

Chanmin Kim

CONTACT INFORMATION	25-2, Sungkyunkwan-ro, Jongno-gu Seoul 03063, Korea	02-760-0495 chanmin.kim@skku.edu
RESEARCH INTERESTS	Bayesian nonparametric methods and Machine learning Causal modeling and Causal mechanism Policy Evaluation, Environmental statistics, and behavioral sciences	
CURRENT POSITION	SungKyunKwan University , Department of Statistics, Seoul, Korea Assistant Professor of Statistics,	Jan 2020 -
	Boston University , Department of Biostatistics, Boston Adjunct Assistant Professor of Biostatistics,	Jan 2020 -
EDUCATION / TRAINING	Harvard University , Department of Biostatistics, Boston, MA Research Associate & Postdoctoral Research Fellow July 2014 - Aug 2017 Project: <i>Developing Bayesian causal inference methods for evaluating air pollution regulatory policies.</i> Mentor: Corwin M. Zigler, Ph.D.	
	University of Florida , Gainesville, FL Ph.D., Statistics Aug 2013 Thesis: <i>Bayesian methods for inference on the causal effects of mediation.</i> Advisor: Michael J. Daniels, Sc.D.	
	Columbia University in the City of New York , New York, NY M.A., Statistics May 2008	
	Sogang University , Seoul, Korea B.B.A., B.A., Business and History (Double Major) Feb 2006 <i>Magna Cum Laude</i> the second highest GPA in the department.	
RESEARCH AND PROFESSIONAL EXPERIENCE	Assistant Professor Department of Biostatistics, Boston University, Boston, MA	Sep 2017 - Dec 2019
	Advisory Committee Hyundai Motor Group, Seoul, Korea	Nov 2020 - Feb 2021
	Postdoctoral Research Fellow Department of Integrative Biology, The University of Texas, Austin - Developed Bayesian nonparametric methods for causal mediation in various settings (single, multiple, or longitudinal mediators). Mentor: Michael J. Daniels, Sc.D.	Aug 2013 - Jul 2014
	Research Assistant Department of Statistics, University of Florida - Causal mediation analysis in the TOURS project (weight management trial) and the Rural LITE project. Supervisor: Michael J. Daniels, Sc.D.	Jan 2010 - Jul 2013
	Research Assistant Applied Statistics Center, Columbia University Supervisor: Andrew Gelman, Ph.D.	Jan 2007 - Dec 2007
	Employee, Samsung Electronics, South Korea	Jan 2006 - May 2006

- Worked at the HR headquarters of the Tele-Communication Business Division which is in charge of Samsung's cell phone business.

Internship, Bearing Point Consulting formerly KPMG Korea Jul 2004 - Aug 2004
 - As a member of PMO, evaluated daily outputs for a project to construct a new banking system for Korean Exchange Bank (KBE). Worked with 600 IT experts.

AWARDS

HONORS

Mitchell Prize, honorable mention (2nd place), ISBA Jun 2020
 - The Mitchell Prize is awarded in recognition of an "outstanding paper" that describes how a Bayesian analysis has solved an important applied problem. The Prize is jointly sponsored by the Section on Bayesian Statistical Science (SBSS) of the ASA, the International Society for Bayesian Analysis (ISBA), and the Mitchell Prize Founders' Committee.

ASA Biometrics Section Paper Award Aug 2017
 - Invited to present the paper at the 2017 JSM

Winner (1st place), 2013 IASC data analysis competition Aug 2013
 - Invited to present the result at the joint meeting of the IASC Satellite Conference for the 59th ISI WSC and the 8th Conference of the Asian regional section of the IASC, Seoul, Korea (22-23 August 2013)

Honorable Mention, NSF research day poster competition, UF Oct 2011

3rd Place, Human Consulting Group case competition, May 2003
 NEMO Partners, South Korea

TRAVEL AWARDS

Sackler Travel Award (granted by NSF) Mar 2015
 for the Sackler Colloquium Drawing Causal Inference from Big Data, D.C.

