

## Chanmin Kim

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| CONTACT INFORMATION                  | 25-2, Sungkyunkwan-ro, Jongno-gu<br>Seoul 03063, Korea  | 02-760-0495<br>chanmin.kim@skku.edu |
| RESEARCH INTERESTS                   | Bayesian nonparametric methods and Machine learning<br>Causal inference and Causal mechanism<br>Policy Evaluation, Environmental statistics, and behavioral sciences<br>Bayesian methodologies  |                                     |
| CURRENT POSITION                     | <b>SungKyunKwan University</b> , Department of Statistics, Seoul, Korea<br><b>Associate Professor</b> of Statistics (with tenure), Sep 2023 - Current<br><b>Director</b> of Research Institute of Applied Statistics, Mar 2024 - Current<br><b>Assistant Professor</b> of Statistics, Jan 2020 - Aug 2023   |                                     |
| EDUCATION / TRAINING                 | <b>Harvard University</b> , Department of Biostatistics, Boston, MA<br>Research Associate & Postdoctoral Research Fellow July 2014 - Aug 2017<br>Project: <i>Developing Bayesian causal inference methods for evaluating air pollution regulatory policies.</i><br>Mentor: Corwin M. Zigler, Ph.D.<br><br><b>University of Florida</b> , Gainesville, FL<br>Ph.D., Statistics Aug 2013<br>Thesis: <i>Bayesian methods for inference on the causal effects of mediation.</i><br>Advisor: Michael J. Daniels, Sc.D.<br><br><b>Columbia University in the City of New York</b> , New York, NY<br>M.A., Statistics May 2008<br><br><b>Sogang University</b> , Seoul, Korea<br>B.B.A., B.A., Business and History (Double Major) Feb 2006<br><i>Magna Cum Laude</i> the second highest GPA in the department.  |                                     |
| RESEARCH AND PROFESSIONAL EXPERIENCE | Assistant Professor Sep 2017 - Dec 2019<br>Department of Biostatistics, Boston University, Boston, MA<br><br>Adjunct Assistant Professor Jan 2020 - Jun 2023<br>Department of Biostatistics, Boston University, Boston, MA<br><br>Advisory Committee Jul 2023 - Oct 2023<br>Korea Internet & Security Agency (KISA), Naju, Korea<br><br>Advisory Committee Nov 2020 - Feb 2021<br>Hyundai Motor Group, Seoul, Korea<br><br>Postdoctoral Research Fellow Aug 2013 - Jul 2014<br>Department of Integrative Biology, The University of Texas, Austin<br>- Developed Bayesian nonparametric methods for causal mediation in various settings (single, multiple, or longitudinal mediators).<br>Mentor: Michael J. Daniels, Sc.D.<br><br>Research Assistant Jan 2010 - Jul 2013<br>Department of Statistics, University of Florida<br>- Causal mediation analysis in the TOURS project (weight management trial) and |                                     |

the Rural LITE project.  
 Supervisor: Michael J. Daniels, Sc.D.

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| 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

SKKU Research Excellence: **Sin-Poom**(1st, 2024)

SKKU Teaching Excellence: **Sin-Poom**(1st, 2024)/**Sin-Poom**(1st, 2023)/**Myo-Poom**(2nd, 2022)

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| Mitchell Prize, honorable mention ( <b>2nd place</b> ), 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. |          |

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

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| Winner ( <b>1st place</b> ), 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) |          |

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| Honorable Mention, NSF research day poster competition, UF | Oct 2011 |
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| <b>3rd Place</b> , Human Consulting Group case competition, NEMO Partners, South Korea | May 2003 |
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## TRAVEL AWARDS

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| Sackler Travel Award (granted by NSF)<br>for the Sackler Colloquium Drawing Causal Inference from Big Data, D.C. | Mar 2015 |
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| Graduate Student Council (GSC) at UF<br>for 2013 Atlantic Causal Inference Conference, Boston, MA | May 2013 |
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| College of Liberal Arts and Sciences (CLAS) at UF<br>for 2013 Atlantic Causal Inference Conference, Boston, MA | May 2013 |
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| Boyd Harshbarger Travel Award (granted by NSF)<br>for SRCOS 2012 Summer Research Conference, GA | Jun 2012 |
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| College of Liberal Arts and Sciences (CLAS) at UF<br>for 2012 Atlantic Causal Inference Conference, Baltimore, MD | May 2012 |
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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** (<sup>†</sup> student mentee, <sup>‡</sup> co-first authors)

Bae, Y.<sup>†</sup>, **Kim, C.**<sup>‡</sup>, Wang, F., Sun, Q., Lee, K., Bayesian Variable Selection for High-Dimensional Mediation Analysis: Application to Metabolomics Data in Epidemiological Studies, to appear in *Statistics in Medicine*.

