RACHAEL K. ROSS, MPH, PhD

Updated: Oct 2023

Address: Columbia University

Mailman School of Public Health Department of Epidemiology

722 W 168th St

New York, NY 10032

Email: rachael.k.ross@columbia.edu

Telephone: 215-805-2761

EDUCATION AND TRAINING

Postdoctoral Research Scientist

2023-

Department of Epidemiology, Columbia University

Advisors: Kara Rudolph (Columbia) and Elizabeth Stuart (Johns Hopkins University)

PhD in Epidemiology (Minor in Biostatistics)

2023

University of North Carolina at Chapel Hill

Advisor: Stephen R. Cole

Dissertation: Missing Data and Measurement Error: Analytic Approaches for Observational

Studies with Examples from Pregnancy Outcomes Research

MPH in Epidemiology and Global Health

2011

Emory University

BA in Biological Basis of Behavior

2006

University of Pennsylvania

PROFESSIONAL POSITIONS

Pharmacoepidemiology Summer Intern

2021

RTI International, Durham, NC

Summer Research Fellow

2020

NoviSci Inc., Durham, NC

Epidemiology Research Associate

2011-2018

Center for Pediatric Clinical Effectiveness, Division of Infectious Diseases

Children's Hospital of Philadelphia, Philadelphia, PA

DISTINCTIONS AND FELLOWSHIPS

Delta Omega Honorary Society

2023

University of North Carolina at Chapel Hill	
Royster Society of Fellows University of North Carolina at Chapel Hill	2022-2023
The Lovick P. Corn Dissertation Fellowship University of North Carolina at Chapel Hill	2022-2023
T32 Predoctoral Fellow University of North Carolina at Chapel Hill	2020-2022
Student/Postdoc Abstract Award International Conference on Pharmacoepidemiology and Therapeutic Risk Management	2020
Antimicrobial Stewardship Program Fellowship Award Pediatric Infectious Diseases Society	2019-2020
Predoctoral Fellow in Pharmacoepidemiology Center for Pharmacoepidemiology, University of North Carolina at Chapel Hill	2019-2020
Conference Student Travel Award International Society for Pharmacoepidemiology	2019-2022
Graduate Merit Assistantship University of North Carolina at Chapel Hill	2018-2019
Certificate for Exceptional Global Health Thesis Emory University	2011
Outstanding Practicum Experience Award Emory University	2011
Delta Omega Honorary Society Emory University	2010
Summa Cum Laude University of Pennsylvania	2006

PUBLICATIONS

Published, peer-reviewed

- 46. **Ross RK**, Cole SR, Edwards JK, Zivich P, Westreich D, Daniels J, Price J, Stringer JSA. Leveraging external validation data: the challenges of transporting measurement error parameters. Epidemiology (accepted)
- 45. Webster-Clark M, **Ross RK**, Keil AP, Platt R. Variable Selection When Estimating Effects in External Target Populations. *American Journal of Epidemiology* (accepted)
- 44. Lemasters K, **Ross RK**, Edwards JK, Robinson WR, Brinkley-Rubinstein L, Delamater PL, Pence BW. Mass probation: Effects of probation on mental health disparities. *Epidemiology* (accepted)
- 43. **Ross RK**, Cole SR, Edwards JK, Westreich D, Daniels J, Stringer JSA. Accounting for nonmonotone missing data using inverse probability weighting. *Statistics in Medicine*. 2023 Oct 15. 42(23):4282-4298. doi: 10.1002/sim.9860. Epub ahead of print. PMID: 37525436.
- 42. Wattier RL, Bucayu RFT, Boge CLK, **Ross RK**, et al. Adjunctive Diagnostic Studies Completed Following Detection of Candidemia in Children: Secondary Analysis of Observed Practice from a