Graduate Student Council (GSC) at UF May 2013
 for 2013 Atlantic Causal Inference Conference, Boston, MA

College of Liberal Arts and Sciences (CLAS) at UF May 2013
 for 2013 Atlantic Causal Inference Conference, Boston, MA

Boyd Harshbarger Travel Award (granted by NSF) Jun 2012
 for SRCOS 2012 Summer Research Conference, GA

College of Liberal Arts and Sciences (CLAS) at UF May 2012
 for 2012 Atlantic Causal Inference Conference, Baltimore, MD

Centre de recherches mathématiques (CRM) at University of Montreal May 2011
 for Workshop on Causal Inference in Health Research, Canada

Graduate Student Council (GSC) at UF May 2011
 for Workshop on Causal Inference in Health Research, Canada

REFEREED

JOURNAL

PUBLICATIONS

Publication in Statistical Methodology

([†] denotes student mentee)

Kim, C., Bayesian Additive Regression Trees in Spatial Data Analysis with Sparse Observations, to appear in *Journal of Statistical Computation and Simulation*, 2022+.

Park, S.[†], **Kim, C.** Comparison of Tree-based Ensemble Models, to appear in *Communications for Statistical Applications and Methods*, 2022+.

Liu, X., **Kim, C.**, Han, Z., Lim, P., Roychoudhury, S., Fava, M., Doros, G., On treatment effect for the sequential parallel comparison design, *Statistics in Medicine*, 41(12), 2166-2190, 2022.

Lee, K.J., **Kim, C.**, Chen, R.B., Lee, K., Robust Probit Linear Mixed Models for Longitudinal Binary Data, to appear in *Biometrical Journal*, 2022+.

Kim, C., Lin, X., Nelson, K., Measuring Rater Bias in Diagnostic Tests with Ordinal Ratings, *Statistics in Medicine*, 40(17), 4014-4033, 2021.

Kim, C., Henneman, L., Choirat, C. Zigler, C. M., Health Effects of Power Plant Emissions through Ambient Air Quality, *Journal of the Royal Statistical Society: Series A*, 183(4), 1677-1703, 2020.

Kim, C., Daniels, M. J., Hogan, J. W., Choirat, C., Zigler, C. M. Bayesian Methods for Multiple Mediators: Relating Principal Stratification and Causal Mediation in the Analysis of Power Plant Emission Controls, *awarded ASA 2017 Biometrics section travel award; and awarded an honorable mention for the Mitchell Prize 2019, ISBA, The Annals of Applied Statistics*, 13(3), 1927-1956, 2019.

Kim, C., Deviance Information Criteria for Mixtures of Distributions, *Communications in Statistics - Simulation and Computation*, 50(10), 2935-2948, 2021.

Liu, Y., **Kim, C.**, Wu, A. D., Gustafson, P., Zumbo, B. D. Investigating Causal Differential Item Functioning (DIF) via Propensity Scores Methods, *Journal of Modern Applied Statistical Methods*, 18(1), 2-26, 2019.

Kim, C., Daniels, M. J., Li, Y., Milbury, K., Cohen, L., A Bayesian Semiparametric Latent Variable Approach to Causal Mediation, *Statistics in Medicine*, 37(7), 1149-1161, 2018.

Kim, C., Daniels, M.J., Marcus, B., Roy, J., A framework for Bayesian nonparametric inference for causal effects of mediation, *Biometrics*, 73(2), 401-409, 2017.

Zigler, C. M., **Kim, C.**, Choirat, C. Hansen, J. B., Wang, Y., Hund, L., Samet, J., King, G., Dominici, F., Causal Inference Methods for Estimating Long-Term Health Effects of Air Quality Regulations, *Health Effects Institute Research Report*, 187, 5-49, 2016 (peer-reviewed).

Daniels, M. J., Roy, J., **Kim, C.**, Hogan, J. W., Perri, M., Bayesian Inference for the Causal Effects of Mediation, *Biometrics*, 68(4), 1028-1036, 2012.

Collaborative Publications

Peer, K., Adams W. G., Legler, A., Sandel, M., Levy, J., Boynton-Jarrett, R., **Kim, C.**, Leibler, J. H., Fabian, M. P., Developing and evaluating a pediatric asthma severity computable phenotype derived from electronic health records, *The Journal of Allergy and Clinical Immunology*, 147(6), 2162-2170, 2021.

