equity and Diversity Committee College of Agriculture and Life Sciences, University of Wisconsin - Madison	2015-2017
Outreach Committee The Science and Medicine Graduate Research Scholars, University of Wisconsin-Madi	2015 son
Admission Committee Department of Genetics, University of Wisconsin-Madison	2015

Professional & Scholastic Affiliations

UW-Madison-The Science and Medicine Graduate Research Scholars
McNair Scholars Program
Society for Advancement of Hispanics/Chicanos and Native Americans in Science
Genetics Society of America
Ornithological Society of North America
Sigma Xi-The Scientific Research Society
Phi Theta Kappa National Honors Society

Grants & Scholarships

Michigan Waterfowl Association Scholarship Michigan Waterfowl Association, Marquette, MI	2013
Excellence in Education Grant Northern Michigan University, Marquette, MI	2013
Development Fund Award Northern Michigan University, Marquette, MI	2012

Honors & Merit Awards

Northern Michigan University Merit Award Phi Theta Kappa National Honors Society Award National Science and Mathematics Access to Retain Talent Grant (SMART Grant) Northern Michigan University National Transfer Award Madison Area Technical College Foundation Scholarship