Chanmin Kim

CONTACT INFORMATION	25-2, Sungkyunkwan-ro, Jongno-gu Seoul 03063, Korea	02-760-0495 chanmin.kim@skku.edu

<small>RESEARCH INTERESTS</small>

Bayesian nonparametric methods and Machine learning
Causal modeling and Causal mechanism
Policy Evaluation, Environmental statistics, and behavioral sciences

<small>CURRENT POSITION</small>

SungKyunKwan University, Department of Statistics, Seoul, Korea
    Assistant Professor of Statistics,   Jan 2020 -

<small>EDUCATION / TRAINING</small>

Harvard University, Department of Biostatistics, Boston, MA
    Research Associate & Postdoctoral Research Fellow   July 2014 - Aug 2017
    Project: *Developing Bayesian causal inference methods for evaluating air pollution regulatory policies.*
    Mentor: Corwin M. Zigler, Ph.D.

University of Florida, Gainesville, FL
    Ph.D., Statistics   Aug 2013
    Thesis: *Bayesian methods for inference on the causal effects of mediation.*
    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
    Magna Cum Laude the second highest GPA in the department.

<small>RESEARCH AND PROFESSIONAL EXPERIENCE</small>

Assistant Professor   Sep 2017 - Dec 2019
    Department of Biostatistics, Boston University, Boston, MA

Adjunct Assistant Professor   Jan 2020 - Jun 2023
    Department of Biostatistics, Boston University, Boston, MA

Advisory Committee   Jul 2023 - Oct 2023
    Korea Internet & Security Agency (KISA), Naju, Korea

Advisory Committee   Nov 2020 - Feb 2021
    Hyundai Motor Group, Seoul, Korea

Postdoctoral Research Fellow   Aug 2013 - Jul 2014
    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.

Research Assistant   Jan 2010 - Jul 2013
    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.

Research Assistant   Jan 2007 - Dec 2007

Applied Statistics Center, Columbia University
Supervisor: Andrew Gelman, Ph.D.

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)

Lee, S.[†], **Kim, C.**, Dirichlet Process Mixture Models using Matrix-Generalized Half-t Distribution, ***Stat***,12(1), 1-13, 2023.

Kim, C., Tec, M., Zigler, C., Bayesian Nonparametric Adjustment of Confounding, to appear in ***Biometrics***, 2023+.

Koo, D., **Kim, C.**, Lee, K., A Bayesian Method for Multinomial Probit Model, ***The Journal of the Korean Statistical Society***, 52, 265-281, 2023.

Kwon, N.[†], **Kim, C.**, Causal Effect of Urban Parks on Children's Happiness, ***The Korean Journal of Applied Statistics***, 36(1), 63-83, 2023.

Kim, C., Bayesian Additive Regression Trees in Spatial Data Analysis with Sparse Observations, ***Journal of Statistical Computation and Simulation***, 92(15), 3275-3300, 2022.

Park, S.[†], **Kim, C.** Comparison of Tree-based Ensemble Models, ***Communications for Statistical Applications and Methods***, 29(5), 1-29, 2022.

Liu, X., **Kim, C.**, Han, Z., Lim, P., Roychoudhury, S., Fava, M., Doros, G., Assessing treatment benefit in the presence of placebo response using 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, ***Biometrical Journal***, 64(7), 1307-1324, 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, *elected as a top cited paper in Wiley 2020-2021*, ***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

Kim, Y. et al., Serum 25-hydroxyvitamin D levels and the risk of early-onset colorectal cancer, to appear in *Gastroenterology*, 2023+.

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, to appear in *Journal Of Exposure Science And Environmental Epidemiology*, 2023+.

Cho, Y., Chang, Y., Ryu, S., **Kim, C.**, Wild, S., Byrne, C., History of gestational diabetes and incident nonalcoholic fatty liver disease: The Kangbuk Samsung Health Study, to appear in *American Journal of Gastroenterology*, 2023+.

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   ([†] denotes student mentee)

Seo, J.[†], **Kim, C.**, Utilizing local likelihood in regression discontinuity design: Investigating the impact of ART eligibility on retention in clinical HIV care in South Africa, under review.

Cheong et al., High-risk human papillomavirus infection and cardiovascular mortality: A cohort study, under revision.

Yoo, Y.[†], **Kim, C.**, bartcs: Bayesian Additive Regression Trees for Confounder Selection in R, under review.

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

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

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.

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).

Choi et al., Early-onset vasomotor symptoms and the development of depressive symptoms among premenopausal women , In preparation.

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.

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.

PRESENTATIONS INVITED TALKS

  16th International Conference of the ERCIM WG on CMStatistics, Dec 2023

  IASC-LARS Data Science Conference in Chile, Nov 2023

  25th International Conference on Computational Statistics (COMPSTAT2023), Aug 2023

  6th International Conference on Econometrics and Statistics (EcoSta), Jul 2023

  15th International Conference of the ERCIM WG on CMStatistics, Dec 2022

  Invited Seminar on Causality, Data Science PLUS, Nov 2022

  Fall Conference, The Korean Data & Information Science Society, Nov 2022

  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, 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, Jul 2020 (postponed)

  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   Aug 2013
and the 8th conference of the ARS of the IASC, South Korea

Topic-Contributed Talks

2017 Joint Statistical Meeting, Baltimore, MD (Missed)   Aug 2017
- Biometrics Section Award Presentation : *Bayesian Methods for Multiple Intermediate Variables: Principal Stratification and Causal Mediation Analysis*

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, Winter Workshop 2012, University of Florida	Jan 2012
NSF Research Day, University of Florida	Oct 2011
Workshop on Causal Inference in Health Research, CRM, University of Montreal, Canada	May 2011

PROFESSIONAL
SERVICE

REVIEWER (Publons)

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, Scientific Reports, MRC grant proposal, HEI grant proposal, Structural Equation Modeling: A Multidisciplinary Journal

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 KDISS (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 : CMStatistics (2011, 2022), KDISS (2022), KSS(2021), ENAR (2015), JSM (2016), Invited Session at ENAR (2020)
Others: Judge of 2014 ENAR spring meeting RAB poster competition.