Nguyen, M., Feeney, T., **Kim, C.**, Drake, T., Mitchell, S., Bednarczyk, M., Sanchez, S., Patient-Level Factors Influencing Palliative Care Consultation at a Safety-Net

Urban Hospital, *American Journal of Hospice and Palliative Medicine*, 38(11), 1299-1307, 2021.

Liu, Y., Beliveau, A., Besche, H., Wu, A., Zhang, X., Stefan, M., Gutlerner, J., **Kim, C.**, Bayesian Mixed Effects Model and Data Visualization for Understanding Item Response Time and Response Order in Open Online Assessment, *Frontiers in Education, section Assessment, Testing and Applied Measurement*, 5, 274, 2021.

Nguyen, M., Feeney, T., **Kim, C.**, Drake, T., Mitchell, S., Bednarczyk, M., Sanchez, S., Differential Utilization of Palliative Care Consultation between Medical and Surgical Services, *American Journal of Hospice and Palliative Medicine*, 37(4), 250-257, 2020.

Mahalingaiah, S., Lane, K.J., **Kim, C.**, Cheng, J., Hart, J., Impacts of Air Pollution on Gynecologic Disease: Infertility, Menstrual Irregularity, Uterine Fibroids, and Endometriosis: a Systematic Review and Commentary, *Current Epidemiology Reports*, 5(3), 197-204, 2018.

Zhang, Z., Zheng, C., **Kim, C.**, Van Poucke, S., Lin, S., Lan, P., Causal Mediation Analysis in the Context of Clinical Research, *Annals of Translational Medicine*, 4(21), 1-20, 2016.

Perri, M., Limacher, M., von Castel-Roberts, K., Daniels, M., Durning, P., Janicke, D., Bobroff, L., Radcliff, T., Milsom, V., **Kim, C.**, Martin, A., Comparative Effectiveness of Three Doses of Weight Loss Counseling: Two-Year Findings from the Rural LITE Trial, *Obesity*, 22, 2293-2300, 2014.

Manuscripts Submitted or Under Revision

Kim, C., Li, Y., Xu, T., Liao, Z., Bayesian Nonparametric Method for Causal Mediation Analysis in Zero-inflated Data, under review.

Kim, C., Tec, M., Zigler, C., Bayesian Nonparametric Adjustment of Confounding [[arXiv](#)], under review.

Nguyen, D., Levy, J., **Kim, C.**, Lane, K., Simon, M., Hart, J., Whitsel, E., VoPham, T., Malwitz, A., Pters, J., Characterizing temporal trends in populations exposed to aircraft noise around U.S. airports: 1995-2015, submitted

Peer, K., Adams W. G., Legler, A., Sandel, M., Levy, J., Boynton-Jarrett, R., **Kim, C.**, Leibler, J. H., Fabian, M. P., Beyond a reductionist approach to residential mobility definitions in the health literature: opportunities and challenges using electronic health record address data, submitted.

Kim, C., Zigler, C. M., Daniels, M. J., Choirat, C., Roy, J. A., Bayesian Longitudinal Causal Inference in the Analysis of the Public Health Impact of Pollutant Emissions [[arXiv](#)].

Cummiskey, K., **Kim, C.**, Choirat, C., Schwartz, J., Zigler, C. A Source-Oriented Approach to Coal Combustion PM_{2.5} Health Effects [[arXiv](#)], under revision.

Koo, D., **Kim, C.**, Lee, K., A Bayesian Method for Multinomial Probit Model, under review.

PAPERS IN
PREPARATION

Kim, C., Hogan, J. W., Marcus, B., Daniels, M. J., A Framework for Causal Inference for Multiple Mediators, In preparation (draft available upon request).

Kim, C., Nelson, K., Enhanced Method for Measuring Rater Bias in Diagnostic Tests with Ordinal Ratings, In preparation.

Liu, X., Han, Z., **Kim, C.**, Doros, G., Assessing treatment effect for the sequential parallel comparison design via stratum-specific estimands when a non-responder criterion is not present, In preparation.