- Multicenter Cohort Study Conducted by the Pediatric Fungal Network. *Journal of Pediatric Infectious Diseases Society*. 2023 Sep 27: 12(9):487-495. doi: 10.1093/jpids/piad057. PMID: 37589394.
- 41. **Ross RK**, Cole SR, Westreich D, Edwards JK, Musonda P, Vwalika B, Kasaro M, Price JT, Stringer JSA. Different effects for different questions: an illustration using short cervix and the risk of preterm birth. *International Journal of Gynecology and Obstetrics*. 2023 Mar; 160(3):842-849. doi: 10.1002/ijgo.14372. PMID: 35899762
- 40. **Ross RK**, Keil AP, Cole SR, Edwards JK, Stringer JSA. A Warning About Using Predicted Values for Estimating Descriptive Measures. *American Journal of Epidemiology*. 2023 Jan 27:kwad020. doi: 10.1093/aje/kwad020. PMID: 36708231
- 39. Cole SR, Zivich PN, Edwards JK, **Ross RK**, Shook-Sa BE, Price JT, Stringer JSA. Missing Outcome Data in Epidemiologic Studies. *American Journal of Epidemiology*. 2023 Jan 6;192(1):6-10. doi: 10.1093/aje/kwac179. PMID: 36222655
- 38. **Ross RK**, Su I, Webster-Clark M, Jonsson Funk M. Nondifferential treatment misclassification biases toward the null? Not a safe bet for active comparator studies. *American Journal of Epidemiology*. 2022 Oct 20; 191(11):1917-1925. doi:10.1093/aje/kwac131. PMID: 35882378
- 37. **Ross RK**, Breskin A, Breger TL, Westreich D. Reflection on modern methods: combining weights for confounding and missing data. *International Journal of Epidemiology*. 2022 May 9:dyab205. doi: 10.1093/ije/dyab205. PMID: 34536004
- Chiotos K, D'Arinzo L, Kitt E, Ross RK, Gerber JS. Quantifying Empiric Antibiotic Use in US Children's Hospitals. *Hospital Pediatrics*. 2021 Dec 1;hpeds.2021-005950. doi: 10.1542/hpeds.2021-005950. PMID: 34807987
- 35. **Ross RK**, Cole SR, Richardson DB. Decreased susceptibility of marginal odds ratios to finite sample bias. *Epidemiology*. 2021 Sep 1;32(5):648-652. doi: 10.1097/EDE.000000000001370. PMID: 34001751
- 34. Fisher BT, Zaoutis TE, Xiao R, Wattier RL, Castagnola E, Pana ZD, Fullenkamp A, Boge CLK, **Ross RK**, et al. Comparative Effectiveness of Echinocandins vs Triazoles or Amphotericin B Formulations as Initial Directed Therapy for Invasive Candidiasis in Children and Adolescents. *Journal of Pediatric Infectious Diseases Society*. 2021 Aug 10:piab024. doi: 10.1093/jpids/piab024. PMID: 34374424
- 33. Webster-Clark M, **Ross RK**, Lund JL. Initiator Types and the Causal Question of the Prevalent New User Design. *American Journal of Epidemiology*. 2021 Jul 1;190(7):1341-1348. doi: 10.1093/aje/kwaa283. PMID: 33350433
- 32. **Ross RK**, Kinlaw AC, Herzog MM, Jonsson-Funk M, Gerber JS. Fluoroquinolone Antibiotics and Tendon Injury in Adolescents. *Pediatrics*. 2021 Jun;147(6): e2020033316. doi: 10.1542/peds.2020-033316. PMID: 33990459
- 31. **Ross RK**, Gerber JS, Willis ZI, Hersh A. Kinlaw AC. Outpatient fluoroquinolone use in children, 2000-2018. *Journal of Pediatric Infectious Diseases Society*. 2021 May 28;10(5):576-585. doi: 10.1093/jpids/piaa156. PMID: 33377490
- 30. Richardson DB, Cole SR, **Ross RK**, Poole C, Chu H, Keil AP. Meta-analysis Reduces Sampling Error but not Sparse Data Bias. *American Journal of Epidemiology*. 2021 Feb 1;190(2):336-340. doi: 10.1093/aje/kwaa205. PMID: 32975277
- 29. **Ross RK**, Kuo TM, Jonsson-Funk M, Lund JL. Validation of a 5-year mortality prediction model among US Medicare beneficiaries. *Journal of American Geriatrics Society*. 2020 Dec;68(12):2898-2902. doi: 10.1111/jgs.16816. PMID: 32889756