DEPARTMENTAL SERVICE

PhD STUDENTS

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), Winter 2022
  Awarded a poster award (2nd prize) at 2022 Winter Conference of KDISS.
Sanghyun Lee (SKKU), Winter 2022
Jaehyun Seo (SKKU), Winter 2022
  Awarded an honorable mention for the poster award at 2022 Spring Conference of KSS.
Jaeho Yoon (SKKU), expected Winter 2022
Namtaek Kwon (SKKU), expected Spring 2023
Yeseul Sung (SKKU), expected Winter 2023
Eunju Sim (SKKU), expected Winter 2023
Juwon Jung (SKKU), expected Winter 2023
Heechul Jeong (SKKU), expected Spring 2024

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, 2022). Advisor: Junenette Peters
Xiaoyan Liu (Boston Univ. Biostatistics, 2022). 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	
	STA3010 - Intro. to Nonparametric Statistics (Undergrad)	Fall 2022
	Department of Statistics, SungKyunKwan University	
	STA5041 - Topics in Bayesian Methods (Grad)	Fall 2022
	Department of Statistics, SungKyunKwan University	
	STA3034 - Massive Data Analysis and Visualization (Undergrad)	Spring 2021
	Department of Statistics, SungKyunKwan University	
	STA2016 - Intro. to Statistical Programming (Undergrad) Fall 2020, Fall 2021, Spring 2022, Spring 2023	
	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, Spring 2023
	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   Summer 2019
Analyzing datasets using nonparametric methods
Department of Biostatistics, Boston University

POSTDOC MENTOR   Summer 2017
6 weeks mentoring of summer project participants (Pipelines into Biostatistics)
Department of Biostatistics, Harvard T. H. Chan School of Public Health

POSTDOC MENTOR   Summer 2016
6 weeks mentoring of summer project participants (Pipelines into Biostatistics)
Department of Biostatistics, Harvard T. H. Chan School of Public Health

GUEST LECTURER   Fall 2018, Spring 2019, Fall 2019
Causal Mediation Analysis (3 hours) in BS852 (Bayesian Methodology in Biostatistics)
Department of Biostatistics, Boston University School of Public Health

GUEST LECTURER   Fall 2014
Causal Mediation Analysis (2 hours) in BIO 249 (Bayesian Methodology in Biostatistics)
Department of Biostatistics, Harvard T. H. Chan School of Public Health

GUEST LECTURER   Spring, Fall 2013
2 hour BUGS tutorial in the course SSC 384.7 (spring)
1 hour BUGS tutoral in the course SSC 383C (Fall)
Division of Statistics and Scientific Computation, The University of Texas at Austin

LAB-INSTRUCTOR   Fall 2008, Spring 2009
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

TEACHING ASSISTANT AT UF   Spring, Fall 2009
STA 3032 - Engineering Statistics
STA 4210 - Regression Analysis
STA 4183 - Theory of Interest
ESI 6546 - Stochastic Modeling and Analysis (Grader)

TEACHING ASSISTANT AT COLUMBIA UNIVERSITY   Spring 2007
W1211 - Introduction to Statistics (with Calculus)

GRANT FUNDING   ACTIVE

NRF (PI: Chanmin Kim)   Jun 2022 - Feb 2025
Bayesian non-parametric method for longitudinal causal mechanism analysis.
Role: **Principal Investigator**

COMPLETED

NRF (PI: Chanmin Kim)   Jun 2020 - Feb 2023
Bayesian non-parametric methods for estimating causal effect heterogeneity.
Role: **Principal Investigator**

Sungkyun Research Fund (PI: Chanmin Kim)   Dec 2021 - Dec 2022
Heterogeneous Mediation Analysis for High-dimensional Confounders and Mediators.

Role: **Principal Investigator**

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 AirQuality 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
               C++, Some experience in Python

               OPERATING SYSTEM
               Unix, Linux, Windows

MISCELLANEOUS Exam P pass, Society of Actuaries   Mar 2011

REFERENCES

Corwin Zigler
    Associate Professor   Phone: 617-432-5014
    Department of Biostatistics   E-mail: czigler@hsph.harvard.edu
    Harvard T. H. Chan School of Public Health

Michael Daniels
    Professor and Chair   Phone: 352-262-9892
    Andrew Banks Family Endowed Chair   E-mail: daniels@ufl.edu
    Department of Statistics
    University of Florida

Jason Roy
    Professor of Biostatistics   Phone: 732-235-9168
    Chair of Biostatistics and Epidemiology   E-mail: jason.roy@rutgers.edu
    Co-Director, Center for Causal Inferece
    Rutgers School of Public Health