Kim, C., Lee, S., Bayesian nonparametric methods for principal stratification analysis with high dimensional covariates, In preparation.

Lee, K-J., **Kim, C.**, Yoo, J., Lee, K., Multivariate probit linear mixed models for multivariate longitudinal binary data, In preparation.

PACKAGE /
SOFTWARE

BNPMediation, an R package. Implements Bayesian nonparametric methods to estimate the causal effects of mediation. Available in CRAN.

BayesODT, an R package. Implements Bayesian hierarchical model to measure rater bias for ordinal classification processes. Available in [lit777.github.io](https://github.com/lit777).

PRESENTATIONS INVITED TALKS

Data Science, Statistics & Visualisation (DSSV) 2022, IASC-ISI, Taiwan Jun 2022

Invited Section for Bayesian Statistics, The Korean Statistical Society Jun 2022

Department of Statistics, Yonsei University, South Korea Dec 2021

Department of Statistics, Yonsei University, South Korea Dec 2021

Department of Statistics, Korea University, South Korea Nov 2021

Seminar on Causal Mediation Analysis, National Evidence-based Healthcare Collaborating Agency, Aug 2021

10th Bernoulli-IMS World Congress in Probability and Statistics, Seoul, Korea (Virtual), Jul 2021

63rd ISI World Statistics Congress, Hague (Virtual), Jul 2021

Seminar on Social Science Methods, Center of Politics and Communication, Seoul National University, Jun 2021

4th International Conference on Econometrics and Statistics (EcoSta 2021), Hong Kong (Virtual), Jun 2021

Working Group on Causal Inference and Machine Learning, Harvard University, May 2021

Spring Conference, The Korean Data & Information Science Society,	May 2021
Invited Section for Bayesian Statistics, The Korean Statistical Society,	Dec 2020
Department of Statistics, SungKyunKwan University, South Korea	Oct 2020
Department of Statistics, Ewha University, South Korea	Aug 2020
4th International Conference on Econometrics and Statistics, Seoul, Korea, 2020 (postponed)	Jul
Bayesian Causal Inference Workshop, Ohio State University, OH (Cancelled)	Jun 2019
Atlantic Causal Inference Conference, McGill University, Canada	May 2019
Institute for Computational and Experimental Research in Mathematics, Brown University, RI	Jan 2019
Graduate School of Future Strategy, KAIST, Daejeon, Korea	Aug 2018
2018 Joint Statistical Meeting, Vancouver, Canada	Aug 2018
The 3rd ISBA-EAC Conference , Seoul, Korea	Jul 2018
2018 ICSA China Conference with the Focus on Data Science, Qingdao, Shangdong, China	Jul 2018
2018 IISA International Conference on Statistics, Gainesville, FL	May 2018
Statistics and Probability Seminar Series, Boston University, MA	Apr 2018
Biostatistics Student Association (BSA) Seminar, Boston University, MA	Nov 2017
Global Health Research Seminar Series, Boston University, MA	Oct 2017
Environmental Statistics Seminar, Harvard University, MA	May 2017
The 31st New England Statistics Symposium, Univ. of Connecticut, CT	Apr 2017
Department of Biostatistics, Boston University, MA	Feb 2017
Department of Biostatistics and Bioinformatics, Duke University, NC	Jan 2017
Department of Biostatistics, Indiana University, Indianapolis, IN	Jan 2017
Div. of Sleep and Circadian Disorders, Brigham and Women's Hospital	Nov 2016
P01 Retreat, Harvard University	Oct 2016
Department of Statistics, SungKyunKwan University, South Korea	Apr 2016
Environmental Statistics Seminar at Harvard Biostatistics	Sep 2015

2015 Atlantic Causal Inference Conference, Philadelphia, PA	May 2015
Department of Biostatistics, Harvard School of Public Health	Dec 2013
Joint meeting of the IASC satellite conference for the 59th ISI WSC and the 8th conference of the ARS of the IASC, South Korea	Aug 2013