- 28. **Ross RK**, Breskin A, Westreich D. When is a complete case approach to missing data valid? The importance of effect measure modification. *American Journal of Epidemiology*. 2020 Dec 1;189(12):1583-1589. doi: 10.1093/aje/kwaa124. PMID: 32601706
- 27. Gerber JS, **Ross RK**, Xiao R, Localio AR, Grundmeier RW, Rettig SL, Teszner E, Szymczak JE, Canning D, Coffin SE. Infections after pediatric ambulatory surgery: incidence and risk factors. *Infection Control and Hospital Epidemiology*. 2019 Feb; 40(2):150-157. PMID: 30698133
- 26. Tribble AC, **Ross RK**, Gerber JS. Comparison of Antibiotic Prescribing for Pediatric Community-Acquired Pneumonia in Children's and Non-Children's Hospitals. *JAMA Pediatrics*. 2019 Feb 1:173(2):190-192. PMID: 30534969
- 25. Karavite DJ, Miller MW, Ramos MJ, Rettig SL, **Ross RK**, Xiao R, Muthu N, Localio AR, Gerber JS, Grundmeier RW, Coffin SE. User testing an information foraging tool for ambulatory surgical site infection surveillance. *Applied Clinical Informatics*. 2018 Oct;9(4):791-802. PMID: 30357777
- 24. Grundmeier RW, Xiao R, **Ross RK**, Ramos MJ, Karavite DJ, Michel J, Gerber JS, Coffin SE. Identifying surgical site infections in electronic health data using predictive models. *Journal of the American Medical Informatics Association*. 2018 Sep 1;29(9);1160-1166. PMID: 29982511
- 23. Flannery DD, **Ross RK**, Mukhopadhyay S, Tribble AC, Puopolo KM, Gerber JS. Temporal trends and center variation in early antibiotic use among premature infants. *JAMA Network Open*. 2018;1(1):e180164. doi:10.1001/jamanetworkopen.2018.0164. PMID: 30646054
- 22. Ross RK, Keele L, Kubis S, Lautz AJ, Dziorny AC, Denson AR, O'Connor KA, Chilutti MR, Weiss SL, Gerber JS. Effect of the Procalcitonin Assay on Antibiotic Utilization in Critically Ill Children. Journal of Pediatric Infectious Diseases Society. 2018 Feb 08 https://doi.org/10.1093/jpids/piy004. PMID: 29529219
- 21. Gerber JS, **Ross RK**, Bryan M, Localio AR, Szymczak JE, Wasserman R, Barkman D, Odeniyi F, Conaboy K, Bell L, Zaoutis TE, Fiks AG. Association of broad- vs narrow-spectrum antibiotics with treatment failure, adverse effects, and quality of life in children with acute respiratory tract infections. *JAMA*. 2017;318(23);2325-2336. PMID: 29260224
- 20. Vaughan AM, Ross RK, Gilman MM, Satchell L, Ditaranto S, Reilly AF, Kersun LS, Shanahan A, Coffin SE, Sammons JS. Mucosal Barrier Injury Central-Line-Associated Bloodstream Infections: What is the Impact of Standard Prevention Bundles? *Infection Control and Hospital Epidemiology*. 2017 Sep 6:1-2 [Epub ahead of print]. PMID: 28874212
- Gerber JS, Hersh AL, Kronman ML, Newland JG, Ross RK, Metjian TA. Development and Application of an Antibiotic Spectrum Index for Benchmarking Antibiotic Selection Patterns Across Hospitals. *Infection Control and Hospital Epidemiology*. 2017 Aug;38(8):993-997. PMID: 28560946
- Goldman JL, Ross RK, Lee BR, Newland JG, Hersh AL, Kronman MP, Gerber JS. Variability in Antifungal and Antiviral Use in Hospitalized Children. *Infection Control and Hospital Epidemiology*. 2017 Jun;38(6):743-746. PMID: 28294077
- 17. Chiotos K, **Ross RK**, Han JH, Miller M, Gerber JS. Use of Carbapenems, Polymyxins, and Tigecycline in United States Children's Hospitals, 2010-2014. *Open Forum Infectious Diseases*. 2017 Jun;38(6):743-746. PMID: 28470018
- Weiss SL, Keele L, Balamuth F, Vendetti N, Ross RK, Fitzgerald JC, Gerber JS. Crystalloid Fluid Choice and Clinical Outcomes in Pediatric Sepsis: A Matched Retrospective Cohort Study. *Journal of Pediatrics*. 2017 Mar;182:304-310. PMID: 28063688
- 15. Fisher BT, **Ross RK**, Roilides E, Palazzi DL, Abzug MJ, Hoffman JA, Berman DM, Prasad PA, Localio AR, Steinbach WJ, Vogiatzi L, Dutta A, Zaoutis TE. Failure to Validate a Multivariable Clinical Prediction Model to Identify Pediatric Intensive Care Unit Patients at High Risk for