Song, Y., Maurizio, F., **Kim, C.**, Robert, Y., Gheorghe, D., Estimating Causal Treatment Effects in the Sequential Parallel Comparison Design (SPCD), *Statistics in Medicine*, 44(25-27), e70319, 2025.

Yoo, Y.<sup>†</sup>, **Kim, C.**, bartcs: Bayesian Additive Regression Trees for Confounder Selection in R, *R journal*, 17(2), 176-206, 2025.

Park, J.<sup>†</sup>, **Kim, C.**, Bayesian MINBM: Addressing Multiple Inflated Values in Discrete Data, to appear in *Communications for Statistical Applications and Methods*, 2025+

**Kim, C.**, Zigler, C., Bayesian nonparametric trees for principal causal effects, *Biometrics*, 81(1), 2025.

**Kim, C.**, Li, Y., Xu, T., Liao, Z., Bayesian nonparametric model for heterogeneous treatment effects with zero-inflated data, *Statistics in Medicine*, 43(30), 5968-5982, 2024.

Seo, J.<sup>†</sup>, **Kim, C.**, Utilizing local likelihood in regression discontinuity design: Investigating the impact of ART eligibility on retention in clinical HIV care in South Africa, *Statistics in Medicine*, 43(8), 2024.

Lee, K-J., **Kim, C.**, Yoo, J., Lee, K., Multivariate probit linear mixed models for multivariate longitudinal binary data, *Statistics in Medicine*, 43(8), 2024.

Lee, S.<sup>†</sup>, **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, *Biometrics*, 79(4), 3252-3265, 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.<sup>†</sup>, **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.<sup>†</sup>, **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 the Performance of Propensity Score Approaches for Differential Item Functioning Analysis, *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

Jang et al., Menopausal Stage Transitions and their Associations with Overall and Individual Sleep Quality in Middle-aged Korean Women, *Journal of Affective Disorders*, 368(1), 82-89, 2025.

Park et al., Overactive bladder and cognitive impairment in middle-aged women: a cross-sectional study, *Maturitas*, 187, 108042, 2024.

Choi et al., Early-onset vasomotor symptoms and the development of depressive symptoms among premenopausal women, *Journal of Affective Disorders*, 354(1), 376-384, 2024.

Cheong et al., Human papillomavirus infection and cardiovascular mortality: a cohort study, *European Heart Journal*, 45(12), 1072-1082, 2024.

Kim, Y. et al., Serum 25-hydroxyvitamin D levels and the risk of early-onset colorectal cancer, *Gastroenterology*, 165(4) 920-931, 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, *American Journal of Gastroenterology*, 118(11) 1980-1988, 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

(<sup>†</sup> denotes student mentee)

**Kim, C.**, Kim, H.<sup>†</sup>, Bayesian Decision Trees for Confounder Selection in Mediation Analysis, submitted (*NeurIPS 2025*).

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<sub>2.5</sub> 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).

**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

|  |          |
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| Department of Statistics, Sookmyung Women's University,                              | Nov 2025 |
| The 7th Pacific Causal Inference Conference (PCIC),                                  | Jul 2025 |
| EAC-ISBA Conference 2025,  | Jul 2025 |
| 17th International Conference of the ERCIM WG on CMStatistics,                       | Dec 2024 |
| ISBA World Meeting 2024, Venice, Italy (cancelled due to illness),                   | Jul 2024 |
| The Institute for Mathematical Statistics – Asia-Pacific Rim Meeting(IMS-APRM 2024), | Jan 2024 |
| 16th International Conference of the ERCIM WG on CMStatistics,                       | Dec 2023 |
| IASC-LARS Data Science Conference in Chile,  | Nov 2023 |

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| Department of Statistics, Seoul National University,  | Oct 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, 2020 (postponed)         | Jul 2020 |
| Bayesian Causal Inference Workshop, Ohio State University, OH (Cancelled)                           | Jun 2019 |
| Atlantic Causal Inference Conference, McGill University, Canada                                     | May 2019 |

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| 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

|   |          |
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| 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

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| 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

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

## PROFESSIONAL SERVICE

### EDITORIAL BOARD

Co-Editor (CSAM, 2025 - ) / Associate Editor (CSAM, 2023 - 2025)

### 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 B, 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, Statistical Methods in Medical Research, Journal of Statistical Computation and Simulation, Statistical Science*

#### 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 EcoSta (2025), 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** : Invited Session at EcoSta (2025), 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 2025

Awarded the best poster award at 3rd World Conference on Data Science and Statistics, Netherlands

##### 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

Currently at Samsung Medical Center.

Yeonghoon Yoo (SKKU), Spring 2022

Currently at Concentrix.