TOPIC-CONTRIBUTED TALKS

2017 Joint Statistical Meeting, Baltimore, MD (Missed)	Aug 2017
- Biometrics Section Award Presentation : <i>Bayesian Methods for Multiple Intermediate Variables: Principal Stratification and Causal Mediation Analysis</i>	
2016 Joint Statistical Meeting, Chicago, IL	Aug 2016
2014 Joint Statistical Meeting, Boston, MA	Aug 2014

CONTRIBUTED TALKS

10th World Congress in Probability and Statistics, Seoul (Virtual)	Jul 2021
2017 ENAR Meeting, DC	Mar 2017
2016 ENAR Meeting, Austin, TX	Mar 2016
P01 retreat at Harvard Biostatistics	Oct 2015
Bayesian Causal Inference Group Seminar at Harvard Biostatistics	Jun 2015
Bayesian Causal Inference Group Seminar at Harvard Biostatistics	Jan 2015
Bayesian Causal Inference Group Seminar at Harvard Biostatistics	Sep 2014
Acid Rain Program Group Seminar at Harvard	Sep 2014, Feb 2015
2015 ENAR Meeting, Miami, FL	Mar 2015
2014 ENAR Meeting, Baltimore, MD	Mar 2014
2013 Joint Statistical Meeting, Montreal, Canada	Aug 2013

POSTER PRESENTATIONS

2015 International Health Policy Statistics Conference, Providence, RI	Oct 2015
2015 Atlantic Causal Inference Conference, Philadelphia, PA	May 2015
2013 Atlantic Causal Inference Conference, Boston, MA	May 2013
2012 SRCOS Summer Research Conference, GA	Jun 2012
2012 Atlantic Causal Inference Conference, Baltimore, MD	May 2012

Workshop on Causal Inference and Graphical Models, Jan 2012
Winter Workshop 2012, University of Florida

NSF Research Day, University of Florida Oct 2011

Workshop on Causal Inference in Health Research, May 2011
CRM, University of Montreal, Canada

PROFESSIONAL REVIEWER (Publons)
SERVICE

Journal of American Statistical Association (theory and methods; applications and case studies), Biometrics, Statistics in Medicine, Bayesian Analysis, Journal of Royal Statistical Society: Series C, Journal of Causal Inference, Statistica Sinica, Annals of Applied Statistics, Biostatistics, Statistical Science, Epidemiologic Methods, BMJ Open, BMC Medical Research Methodology, Computational Statistics and Data Analysis, The Canadian Journal of Statistics, Journal of Agricultural Biological and Environmental Statistics, BMC Public Health, WIREs Computational Statistics, The International Journal of Biostatistics, Statistical Methods and Applications, The Korean Journal of Applied Statistics, MRC grant proposal, HEI grant proposal

PROFESSIONAL SOCIETY

Elected Member of ENAR Council for Emerging and New Statisticians. 2014 - 2016
Members of ENAR, ASA, ISBA

CONFERENCE ORGANIZATION

Session Organizer : Invited Session at CMStatistics (2021, 2022), Invited Session at 2021 Fall Conference of KSS, Invited Session at ENAR (2019), Invited Session at JSM (2018), Invited Session at ACIC (2018), Topic-contributed sessions at JSM (2016, 2017)

Session Chair : ENAR (2015), JSM (2016), Invited Session at ENAR (2020)

Others: Judge of 2014 ENAR spring meeting RAB poster competition.

DEPARTMENTAL PHD STUDENTS
SERVICE

Youngho Bae (SKKU), Winter 2026

MS STUDENTS

Youngho Bae (SKKU), Winter 2021

Awarded a poster award (2nd prize) at 2021 Spring Conference of KDISS.

Doyoung Kim (SKKU), Spring 2022

Awarded the best poster award (1st prize) at 2021 Spring Conference of KDISS and an honorable mention for the poster award at 2021 Spring Conference of KSS.

Currently, Ph.D. student in the Dept. of Statistics at Florida State Univ.

Sangho Park (SKKU), Winter 2021

Yeonghoon Yoo (SKKU), Spring 2022

Hyunwoo Lim (SKKU), Spring 2022

Nayeon Kwon (SKKU), expected Winter 2022

Sanghyun Lee (SKKU), expected Winter 2022

Jaehyun Seo (SKKU), expected Winter 2022

Awarded an honorable mention for the poster award at 2022 Summer Conference of KSS.

