Michael L Williams

Phd Candidate, Department of Biostatistics
Vanderbilt University, Nashville TN USA
✉ michael.lee.williams@vanderbilt.edu 🌐 michaelleewilliams.github.io

Education

Vanderbilt University, PhD Biostatistics, *Nashville TN* — ongoing

University of Michigan, B.S. Biomedical Engineering, *Ann Arbor MI* — 2011

Employment

Massachusetts Institute of Technology, Research Assistant, *Cambridge, MA* — 2015-2017

United States Peace Corp, Math Teacher Secondary Education, *Sierra Leone* — 2012-2014

University of Michigan, Research Technician *Ann Arbor, MI* — 2008-2012

Journal Articles

Williams, Michael L., Prince J. Kannankeril, Joseph H. Breeyear, Todd L. Edwards, Sara L. Van Driest, Leena Choi." Effect of CYP3A5 and CYP3A4 Genetic Variants on Fentanyl Pharmacokinetics in a Pediatric Population." Clinical Pharmacology & Therapeutics (2021).doi:10.1002/cpt.2506

Williams, Michael L., Hannah L. Weeks, Cole Beck, and Leena Choi. "Effects of Last Dosing Time on Population Pharmacokinetic Analysis of Tacrolimus Performed Using Extracted Data from Electronic Health Records." MedRxiv, January 20, 2021, 2021.01.15.21249900.

Choi, Leena, Cole Beck, Elizabeth McNeer, Hannah L. Weeks, **Michael L. Williams**, Nathan T. James, Xinnan Niu, et al. "Development of a System for Postmarketing Population Pharmacokinetic and Pharmacodynamic Studies Using Real-World Data From Electronic Health Records." Clinical Pharmacology & Therapeutics 107, no. 4 (2020): 934–43.

McNeer, Elizabeth, Cole Beck, Hannah L Weeks, **Michael L Williams**, Nathan T James, Cosmin A Bejan, and Leena Choi. "Building Longitudinal Medication Dose Data Using Medication Information Extracted from Clinical Notes in Electronic Health Records." Journal of the American Medical Informatics Association 28, no. 4 (March 18, 2021): 782–90.

Weeks, Hannah L, Cole Beck, Elizabeth McNeer, **Michael L Williams**, Cosmin A Bejan, Joshua C Denny, and Leena Choi. "MedExtractR: A Targeted, Customizable Approach to Medication Extraction from Electronic Health Records." Journal of the American Medical Informatics Association 27, no. 3 (March 1, 2020): 407–18.

McNeer, Elizabeth, Cole Beck, Hannah L. Weeks, **Michael L. Williams**, Nathan T. James, and Leena Choi. "A Post-Processing Algorithm for Building Longitudinal Medication Dose Data from Extracted Medication Information Using Natural Language Processing from Electronic Health Records." BioRxiv, September 19, 2019.

Bichot, Narcisse P., Rui Xu, Azriel Ghadooshahy, **Michael L. Williams**, and Robert Desimone. "The Role of Prefrontal Cortex in the Control of Feature Attention in Area V4." Nature Communications 10, no. 1 (December 2019): 5727.

VanDusen, Keith W., Brian C. Syverud, **Michael L. Williams**, Jonah D. Lee, and Lisa M. Larkin. "Engineered Skeletal Muscle Units for Repair of Volumetric Muscle Loss in the Tibialis Anterior Muscle of a Rat." Tissue Engineering. Part A 20, no. 21–22 (November 2014): 2920–30.

Williams, Michael L, Tatiana Y Kostrominova, Ellen M. Arruda, and Lisa M. Larkin. "Effect of Implantation on Engineered Skeletal Muscle Constructs." Journal of Tissue Engineering and Regenerative Medicine 7, no. 6 (June 2013): 434–42.

Presentations

Williams, Michael L, Prince J. Kannankeril, Sara L Van Driest, and Leena Choi. "Effect of CYP3A5 and CYP3A4 Genetic Variants on Fentanyl Pharmacokinetics in a Pediatric Population." Poster Presentation presented at the American Society of Human Genetics - Pharmacogenomics Global Research Network 2021, October 18, 2020.

Williams, Michael L "A Population Pharmacokinetic Analysis Using Real-World Data Extracted from Electronic Health Records: Last-Dosing Times and Other Modeling Considerations." Oral Presentation presented at the Vanderbilt University Department of Biostatistics Seminar Series, March 10, 2020.

Williams, Michael L, Laura M Sampson, Matthew J Ferrari, and Christopher Fonnesbeck. "A Diagnostic Tool for Discrimination of Malarial and Bacterial Causes of Neurological Symptoms." Poster Presentation presented at the Translational Science 2019, Washington DC, February 2019.

Teaching Assistantships

BIOS 6306. Introduction to Study Design   Fall 2019

BIOS 6321. Clinical Trials and Experimental Design   Spring 2020

BIOS 6311. Principles of Modern Biostatistics   Fall 2020

BIOS 6301. Introduction to Statistical Computing   Fall 2021

Relevant Coursework

BIOS 6321. Clinical Trials and Experimental Design   Spring 2018

BIOS 7346. Advanced Regression Analysis II (General Linear Models & Longitudinal Data Analysis)   Spring 2018

BIOS 7362. Advanced Statistical Inference and Statistical Learning   Fall 2018

BIOS 8372. Bayesian Methods   Fall 2019

Awards

Vanderbilt University Department of Biostatistics IT Innovation Award   2021

Association for Clinical and Translational Science TL1 Research Fellow   2018-2020