# Will Simmons

Weill Cornell Medicine, New York, NY simmwill.github.io

### **Education**

M.P.H. Epidemiology & Biostatistics, 2020 GPA: 4.0 Columbia University, New York, NY

B.S. Neuroscience, 2015 GPA: 4.0

Baylor University, Waco, TX

## **Experience**

#### Professional and Research

2020- Weill Cornell Medicine, Division of Biostatistics, Department of Population Health Sciences New York, NY

Research Biostatistician II (2022–) Programmer Analyst I (2020–2022)

2019–2020 Columbia University Mailman School of Public Health New York, NY

Graduate Research Assistant, Department of Epidemiology

2019–2020 Columbia University Earth Institute Palisades, NY

Graduate Research Assistant, International Research Institute for Climate and Society

2015–2018 Hawai'i Alliance for Community Based Economic Development Honolulu, HI

Grantwriter

2015 Our Children, Their Nutrition Waco, TX

Lead Program Evaluator

### **Teaching**

Weill Cornell Medicine, M.S. Biostatistics and Data Science Program

Instructor, SQL & Database Management (Spring 2023)

Teaching Assistant, SQL & Database Management (Spring 2022)

Teaching Assistant, Data Science I (Fall 2021)

Columbia University Mailman School of Public Health

Teaching Assistant, SQL Bootcamp (Summer 2022)

Teaching Assistant, Quantitative Research Methods (Fall 2019)

# Funding, Honors, and Memberships

### **Grants and Scholarships**

2018–2020 Wyman Scholar, Columbia University Mailman School of Public Health (full tuition: 2 years of graduate study)

2013 Glennis McCrary Goodrich Scholarship Award for International Research (\$3,500)

2011–2015 Regent's Gold Scholar, Baylor University (full tuition: 4 years of undergraduate study)

#### **Awards and Honors**

2020 First prize research poster, NYC Clinical Climate Change Conference

2019 First prize research presentation, Master's Student Day, Columbia University Department of Epidemiology

### **Professional Memberships**

2021- Member, Scientific Committee, NYC Epidemiology Forum

2021 Member, American Statistical Association
2014 Member, Phi Beta Kappa Honor Society

## **Publications**

#### Published:

- Narayanan N, Langer S, Acker KP, Rosenblatt SD, **Simmons W**, Wu A, Han JY, Abramson EL, Grinspan ZM, Levine DA. COVID-19 croup is observed in older children during the Omicron wave in New York City. The Journal of Emergency Medicine. Published online September 19, 2022. doi.org/10.1016/j.jemermed.2022.09.036.
- Batra R, Uni R, Akchurin OM, Alvarez-Mulett S, Gómez-Escobar LG, Hoffman KL, **Simmons W**, Chetnik K, Buyukozkan M, Benedetti E, Suhre K, Schmidt F, Schenck E, Cho SJ, Choi AMK, Choi ME, Krumsiek J. "Multiomic comparative analysis of COVID-19 and bacterial sepsis-induced ARDS." *PLOS Pathogens.* 18 (9), e1010819. doi.org/10.1371/journal.ppat.1010819.
- Acker KP, Levine DA, Varghese M, Nash KA, RoyChoudhury A, Abramson EL, Grinspan ZM, **Simmons W**, Wu A, Han J-Y. "Indications for Hospitalization in Children with SARS-CoV-2 Infection during the Omicron Wave in New York City." *Children*. 2022; 9(7):1043. doi.org/10.3390/children9071043.
- Min JY, **Simmons W**, Banergee S, Wang F, Williams N, Zhang Y, Reese AB, Mushlin AI, Flory JH. "Association between antidiabetic drug use and the risk of COVID-19 hospitalization in the INSIGHT Clinical Research Network in New York City." *Diabetes, Obesity and Metabolism.* 2022; 24 (7), 1402. doi.org/10.1111/dom.14704.
- Buyukozkan M, Alvarez-Mulett S, Racanelli AC, Schmidt F, Batra R, Hoffman KL, Sarwath H, Engelke R, Gomez-Escobar L, **Simmons W**, Benedetti E, Chetnik K, Zhang G, Schenck E, Suhre K, Choi JJ, Zhao Z, Racine-Brzostek S, Yang HS, Choi ME, Choi AMK, Cho SJ, Krumsiek J. "Integrative metabolomic and proteomic signatures define clinical outcomes in severe COVID-19." *iScience*. 2022 Jul 15;25(7):104612. doi.org/10.1016/j.isci.2022.104612.
- Min JY, Williams N, **Simmons W**, Banergee S, Wang F, Zhang Y, Reese AB, Mushlin AI, Flory JH. (2022). "Baseline hemoglobin A1c and the risk of COVID-19 hospitalization and death among type 2 diabetes patients in the INSIGHT Clinical Research Network." *Diabetic Medicine*. 2022 May; 39(5): e14815. doi.org/10.1111/dme.14815.
- Nissan H, **Simmons W**, Downs SD. (2022). "Building climate-sensitive nutrition programmes [Élaboration de programmes de nutrition adaptés au climat]." *Bulletin of the World Health Organization, 100*(1), 70-77. doi.org/10.2471/BLT.21.285589.
- Simmons W, Stingone J, Luben T, Sheridan S, Langlois P, Shaw G, Reefhuis J, Romitti P, Feldkamp M, Nembhard W, Browne M, Lin S, and the National Birth Defects Prevention Study. (2021). "Modeling complex effects of exposure to particulate matter and extreme heat during pregnancy on congenital heart defects: a U.S. population-based case-control study in the National Birth Defects Prevention Study." *Science of the Total Environment*, 152150. doi.org/10.1016/j.scitotenv.2021.152150.