Jaeho Yoon (SKKU), expected Winter 2022

Namtaek Kwon, expected Spring 2023

PHD COMMITTEES

Kevin Cummiskey (Harvard Biostatistics, 2018). Advisor: Corwin M. Zigler
Aya Mitani (Boston Univ. Biostatistics, 2019). Advisor: Kerrie Nelson
Komal Basra (Boston Univ. Environmental Health, 2021). Advisor: Patricia Fabian
Daniel Nguyen (Boston Univ. Environmental Health). Advisor: Junenette Peters
Xiaoyan Liu (Boston Univ. Biostatistics). Advisor: Gheorghe Doros

MS COMMITTEES

Amelia Williams (Boston University Epidemiology, 2018). Advisor: Kimberly Shea

QUAL EXAMINER

Chloe Kim (Boston University Environmental Health). Advisor: Michael McClean
Komal Basra (Boston University Environmental Health, 2019). Advisor: Patricia Fabian

OTHER SERVICES

Co-Organizer, Epidemiology+Biostatistics Joint Seminar Series, Boston University
2018
Co-Organizer, Seminar Series, Department of Biostatistics, Boston University 2017
- 2019
Co-Chair, Course Development Task Force (Topics in Causal Inference), Department
of Biostatistics, Boston University 2018 - 2019
Convener, PhD Program Review Committee, Department of Biostatistics, Boston
University 2018
Faculty Search Committee, Department of Biostatistics, Boston University 2018 -
2019
Co-Organizer, Causal Inference Seminar Series, Departments of Biostatistics + Mathematics
and Statistics, Boston University 2018-
Biostatistics Program Advisory Committee (BPAC), Departments of Biostatistics,
Boston University 2019-
MA/PhD Admission Committee, Departments of Biostatistics, Boston University
2019-

TEACHING EXPERIENCE

INSTRUCTOR

STA3034 - Massive Data Analysis and Visualization (Undergrad) Spring 2021

STA2016 - Intro. to Statistical Programming (Undergrad) Fall 2020, Fall 2021,
Spring 2022
Department of Statistics, SungKyunKwan University

STA5004 - Advanced Categorical Data Analysis (Grad) Fall 2020, Fall 2021
Department of Statistics, SungKyunKwan University

STA5030 - Bayesian Statistics (Grad) Spring 2020, Spring 2021
Department of Statistics, SungKyunKwan University

STA5039 - Causal Inference (Grad) Spring 2022
Department of Statistics, SungKyunKwan University

BS730 - Introduction to Statistical Computing Spring 2018, Spring 2019
Teaching core statistical concepts and computing skills with R
Department of Biostatistics, Boston University

	BS901 - Directed Studies in Biostatistics Analyzing datasets using nonparametric methods Department of Biostatistics, Boston University	Summer 2019
	POSTDOC MENTOR 6 weeks mentoring of summer project participants (Pipelines into Biostatistics) Department of Biostatistics, Harvard T. H. Chan School of Public Health	Summer 2017
	POSTDOC MENTOR 6 weeks mentoring of summer project participants (Pipelines into Biostatistics) Department of Biostatistics, Harvard T. H. Chan School of Public Health	Summer 2016
	GUEST LECTURER Causal Mediation Analysis (3 hours) in BS852 (Bayesian Methodology in Biostatistics) Department of Biostatistics, Boston University School of Public Health	Fall 2018, Spring 2019, Fall 2019
	GUEST LECTURER Causal Mediation Analysis (2 hours) in BIO 249 (Bayesian Methodology in Biostatistics) Department of Biostatistics, Harvard T. H. Chan School of Public Health	Fall 2014
	GUEST LECTURER 2 hour BUGS tutorial in the course SSC 384.7 (spring) 1 hour BUGS tutorial in the course SSC 383C (Fall) Division of Statistics and Scientific Computation, The University of Texas at Austin	Spring, Fall 2013
	LAB-INSTRUCTOR STA 2023 - Introduction to Statistics Teaching lab sessions of the course 3 hours a week Evaluation: 4.31/5 (Spring 2009), 4.38/5, 4.26/5, 4.35/5 (Fall 2008) Department of Statistics, University of Florida	Fall 2008, Spring 2009
	TEACHING ASSISTANT AT UF STA 3032 - Engineering Statistics STA 4210 - Regression Analysis STA 4183 - Theory of Interest ESI 6546 - Stochastic Modeling and Analysis (Grader)	Spring, Fall 2009
	TEACHING ASSISTANT AT COLUMBIA UNIVERSITY W1211 - Introduction to Statistics (with Calculus)	Spring 2007
GRANT FUNDING	ACTIVE	
	NRF (PI: Chanmin Kim) Bayesian non-parametric method for longitudinal causal mechanism analysis. Role: Principal Investigator	Jun 2022 - Feb 2025
	NRF (PI: Chanmin Kim) Bayesian non-parametric methods for estimating causal effect heterogeneity. Role: Principal Investigator	Jun 2020 - Feb 2023
	Sungkyun Research Fund (PI: Chanmin Kim) Heterogeneous Mediation Analysis for High-dimensional Confounders and Mediators. Role: Principal Investigator	Dec 2021 - Dec 2022

