


Taft DH, Liu J, Akre S, Huda MN, Ahmad S, Stephensen CB, Mills DA. Bifidobacterial dominance of the gut in early life and acquisition of antimicrobial resistance. mSphere. 2018 September, 3(5).


Funding

NICHD Individual Post-Doctoral Fellowship, “Effects of Bifidobacterium Dominance on the Infant Microbiome”, F32HD093185

Co-investigator, internal Research in Progress grant, Cincinnati Children's Hospital and Medical Center, “Microbiome of Juvenile Idiopathic Arthritis”

Past traineeship, Pre-doctoral Fellow, University of Cincinnati's Molecular Epidemiology in Children's Environmental Health training program. NIH T32 ES 10957-11

Travel award to attend the 2013 Office of Dietary Supplements Research Practicum

Past traineeship funded by NICHD P01 HD13021 (Morrow, PI), “The Role of Human Milk in Infant Nutrition and Health”

Taft, Diana (PI), University of Cincinnati Graduate Student Governance Association, grant ($500). “Maternal FUT2 genotype as a determinant of human milk slgA concentrations”

Work experience

Assistant Project Scientist
University of California Davis 2/2021 - present

Post-Doctoral Research Fellow
University of California at Davis 6/2016 - 2/2021

F32 funded research fellow in laboratory of Dr. David A. Mills, Ph.D. Studying the normal development of the intestinal microbiota in term infants.

Post-Doctoral Research Fellow
Cincinnati Children's Hospital and Medical Center 8/2014 - 5/2016

Research fellow in laboratory of Dr. John Harley, M.D./Ph.D. Research focused on the microbiome in lupus.

Graduate Student
University of Cincinnati 9/2009 - 8/2014
Graduate student in research laboratory of Ardythe L. Morrow, Ph.D. Worked with term and preterm infant cohorts to study the intestinal microbiome during early life and its association with health and disease.

**Post-baccalaureate Intramural Research Awardee**
National Institute of Child Health and Human Development

Trainee in the Reproductive and Adult Endocrinology Branch, Laboratory of Clinical Genomics. Investigated biomarkers of testicular cancer. Funding through the Dean's Scholars program to support an Honor’s Thesis, summer 2006. Examined the possible linkage of flower color polymorphisms in H. matronalis to other traits leading to differential survival across microclimates.

**Summer Research Intern**
Boyce Thompson Institute

Internship at the Boyce Thompson Institute working in the laboratory of Dr. Peter Moffett on gene to gene Rx resistance in genetically engineered N. benthamiana. Used Virus Induced Gene Silencing to investigate the Rx resistance pathway.

**Education**

**Ph.D.**
University of Cincinnati
Advisor: Ardythe Morrow

Thesis focused on the intestinal microbiome of preterm infants and the risk of late-onset sepsis.

**B.A.**
Cornell University

Magna cum Laude Chemistry and Cum Laude Biology. Honors Thesis examined the possible linkage of flower color polymorphism in H. matronalis to other traits leading to differential survival across microclimates.

**First Author Presentations**


**Taft DH.** *Bifidobacterium*, breastfeeding, and infant health. 2018 6th Microbiome R&D and Business Collaboration Forum (Oral)


**Taft DH**, Liu J, Huda MN, Stephensen CB, Mills DA. Bifidobacterial dominance correlates with reduced infant gut antimicrobial resistance. 2017 International Milk Genomics Consortium Annual Symposium (Oral)

**Taft DH**, Dingess KA, Valentine CJ, Davidson BS, Ollberding NJ, Ward DV, Brenna JT, MacMahon RJ, Morow AL. The fatty acid composition of human milk is associated with infant microbial community profile. 2016 Experimental Biology meeting abstracts. (Oral)


Taft DH, Ambalavanan N, Schibler KR, Yu Z, Newburg DS, Ward DV, Morrow AL. Intestinal colonization patterns differ prior to late-onset sepsis in premature infants. 2014 Experimental Biology meeting abstracts. (Poster) and 2014 Pediatric Academic Societies meeting abstracts. (Oral)