#### In preparation:

Zhang WZ, **Simmons W**, Kim K, Hoffman K, Haber L, Goyal P, Schenck E, Plataki M, Choi AMK, Cloonan SM. "Macrophage ferritin light chain secretion is a protective response in Acute Respiratory Distress Syndrome (ARDS) with relevance for COVID-19 induced critical illness." Target: *American Journal of Respiratory and Critical Care Medicine*.

### **Presentations and Invited Talks**

\*Presenting author.

- 2022 **Simmons W\***. "dbplyr and the tidy-SQL-verse." Invited presentation, Weill Cornell Biostatistics Computing Club. New York, NY. Link to slides.
- Simmons W\*. "data.table and dtplyr: R packages for high-efficiency data processing." Invited lecture, Data Science I, Weill Cornell M.S. Biostatistics and Data Science. New York, NY. Link to slides.
- Simmons W\*, Stingone J, Luben T, et al. "Modeling complex effects of exposure to particulate matter and extreme heat during pregnancy on congenital heart defects." Poster presentation, 33rd Annual Conference for the International Society of Environmental Epidemiology. Virtual. doi.org/10.1289/isee.2021.P-571.
- 2021 **Simmons W\***. "Balancing reproducibility and modifiability: ETL pipelines using R and the REDCap API." Invited presentation, Weill Cornell Biostatistics Computing Club. New York, NY. Link to slides.
- Simmons W\*, Nissan H. "Climate variation and anthropometric indicators of under-5 nutrition: Bangladesh, 1990-2006." Poster, 2nd Annual Conference on Clinical Climate Change. Icahn School of Medicine at Mount Sinai. New York, NY. First prize. Link to poster.

- Simmons W\*, Nissan H. "Associations between climate and under-5 nutritional status in Bangladesh, 1990-2006." Invited presentation, Epidemiology Master's Student Day. Columbia University Mailman School of Public Health. New York, NY. First prize. Link to slides.
- 2016 **Simmons W**, Baker L\*. "Clean water, food security, or protein? A study of growth among children in rural Kenya." Presentation, 13th Annual Global Health & Innovation Conference. Yale University, New Haven, CT.

# **Technical Skills**

Languages, Software, & Tools

Certifications

Daily: R, SQL, Git/DVCS/GitHub

HIPAA, CITI Human Subjects

As needed: R Shiny, SAS, QGIS, LATEX, REDCap