

# Nicholas Williams

Division of Biostatistics  
Department of Population Health Sciences  
Weill Cornell Medical College

Email: niw4001@med.cornell.edu  
Phone: +1 719 650 1307  
Web: nicholastwilliams.com

## EDUCATION

M.P.H. Biostatistics, Columbia University, 2019  
B.A. Psychology, University of Colorado at Boulder, 2017

## PROFESSIONAL EXPERIENCE

2019– Weill Cornell Medical College  
Research Biostatistician I, Division of Biostatistics  
Department of Population Health Sciences  
2018 Mailman School of Public Health  
Research Assistant, Department of Biostatistics  
Supervisor: Christine Mauro, Ph.D.

## RESEARCH INTERESTS

Nonparametric causal inference methodology for stochastic treatment policies.  
Open source statistical software development with a focus on the user experience of the applied statistician.

## PUBLICATIONS

### Research in Statistics

2020 Díaz, I., **Williams, N.**, Hoffman, K. and Schenck, E. “Non-parametric causal effects based on longitudinal modified treatment policies.” *arXiv* preprint: 2006.01366v2

### Applied Health Sciences

2021 Goel, A.R., Bruce, H.A., **Williams, N.** and Alexiades, G. “Long-Term Effects of Hearing Aids on Hearing Ability in Patients with Sensorineural Hearing Loss.” *Journal of the American Academy of Audiology*.  
2020 Thiesmeyer, J.W., Ullmann, T.M., Greenberg, J., **Williams, N.T.**, Limberg, J., Stefanova, D., Beninato, T., Finnerty, B.M., Vignaud, T., Leclerc, J., Fahey III, T.J., Mirallie, E.M., Brunaud, L. and Zarnegar, R. “Hypertension resolution after adrenalectomy for primary hyperaldosteronism: Which is the best predictive model?” *Surgery*. DOI: 10.1016/j.surg.2020.04.017

- 2020 Riley, C.A., Zheng, Z., **Williams, N.**, Smith, T.L., Orlandi, R.R. and Tabaei, A. "Concordance of self-reported practice patterns of American Rhinologic Society members with the International Consensus Statement of Allergy and Rhinology: Rhinosinusitis" *International Forum of Allergy and Rhinology*. DOI: 10.1002/alr.22533
- 2020 Day, J., Conti, M.S., **Williams, N.**, Ellis, S.J., Deland, J.T. and Cody, E.A. "Contribution of First-Tarsometatarsal Joint Fusion to Deformity Correction in the Treatment of Adult-Acquired Flatfoot Deformity." *Foot and Ankle Orthopaedics*. DOI: 10.1177/2473011420927321
- 2020 Day, J., Kim, J., Conti, M.S., **Williams, N.**, Deland, J.T. and Ellis, S.J. "Outcomes of Idiopathic Flexible Flatfoot Deformity Reconstruction in the Young Patient." *Foot and Ankle Orthopaedics*. DOI: 10.1177/2473011420937985
- 2020 Cronin, S., Conti, M., **Williams, N.** and Ellis, S.J. "Relationship Between Demographic and Radiographic Characteristics and Second Ray Pathology in Hallux Valgus Patients." *Foot and Ankle Orthopaedics*. DOI: <https://doi.org/10.1177/2473011420909088>
- 2019 Hussain, I., Winston, G.M., Goldberg, J., Curri, C., **Williams, N.**, Chazen, J.L., Greenfield, J.P. and Baaj, A.A. "Impact of imaging modality, age, and gender on craniocervical junction angles in adults without structural pathology." *Journal of Craniovertebral Junction and Spine*. PMID: 32089618

#### Manuscripts under review

- 2021 Winston, G., Guadix, S., Lavieri, M., Uribe-Cardenas, R., Kocharian, G., **Williams, N.**, Sholle, E., Grinspan, Z., and Hoffman, C. "Closed-Loop Vagal Nerve Stimulation for Intractable Epilepsy: A Single-Center Experience." Under review at *Seizure: European Journal of Epilepsy*, Winter 2021.

#### Manuscripts in Preparation

- 2020 Day, J., Chrea, B., and **Williams, N.** "Fixation versus Non-Fixation of Posterior Malleolus Fractures." Target: *Foot and Ankle International*, Fall 2020.
- 2020 Mehta, B., Brantner, C., **Williams, N.**, Szymonifka, J., Navarro-Millan, I.Y., Bass, A.R., Russell, L.A., Parks, M.L., Figgie, M.P., Nguyen, J.T., Ibrahim, S. and Goodman, S.M. "Primary Care Provider Density and Elective Total Joint Replacement Outcomes." Target: *Journal of Arthroplasty*, Fall 2020.

#### INVITED TALKS

- 2020 "R Packages." Guest Lecture for Data Science I, Biostatistics and Data Science Program, Weill Cornell Medicine. New York, NY. October 14.
- 2020 "An Introduction to Answering Causal Questions with the lmt R package." Weill Cornell Biostatistics Computing Club. New York, NY. July 14.

## SOFTWARE

### Maintainer

- lmtp* R: Non-Parametric Causal Effects of Feasible Interventions Based on Modified Treatment Policies
- cabinets* R: Project Specific Workspace Organization Templates
- catfun* R: Categorical Data Analysis

### Contributer

- broom* R: Convert Statistical Objects into Tidy Tibbles

## CONFERENCE ACTIVITY

### Conference Presentations

Presenting author *italicized*.

- 2021 *Brantner, C., Pearce-Fisher, D., Moezina, C., ..., Williams, N., Demetres, M., and Goodman, S.* "Treatment knowledge and preferences for Black people with hip and knee osteoarthritis: A Systematic Literature Review and Meta-Analysis." European Congress of Rheumatology.
- 2020 *Williams, N., Savenkov, O. and Chrea, B.* "Estimating the Causal Effect of Surgical Treatment for Posterior Malleolus Fracture with Different Treatment Rules on Patient Reported Outcomes." Joint Statistical Meetings (Virtual), Philadelphia, PA.
- 2019 *Mauro, C., Williams, N. and An, A.* "Experiences with Incorporating R into a Second-Level Biostatistics Course for MPH Students." Joint Statistical Meetings, Denver, CO.

## GRANTS AND AWARDS

### Awards and Honors

- 2017 Graduate with Distinction, University of Colorado at Boulder

### Grants and Fellowships

- 2015 Virginia Summer Undergraduate Research Initiative. Project: "The relationship between cognitively oriented verbs and affect."

## TEACHING EXPERIENCE

### Weill Cornell Medicine

Data Science I  
(Teaching Assistant)

## **Columbia University**

Categorical Data Analysis  
(Lead Teaching Assistant)

Research Methods, Quantitative Foundations  
(Teaching Assistant)

## **PROFESSIONAL AFFILIATIONS**

2020– American Statistical Association

## **TECHNICAL SKILLS**

R expert

SAS

SQL

L<sup>A</sup>T<sub>E</sub>X

Julia novice

C++ novice

Ruby novice

Updated February 2021