- Candidemia. *Journal of Pediatric Infectious Diseases Society*. 2016 Dec;5(4):458-461. PMID: 26407259
- 14. Larru B, Sulieman SE, Localio AR, Ross RK, Sharland M, Zaoutis TE, Gerber JS. Frontline clinician knowledge of antimicrobial prescribing in an academic tertiary children's hospital: a point prevalence study. *Journal of Pediatric Infectious Diseases Society*. 2016 Dec;5(4):462-464. PMID: 26407260
- 13. Lautz AJ, Dziorny AC, Denson AR, O'Connor KA, Chilutti MR, **Ross RK**, Gerber JS, Weiss SL. Value of Procalcitonin measurements for early evidence of severe bacterial infections in the pediatric intensive care unit. *Journal of Pediatrics*. 2016 Dec;179:74-81. PMID: 27587074
- 12. **Ross RK**, Beus JM, Metjian TA, Localio AR, Shelov ED, Desai BR, O'Neill SP, Zaoutis TE, Gerber JS. Safety of automatic end dates for antimicrobial orders to facilitate stewardship. *Infection Control and Hospital Epidemiology*. 2016 Aug;37(8):974-8. PMID: 27174362
- 11. Miller MW, **Ross RK**, Voight C, Brouwer H, Karavite DJ, Gerber JS, Grundmeier RW, Coffin SE. Patient-generated digital images after pediatric ambulatory surgery. *Applied Clinical Informatics*. 2016 Jul 6;7(3):646-52. PMID: 27452477
- Kronman MP, Oron AP, Ross RK, Hersh AL, Newland JG, Goldin A, Rangel SJ, Weissman SJ, Zerr DM, Gerber JS. Extended versus narrower-spectrum antibiotics for appendicitis. *Pediatrics*. 2016 Jul;138(1). PMID: 27354453
- 9. Gerber JS, Bryan M, **Ross RK**, Daymont C, Parks EP, Localio AR, Grundmeier RW, Stallings VA, Zaoutis TE. Antibiotic Exposure during the First 6 Months of Life and Weight Gain during Childhood. *JAMA*. 2016;315(12):1258-126. PMID: 27002447
- 8. Kronman MP, Hersh AL, Gerber JS, **Ross RK**, Newland JG, Goldin A, Rangel SJ, Oron AP, Zerr DM. Identifying Antimicrobial Stewardship Targets for Pediatric Surgical Patients. *Journal of Pediatric Infectious Diseases Society*. 2015 Dec;4(4):e100-8. PMID: 26407258
- **7. Ross RK**, Hersh AL, Kronman MP, Newland JG, Gerber JS. Cost of antimicrobial therapy across US children's hospitals. *Infection Control and Hospital Epidemiology*. 2015 Oct;36(10):1242-4. PMID: 26166408
- 6. Milder EA, Rizzi MD, Morales KH, **Ross RK**, Lautenbach E, Gerber JS. Impact of a new practice guideline on antibiotic use with pediatric tonsillectomy. *JAMA Otolaryngology-Head & Neck Surgery*. 2015 May 1;141(5):410-6. PMID: 25719954
- Ross RK, Hersh AL, Kronman MP, Newland JG, Metjian TA, Localio AR, Zaoutis TE, Gerber JS. Impact of Infectious Diseases Society of America/Pediatric Infectious Diseases Society guidelines on treatment of community-acquired pneumonia in hospitalized children. *Clinical Infectious Diseases*. 2014 Mar;58(6):834-8. PMID: 24399088
- 4. Fisher BT, **Ross RK**, Localio AR, Prasad PA, Zaoutis TE. Decreasing rates of invasive candidiasis in pediatrics hospitals across the United States. *Clinical Infectious Diseases*. 2014 Jan;58(1):74-7. PMID: 24114736
- 3. Gerber JS, Kronman MP, **Ross RK**, Hersh AL, Newland JG, Metjian TA, Zaoutis TE. Identifying targets for antimicrobial stewardship in children's hospitals. *Infection Control and Hospital Epidemiology*. 2013 Dec;34(12):1252-8. PMID: 24225609
- Ross RK, King JD, Damte M, Ayalew F, Gebre T, Cromwell EA, Teferi T, Emerson PM. An Evaluation of Household Latrine Coverage in Kewot District, Ethiopia Three Years After Implementing Interventions to Control Blinding Trachoma. *International Health*. 2011 Dec;3(4):251-8. PMID: 24038498
- Pelletreau S, Nyaku M, Dembele M, Sarr B, Budge P, Ross RK, Mathieu E. The field-testing of a novel integrated mapping protocol for neglected tropical diseases. *PLoS Neglected Tropical Diseases*. 2011 Nov;5(11). PMID: 22102921

