**Michael J. Sieler Jr.**

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| Department of Microbiology  Oregon State University  226 Nash Hall, Corvallis, OR 97331 | sielerjm@oregonstate.edu  MichaelSieler.com |

**EDUCATION**

**Oregon State University, Corvallis, OR** Expected June 2025

*Ph.D. Microbiology, minor: Biological Data Sciences. GPA: 3.95*

**Oregon State University, Corvallis, OR**  June 2020

*B.S. Bioresource Research, options: Bioinformatics and Genomics. GPA: 3.82*

**RESEARCH APPOINTMENTS**

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| ***Graduate Student Researcher***, Mentor: Thomas J. Sharpton  Research focus in zebrafish gut microbiome ecology and bioinformatics  Department of Microbiology, Oregon State University | 2020-Present |
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| ***Phd Intern***, Mentor: Lisa Bramer and Kelly Stratton  Research focus in metabolomic data science and bioinformatics  Pacific Northwest National Laboratory | 2023-2024 |
| ***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 |
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**TEACHING APPOINTMENTS**

**Graduate Teaching Assistant**

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| 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 2024 – Present**

*National Microbiome Data Collaborative*

Recognized and received training for early career contributions to promoting findable, accessible, interoperable and reusable microbiome research data and workflows

**ODFW Fish Health Graduate Research Fellowship 2023 – 2025**

*Oregon Department of Fish and Wildlife*

Recognized for research in Microbiology at Oregon State University, focusing on fish health issues to benefit Oregon's fish populations

**Science Communication Fellow 2020 – Present**

*Oregon Museum of Science and Industry*

Received certified training in informal science education and engagement with public audiences

**ARCS Scholar 2020 – 2023**

*ARCS Foundation*

Recognized for early significant contributions to scientific research

**SCIENTIFIC PUBLICATIONS**

Keaton Stagaman, Alexandra Alexiev, **Michael J. Sieler Jr.**, Austin Hammer, Kristin D. Kasschau, Lisa Truong, Robyn L. Tanguay & Thomas J. Sharpton (2024). “The zebrafish gut microbiome influences benzo[a]pyrene developmental neurobehavioral toxicity” Sci Rep.

Austin Hammer, Christopher Gaulke, Manuel Garcia-Jaramillo, Connor Leong, **Michael J. Sieler Jr.,** Jeff Morré, Yuan Jiang, Claudia Maier, Michael Kent, Thomas Sharpton, and Jan Fred Stevens (2024). “Gut microbiota metabolically mediate intestinal helminth infection in Zebrafish”. *In-review.*

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 (2024). “Analyzing batch effect correction algorithms for small molecule data using ground truth from a designed experiment.” *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**

**9th Conference on Beneficial Microbes** 2024

*University of Wisconsin*  Madison, Wisconsin

“Modelling the Gut Microbiome’s Resistance and Resilience to Climate Change and Infection in Zebrafish”

**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”

**PANELS**

**9th Conference on Beneficial Microbes** 2024

*University of Wisconsin*  Madison, Wisconsin

“The Importance of Inclusive Practices in Microbiome Science”

**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**  2019

*Oregon State University Corvallis, OR*

“The gut microbiome drives Benzo(a)pyrene’s impact on zebrafish behavioral development”

**PROFESSIONAL AFFILIATION & SERVICE**

**Pernot Microbiology Summer Camp** - Camp Mentor2024

*Department of Microbiology, Oregon State University*

Supervised 20 high school students from historically disadvantaged backgrounds in learning laboratory techniques.

**Food and Nutrition Special Interest Group**  2023-Present

Advocate

*Oregon Public Health Association Portland, OR*

**Microbes and Social Equity Working Group**  2022-Present

Member

**Microbiology Graduate Student Association** 2022 – 2023

President

*Oregon State University Corvallis, OR*