

Michael J. Sieler Jr.

Department of Microbiology
Oregon State University
226 Nash Hall, Corvallis, OR 97331

sielerjm@oregonstate.edu
208-867-7109

EDUCATION

Oregon State University, Corvallis, OR <i>Ph.D. Microbiology, minor: Biological Data Sciences. GPA: 3.95</i>	Expected June 2025
Oregon State University, Corvallis, OR <i>B.S. Bioresource Research, options: Bioinformatics and Genomics. GPA: 3.82</i>	June 2020

RESEARCH APPOINTMENTS

Phd Intern , Mentor: Lisa Bramer and Kelly Stratton Research focus in metabolomic data science and bioinformatics Pacific Northwest National Laboratory	2023-Present
Graduate Student Researcher , Mentor: Thomas J. Sharpton Research focus in zebrafish microbiome ecology and bioinformatics Department of Microbiology, Oregon State University	2020-Present
Undergraduate Student Researcher , Mentor: Thomas J. Sharpton Research focus in zebrafish microbiome ecology and bioinformatics Department of Microbiology, Oregon State University	2018-2020
Undergraduate Student Researcher , Mentor: Taifo Mahmud Research focus in identifying novel antibiotic compounds Department of Pharmacy, Oregon State University	2017-2018

TEACHING APPOINTMENTS

Graduate Teaching Assistant General Microbiology Lab (MB 303, Spring)	2022-2023
Human Microbiome (MB 436, Spring)	2021
Introduction to Microbiology (MB 230, Spring)	2021

FELLOWSHIPS & AWARDS

NMDC Ambassador <i>National Microbiome Data Collaborative</i> Recognized and received training for early career contributions to promoting findable, accessible, interoperable and reusable microbiome research data and workflows	2024 – Present
ODFW Fish Health Graduate Research Fellowship <i>Oregon Department of Fish and Wildlife</i> Recognized for research in Microbiology at Oregon State University, focusing on fish health issues to benefit Oregon's fish populations	2023 – 2025
Science Communication Fellow	2020 – Present

ARCS Scholar

2020 – 2023

ARCS Foundation

Recognized for early significant contributions to scientific research

SCIENTIFIC PUBLICATIONS

Damon T. Leach, **Michael J. Sieler Jr.**, Kelly G. Stratton, Rachel E. Richardson, Jennifer E. Kyle, Young-Mo Kim, Josie G. Eder, Kristin M. Engbrecht, Athena A. Schepmoes, Bobbie-Jo M. Webb-Robertson, Lisa Bramer. "Analyzing batch effect correction algorithms for small molecule data using ground truth from a designed experiment." *In review*.

Keaton Stagaman, Alexandra Alexiev, **Michael J Sieler Jr**, Austin Hammer, Kristin D. Kasschau, Lisa Truong, Robyn L. Tanguay, Thomas J. Sharpton. "The zebrafish gut microbiome mediates benzo[a]pyrene developmental neurotoxicity." *In review*.

Michael J. Sieler Jr., Colleen E Al-Samarrie, Kristin D Kasschau, Zoltan M Varga, Michael L Kent, Thomas J Sharpton (2023). "Disentangling the link between zebrafish diet, the gut microbiome succession and *Mycobacterium chelonae* infection." *Anim. Microbiome*.

Joseph A Szule, Lawrence R Curtis, Thomas J Sharpton, Christiane V Löhr, Susanne M Brander, Stacey L Harper, Jamie M Pennington, Sara J Hutton, **Michael J. Sieler Jr.**, Kristin D Kasschau (2022). "Early Enteric and Hepatic Responses to Ingestion of Polystyrene Nanospheres from Water in C57BL/6 Mice." *Front. Water*.

Maude M David, Christine Tataru, Quintin Pope, Lydia J Baker, Mary K English, Hannah E Epstein, Austin Hammer, Michael Kent, **Michael J. Sieler Jr.**, Ryan S Mueller, Thomas J Sharpton, Fiona Tomas, Rebecca Vega Thurber, Xiaoli Z Fern (2022). "Revealing General Patterns of Microbiomes That Transcend Systems: Potential and Challenges of Deep Transfer Learning." *Msystems*.

Thomas J. Sharpton, Keaton Stagaman, **Michael J. Sieler Jr.**, Holly K. Arnold, Edward W. Davis II (2021). "Phylogenetic integration reveals the zebrafish core microbiome and its sensitivity to environmental exposures." *Toxics*.

PRESENTATIONS

5th Annual MANA Conference

2023

Metabolomics Association of North America (MANA)

Columbia, Missouri

"Choice of batch correction method is an important factor in small molecule study"

Zebrafish Husbandry Workshop

2022

Aquaculture

San Diego, CA (virtual)

"Effects of diet on growth and the microbiome"

3rd International Fish Microbiota Workshop

2021

Chinese Academy of Agriculture Sciences

Beijing, China (virtual)

"Zebrafish laboratory diets differentially alter gut microbiota composition"

POSTERS

ARCS Annual Scholar Event

2022

ARCS Foundation

Portland, OR

"How do external environmental factors impact the gut microbiome to influence host health?"

2nd International Fish Microbiota Workshop

2019

University of Oregon

Eugene, OR

"The gut microbiome drives Benzo(a)pyrene's impact on zebrafish behavioral development"

College of Agriculture Science Showcase

Oregon State University

"The gut microbiome drives Benzo(a)pyrene's impact on zebrafish behavioral development"

2019

Corvallis, OR

PROFESSIONAL AFFILIATION & SERVICE

Food and Nutrition Special Interest Group

Advocate

Oregon Public Health Association

2023-Present

Portland, OR

Microbes and Social Equity Working Group

Member

2022-Present

Microbiology Graduate Student Association

President

Oregon State University

2022 – 2023

Corvallis, OR