Under review

- **Ross RK**, Zivich PN, Stringer JSAS, Cole SR. M-estimation: introduction and applied examples. *International Journal of Epidemiology*
- Zivich P, **Ross RK**, Shook-Sa B, Cole SR, Edwards JK. Empirical sandwich variance estimator for iterated conditional expectation g-computation. *Statistics in Medicine*

In preparation

- Webster-Clark M, **Ross RK**, Edwards JK. Validity of Complete Case Analysis Depends on the Target Population. Target: *American Journal of Epidemiology*
- **Ross RK**, Stuart EA, Rudolph KE. Comparative effectiveness of oral buprenorphine and extended release naltrexone for treatment of opioid use disorder among Medicaid beneficiaries. Target: *Drug and Alcohol Dependence*
- **Ross RK**, Rudolph KE, Shover C. Availability, coverage, and prescribing of extended release buprenorphine for Medicaid beneficiaries. Target: *Journal of Addiction Medicine*
- **Ross RK**, Stuart EA, Rudolph KE. Extended release naltrexone treatment for opioid use disorder: identification in Medicaid and description of treatment course and outcomes. Target: *Medical Care*

Letters

- Zivich P, **Ross RK**. RE: "Using numerical methods to design simulations: revisiting the balancing intercept." *American Journal of Epidemiology*. 2022 Sep 28;191(10):1833-1834. PMID: 35513352
- Tribble AC, **Ross RK**, Gerber JS. Does a diagnosis of community-acquired pneumonia in a child always require antibiotics? *JAMA Pediatrics*. 2019 Aug 1;173(8):797-798. PMID: 31157897

PRESENTATIONS

Invited

- Ross RK. 2023. Using external data to address measurement error: a transportability perspective. Extending Inferences to a New Target Population Conference, **The Institute for Computational Experimental Research in Mathematics**. Providence, RI
- Ross RK. 2022. Using Predicted Values in Descriptive Epidemiology. **Royster Society of Fellows, University of North Carolina**. Chapel Hill, NC

Recent oral abstracts (last 5 years)

- Webster-Clark M, **Ross RK**, Edwards JK. Conditions for Unbiased Complete Case Analysis in External Control Arms: A Simulation Study. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. August 2023. Halifax, Canada.
- **Ross RK**, Cole SR, Edwards JK, Price J, Westreich D, Daniels J, Stringer JSA. Leveraging external validation data for measurement error: the issue of transportability. *Society for Epidemiologic Research*. June 2023. Portland, OR.
- **Ross RK**, Keil AP, Cole SR, Edwards JK, Stringer JSA. A Warning About Using Predicted Values for Estimating Descriptive Measures. *Society for Epidemiologic Research*. June 2023. Portland, OR.

