

July, 2019

IAN R. HUMPHREYS

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EDUCATION

Matriculating **Ph.D., Molecular & Cellular Biology**
University of Washington, Seattle, WA

2019 **M.S., Microbiology**

2018 **B.S. (*Cum Laude*), Microbiology**
Oregon State University, Corvallis, OR

EXPERIENCE

2017 - 2019 Graduate Student Researcher
Dr. Thomas J. Sharpton, Computational Microbiology
Oregon State University, Department of Microbiology

- Quantifying the accuracy with which DNA sequencing data reconstructs the evolutionary history and diversity of microbiome samples through phylogenetic simulations.
- Proficient in: Unix/Linux environment, Perl and R.

2015 - 2017 Undergraduate Student Researcher
Dr. Jane E. Ishmael, Natural Products Pharmacology
Oregon State University, Department of Pharmaceutical Sciences

- Analyzed cell death signaling in response to marine natural products.
- Screened small molecule libraries in search of new compounds of interest.
- Proficient in: cell culture, dose-response assays, and western blotting.

PUBLICATIONS

- Humphreys IR** and Sharpton TJ. The Accuracy of Phylogenies Assembled from 16S rRNA Sequences. *Manuscript in preparation*.
3. Gaulke CA, Martins ML, Watral V, **Humphreys IR**, Kent ML, and Sharpton TJ. A Longitudinal Assessment of Host-Microbe-Parasite Interactions Resolves the Zebrafish Gut Microbiome's Link to *Pseudocapillaria tomentosa* Infection and Pathology. *Microbiome*, **2019**, [7:10](#).
 2. Gaulke CA, Arnold HK, **Humphreys IR**, Kembel SW, O'Dwyer JP, and Sharpton TJ. Ecophylogenetics Clarifies the Evolutionary Association between Mammals and their Gut Microbiota. *mBio*, **2018**, [9:e01348-18](#).
 1. Wan X, Serrill JD, **Humphreys IR**, Tan M, McPhail KL, Ganley IG, and Ishmael JE. ATG5 Promotes Death Signaling in Response to the Cyclic Depsipeptides Coibamide A and Apratoxin A. *Marine Drugs*, **2018**, [16\(3\), 77](#).

HONORS & AWARDS

- 2018 - 2019 Mark H. Middlekauf Research Scholarship
2018 - 2019 Virginia Welch Good Samaritan Regional Medical Center Scholarship
2018 Dr. Nicholas R. Tartar Graduate Student Summer Research Fellowship
2017 OSU College of Pharmacy Summer Undergraduate Research Fellowship
2016 - 2017 OSU Department of Microbiology and College of Pharmacy Joint Research Funding
2016 OSU College of Pharmacy Summer Undergraduate Research Fellowship

SCIENTIFIC PRESENTATIONS

- 2019 *The Accuracy of Phylogenies Assembled from 16S rRNA Sequences*
American Society of Microbiology, San Francisco, CA [Poster]
- 2019 *Insights from Digital Microbial Forests: Identifying Study Parameters that Impact the Accuracy of 16S rRNA Phylogenies*
OSU Department of Microbiology, Corvallis, OR [Talk]
- 2018 *The Accuracy of Phylogenies Assembled from 16S rRNA Sequences*
OSU Center for Genome Research and Biocomputing Conference, Corvallis, OR [Poster]
- 2018 *Experimental Parameters to Improve the Fidelity of 16S Phylogenies*
OSU Center for Genome Research and Biocomputing Conference, Corvallis, OR [Poster]
- 2017 *Use of a Cell-Based Bioluminescent Assay to Detect Small Molecule Inhibitors of the Mammalian Secretory Pathway*
OSU College of Pharmacy Undergraduate Symposium, Corvallis, OR [Talk]
- 2016 *Analysis of Cell Death Signaling in Response to Marine Natural Product Coibamide A*
OSU College of Pharmacy Undergraduate Symposium, Corvallis, OR [Talk]

TRAINING CERTIFICATES

- 2017 - 2019 Center for Genome Research and Biocomputing 5 week workshops
Oregon State University, Corvallis, OR
- RNAseq I & II
 - Python I & II (python 2.7)
 - Command-line Data Analysis
 - Introduction to Unix/Linux
 - Introduction to R and RStudio

SERVICE, MEMBERSHIP, & VOLUNTEERING

- 2019 - American Society of Microbiology
2018 - 2019 OSU Microbiology Graduate Student Association
2017 - 2019 CASA Voices For Children, Court Appointed Special Advocate
2017 - 2018 Synapse (VP Outreach)
2017 OSU Botany and Plant Pathology Promotion and Tenure Committee
2016 - 2018 OSU Microbiology Student Association (Undergraduate)
2015 - 2017 Good Samaritan Regional Medical Center Volunteer