Hyunwoo Lim (SKKU), Spring 2022

Currently at Seoul Guarantee Insurance Company.

Nayeon Kwon (SKKU), Winter 2022

Awarded a poster award (2nd prize) at 2022 Winter Conference of KDISS.

Sanghyun Lee (SKKU), Winter 2022

Currently working for the Korean government.

Jaehyun Seo (SKKU), Winter 2022

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

Currently at Neople

Jaeho Yoon (SKKU), Spring 2023

Formally, Ph.D. student at Univ. of Georgia.

Namtaek Kwon (SKKU), Spring 2023

Currently, at Netmarble.

Yeseul Sung (SKKU), Winter 2023  
 Eunju Sim (SKKU), Winter 2023  
 Currently at DB Insurance.  
 Juwon Jung (SKKU), Winter 2023  
 Currently, a PhD student at Korea University.  
 Heechul Jeong (SKKU), expected Spring 2024  
 Currently at SBI Savings Bank.  
 Jin Lee (SKKU), Winter 2024  
 Sun Min Yi (SKKU), Winter 2024  
 Currently at NICE Information Service  
 Jisung Park (SKKU), Winter 2024  
 Currently at Samsung Electronics DS division  
 Jungeun Lee (SKKU), Spring 2025  
 Seokho Kim (SKKU), expected Winter 2025  
 Awarded the paper award (3rd prize) at 2025 Summer Conference of KSS.  
 Hyunwoo Kim (SKKU), expected Winter 2025  
 Joohyung Son (SKKU), expected Winter 2025  
 Hyunbin Kim (SKKU), expected Spring 2026  
 Taesoo Kim (SKKU), expected Spring 2026  
 Yerim Park (SKKU), expected Spring 2026  
 I-Heon Jung (SKKU), expected Spring 2026  
 Doun Jeon (SKKU), expected Spring 2026  
 Jisu Kang (SKKU), expected Winter 2026  
 Jin Seop Hyun (SKKU), expected Winter 2026

#### 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  
 Song Yang (Boston Univ. Biostatistics, 2025). 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

STA3041 - Intro. to Spatial Statistics (Undergrad) Fall 2025  
 Department of Statistics, SungKyunKwan University

STA3010 - Intro. to Nonparametric Statistics (Undergrad) Fall 2022, 2024, 2025  
 Department of Statistics, SungKyunKwan University

STA5041 - Topics in Bayesian Methods (Grad) Fall 2022, 2025  
 Department of Statistics, SungKyunKwan University

STA3034 - Massive Data Analysis and Visualization (Undergrad) Spring 2021, Fall 2023  
 Department of Statistics, SungKyunKwan University

STA2016 - Intro. to Statistical Programming (Undergrad) Fall 2020, Fall 2021, Spring 2022, Spring 2023, Spring 2024, Fall 2024, Spring 2025  
 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, Fall 2023  
 Department of Statistics, SungKyunKwan University

STA5039 - Causal Inference (Grad) Spring 2022, Spring 2023, Spring 2024  
 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 tutorial 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 mid-career research (PI: Chanmin Kim) Mar 2025 - Feb 2029  
 Development of integrated data science methodologies based on disease stage for  
 medical big data analysis  
 Role: **Principal investigator** 555,423,000 won

NRF basic research lab (PI: Keunbaik Lee) Aug 2024 - Apr 2027  
 Development of integrated data science methodologies based on disease stage for  
 medical big data analysis  
 Role: **Co-investigator** 1,375,000,000 won

#### COMPLETED

NRF basic research(PI: Chanmin Kim) Jun 2022 - Feb 2025  
 Bayesian non-parametric method for longitudinal causal mechanism analysis.  
 Role: **Principal Investigator** 210,000,000 won

NRF basic research (PI: Chanmin Kim) Jun 2020 - Feb 2023  
 Bayesian non-parametric methods for estimating causal effect heterogeneity.  
 Role: **Principal Investigator** 170,000,000 won

Sungkyun Research Fund (PI: Chanmin Kim) Dec 2021 - Dec 2022  
 Heterogeneous Mediation Analysis for High-dimensional Confounders and Mediators.  
 Role: **Principal Investigator** 13,000,000 won

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**

|         |   |
|---------|---|
| PROJECT | ACTIVE  |
|         | Doosan Enerbility Apr 2024 - Dec 2024   |
|         | Bayesian causal methods development for Doosan Enerbility's wind power business |
|         | Role: <b>Project Manager</b>  |

|           |   |
|-----------|---|
| 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++, Python

OPERATING SYSTEM  
Unix, Linux, Windows

|               |  |
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| MISCELLANEOUS | Exam P pass, Society of Actuaries Mar 2011 |
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