- Webster-Clark M, **Ross RK**, Keil AP, Platt R. Variable Selection for Transporting to External Target Populations. *Society for Epidemiologic Research*. June 2023. Portland, OR.
- Lemasters K, **Ross RK**, Edwards JK, Robinson WR, Brinkley-Rubinstein L, Delamater PL, Pence BW. Mass probation: Effects of probation on mental health disparities. *Society for Epidemiologic Research*. June 2023. Portland, OR.
- **Ross RK**, Cole SR, Edwards JK, Westreich D, Daniels J, Stringer JSA. Nonmonotone missing data: weighting or imputation? *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. August 2022. Copenhagen, Denmark.
- **Ross RK**, Cole SR, Edwards JK, Westreich D, Daniels J, Stringer JSA. Nonmonotone missing data: weighting or imputation? *Society for Epidemiologic Research*. June 2022. Chicago, IL.
- **Ross RK**, Su I, Jonsson Funk M. Nondifferential treatment misclassification biases toward the null? Not a safe bet. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. August 2021. Virtual Meeting.
- **Ross RK**, Su I, Jonsson Funk M. Nondifferential exposure misclassification in active comparator studies: drivers of bias away from the null. *Society for Epidemiologic Research*. June 2021. Virtual Meeting.
- **Ross RK**, Cole SR, Westreich D, Edwards JK, Price J, Stringer JSAS. Exposure effects & intervention effects: an illustration examining high blood pressure and preterm birth. *Society for Pediatric and Perinatal Epidemiologic Research*. June 2021. Virtual Meeting.
- **Ross RK**, Breskin A, Westreich D. Combining weights for missing data and confounding. *Society for Epidemiologic Research*. December 2020. Virtual Meeting.
- **Ross RK**, Gerber JS, Herzog MM, Jonsson-Funk M, Kinlaw AC. Fluoroquinolone antibiotic exposure and risk of Achilles tendon injury in adolescents in the United States 2000-2018. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. September 2020. Virtual Meeting.
 - Award: Third Best Abstract Submitted by a Student/Postdoc
- **Ross RK**, Kuo TM, Jonsson-Funk M, Lund JL. Validation of a 5-year mortality prediction model among US Medicare beneficiaries. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. August 2019. Philadelphia, PA.

Recent posters (last 5 years)

- **Ross RK**, Cole SR, Edwards JK, Price J, Westreich D, Daniels J, Stringer JSA. Leveraging external validation data for measurement error: the issue of transportability. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. August 2023. Halifax, Canada.
- Webster-Clark M, **Ross RK**, Keil AP, Platt R. Variable Selection for Transporting to Specific Target Populations. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. August 2023. Halifax, Canada
- Webster-Clark M, **Ross RK**, Edwards JK. Validity of Covariate Complete Case Analysis Depends on the Target and Analytic Population. *Society for Epidemiologic Research*. June 2023. Portland, OR.
- Sadinski LM, **Ross RK**, Breskin A. Model specification for outcome predictors in inverse probability weighting. *Society for Epidemiologic Research*. June 2023. Portland, OR.
- **Ross RK**, Cole SR, Price J, Stringer JSAS. High blood pressure and preterm birth: exposure effects or intervention effects? *Society for Epidemiologic Research*. June 2021. Virtual Meeting.