Taft DH, University of Cincinnati Division of Biostatistics and Epidemiology seminar. "A pilot study of TLR4 polymorphism in relation to intestinal dysbiosis and risk of necrotizing enterocolitis in preterm infants." March 2013. (Oral)

Taft D, Jiang X, Huang P, Davidson B, Morrow AL. Maternal fucosyltransferase 2 genotype alters milk immunoglobulin A levels specific to some strains of norovirus. 2012 Experimental Biology meeting abstracts. (Poster)

Nguyen K, Taft DH, Mills DA. Complementary feeding affects the presence of antimicrobial resistance genes in infants. 2019 University of California at Davis Undergraduate Research Conference.

Sastry S, Taft DH, Mills DA, Boundy-Mills K. The performance of UNITE, dITSy, and dITSy-UNITE hybrid classifiers on yeast taxonomic assignment in ecological studies. 2019 University of California at Davis Undergraduate Research Conference.


Akre S, Joslin S, Taft DH. Mills DA. Human DNA decontamination software for WGS comparison and optimization using in silico and in vivo datasets. 2017 University of California at Davis Undergraduate Research Conference.

Huda, MN, Ahmad S, Kalanetra KM, Taft DH, Lewis ZT, Raqib R, Mills DA, Stephensen C. Infant stool microbiota at the time of vaccination at 6 w of age is associated with vaccine responses measured at 2 y of age. 2017 Bay Area Microbial Pathogenesis Symposium meeting abstracts.

Huda, MN, Ahmad S, Kalanetra KM, Taft DH, Lewis ZT, Raqib R, Mills DA, Stephensen C. Infant stool microbiota at the time of vaccination at 6 w of age is associated with vaccine responses measured at 2 y of age. 2017 American Association of Immunologists meeting abstracts.


Instructor and Course Developer, “Microbiome Analysis for Beginners”, in collaboration with Dr. Karen Kalanetra, Spring 2017 and Spring 2019, University of California at Davis

Lecture, “The Human Microbiome – At the Intersection of Genetics and Ecology”, Advanced Fundamentals of Genetics class, University of Cincinnati, Fall Semester 2015

Instructor, MCAT Preparation Course Critical Analysis and Reasoning Section, University of Cincinnati, Summer Session 2015 and Winter Session 2016
Lecture, “Basics of Epidemiology”, Radiology Fellows Research Lectures, University Hospital, Cincinnati, Spring 2014 and Fall 2015

Guest Lecture, “Understanding an Outbreak Investigation”, Xavier University, September 2015

Teaching Assistant, “Introduction to Epidemiology”, University of Cincinnati, Winter 2011, Winter 2012, Fall 2012, Fall 2013

Awards

Travel award to attend the International Milk Genomics Consortium Symposium, 2017

Finalist Translational Research Award Competition, American Society for Nutrition, Experimental Biology, 2016.

Nutritional Immunology Poster Competition at Experimental Biology, third place. 2014

University of Cincinnati Graduate Student Research Festival Poster Award Honorable Mention, 2013

Travel award to attend the 2013 Office of Dietary Supplements Research Practicum

Nominated by College of Medicine for University of Cincinnati’s Excellence in Teaching Award 2012

Other Training Activities

Attended the five day 2017 Joint Genome Institute IMG training on the analysis of bacterial genomic and metagenomic datasets in Walnut Creek, CA and received a certificate of completion

Attended the three day 2013 Office of Dietary Supplements Research Practicum focused on use, research, and regulation of dietary supplements in the United States at the Office of Dietary Supplements, National Institutes of Health in Bethesda, MD and received a certificate of completion

Attended the ten day summer 2012 the Strategies and Techniques for Analyzing Microbial Populations (STAMPs) course at the Marine Biological Laboratory in Woods Hole, MA and received a certificate of completion

Professional Memberships

Member of the American Society of Nutrition

Trainee member of the International Society for Research on Human Milk and Lactation

Member of the American Association for the Advancement of Science