COMPLETED

US-EPA (PI: Corwin Zigler) Sep 2016 - Aug 2020
Air Climate and Energy Center: Regional Air Pollution Mixtures: The Past and Future Impacts of Emission Controls and Climate Change on Air Quality and Health, Project 4: A Causal Inference Framework to Support Policy Decisions by Evaluating the Effectiveness of Past Air Pollution Control Strategies for the Entire United States.

Role: **PI on subcontract**, subcontract from Harvard University

NIH (PI: Kerrie Nelson) Feb 2018 - Aug 2022
Improving Accuracy and Reliability in Cancer Screening Tests
Role: **Biostatistician**

NIH (PI: David Sherr) Sep 2012 - Aug 2020
Superfund Research Program at Boston University
Role: **Biostatistician**

NIH (PI: Lauren Wise and Elizabeth Hatch) Jan 2019 - Oct 2023
A Preconception Cohort Study of Environmental Chemicals, Fertility, and Miscarriage
Role: **Biostatistician**

NIH (PI: Debbie Cheng) Sep 2016 - Aug 2021
Biostatistics and Data Management (BDM) Core - URBAN ARCH Consortium
Role: **Biostatistician**

NIH (PI: Jason Roy) Sep 2014 - Aug 2018
Non-Parametric Bayesian Methods of Causal Inference.
Role: **PI on subcontract**, subcontract from University of Pennsylvania

NIH (PI: Corwin Zigler) Sep 2015 - Aug 2020
Causal Inference with Interference for Evaluating Air Quality Policies
Role: **Investigator**

NIH (PI: Kerrie Nelson) Jan 2014 - Dec 2019
Modeling Agreement in Cancer Diagnostic Tests
Role: **Biostatistician**

COMPUTING

STATISTICAL PROGRAMS (PACKAGES)

R, SAS, Stan, BUGS (WinBUGS, OpenBUGS), MATLAB

- SAS Certified Base Programmer for SAS 9 Credential

May 2012

- SAS Certified Advanced Programmer for SAS 9 Credential

Sep 2012

PROGRAMMING LANGUAGES

Some experience in Python, C++

OPERATING SYSTEM

Unix, Linux, Windows

MISCELLANEOUS Exam P pass, Society of Actuaries

Mar 2011

REFERENCES

Corwin Zigler

Associate Professor

Department of Biostatistics

Harvard T. H. Chan School of Public Health

Phone: 617-432-5014

E-mail: czigler@hsph.harvard.edu

Michael Daniels

Professor and Chair

Andrew Banks Family Endowed Chair

Department of Statistics

University of Florida

Phone: 352-262-9892

E-mail: daniels@ufl.edu

Jason Roy

Professor of Biostatistics

Chair of Biostatistics and Epidemiology

Co-Director, Center for Causal Inference

Rutgers School of Public Health

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E-mail: jason.roy@rutgers.edu