- **Ross RK**, Cole SR, Richardson DB. Decreased susceptibility of marginal effect estimates to finite sample bias. *Society for Epidemiologic Research*. December 2020. Virtual Meeting.
- Webster-Clark M, **Ross RK**, Lund JL. Prevalent New Users: When Is Time Not Enough? *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. September 2020. Virtual Meeting.
- Strassle, PD, **Ross RK**, Marx AH, Willis ZI, Farel CE, Kinlaw AC. Differential missingness of antibiotic indication in claims data. *International Conference on Pharmacoepidemiology and Therapeutic Risk Management*. September 2020. Virtual Meeting.
- **Ross RK**, Breskin A, Westreich D. Missing data in the presence of confounding. *Society for Epidemiologic Research*. June 2019. Minneapolis, MN.
- Gerber JS, **Ross RK**, Xiao R, Localio AR, Grundmeier RW, Rettig SL, Teszner E, Szymczak JE, Canning D, Coffin SE. Infections after Pediatric Ambulatory Surgery: Incidence and Risk Factors. *Infectious Diseases Society of America*. October 2018. San Francisco, CA.

TEACHING

Co-Instructor, "The ABCs of M-estimation"

June 2023

Preconference Workshop

Society for Epidemiologic Research Annual Meeting

Co-instructors: Dr. Paul N. Zivich and Dr. Stephen R. Cole

Invited Lecturer, "Introduction to Epidemiologic Methods"

Reproductive, Pediatric, and Perinatal Epidemiology (EPID 851)

Department of Epidemiology, University of North Carolina

Lead course instructor: Dr. Andrew Olshan

Invited Lecturer, "Generalizability and Transportability"

February 2022

August 2022

Advanced Epidemiology Methods (EPID 722)

Department of Epidemiology, University of North Carolina

Co-lecturer: Lauren Zalla

Lead course instructors: Dr. Jessie K. Edwards and Dr. Stephen R. Cole

Teaching Assistant Spring 2021

Advanced Epidemiology Methods (EPID 722)

Department of Epidemiology, University of North Carolina

Lead course instructors: Dr. Stephen R. Cole and Dr. Jessie K. Edwards

SERVICE

Ad Hoc Reviewer

American Journal of Epidemiology, Epidemiology, International Journal of Epidemiology, Clinical Epidemiology, Annals of Epidemiology, JAMA Network Open, BMJ, Clinical Infectious Diseases, Research Synthesis Methods, Pediatrics, Journal of Pediatric Infectious Diseases Society, Scientific Reports

Committees

Society	for	Fnide	mial	ogic	Research
Society	IOL	Epiu(OLIC	Research

Program Co-Chair, Student and Post-Doc Committee	2021-2023
Member, Membership committee	2016-2019
Session Chair/Co-Chair at Annual Meeting	
Breakfast with the Experts	2022, 2023
Speed Mentor Networking	2022, 2023
Student and Post-Doc Committee Career Panel	2022, 2023
Career Pathways for Master's Level Epidemiologist Session	2019

Department of Epidemiology, University of North Carolina

Student Representative, Graduate Studies Committee 2019-2020

International Society for Pharmacoepidemiology

UNC Student Chapter

Treasurer	2019-2020
Treasurer-elect	2018-2019

Delta Omega Honorary Society

Rollins School of Public Health, Emory University

Treasurer 2010-2011

Society membership

Society for Epidemiologic Research	2016-
International Society for Pharmacoepidemiology	2018-
Society for Pediatric and Perinatal Epidemiologic Research	2020-2022

GRANT FUNDING

R01 DA056407, NIDA (MPI: Rudolph and Stuart)

4/17/2023 -

Design and analysis advances to improve generalizability of clinical trials for treating opioid use disorder

Postdoctoral Research Scientist

T32 HD52468, NICHD (PI: Daniels)

08/01/2020 - 07/31/2022

Training program in reproductive, perinatal and pediatric epidemiology

Predoctoral Fellow

02/15/2016 - 01/31/2021

R01 AI121383, NIAID (PI: Gerber)

Early life antibiotics, gut microbiome development, and risk of childhood obesity Significantly contributed to preparation of grant application

CE-1304-7279, PCORI (PI: Gerber)

10/01/2013 - 09/30/2016

Comparative Effectiveness of Broad vs. Narrow Spectrum Antibiotics for Acute Respiratory Tract Infections in Children

Significantly contributed to preparation of grant application