HYUNKEUN RYAN CHO

CONTACT INFORMATION	Department of Biostatistics College of Public Health University of Iowa 145 N. Riverside Drive Iowa City, IA 52242 USA	*Phone:* +1 (319) 384-1581 *Email:* hyunkeun-cho@uiowa.edu *Homepage:* https://www.public-health.uiowa.edu

EDUCATION

Ph.D. in Statistics, University of Illinois at Urbana-Champaign	2013
M.S. in Statistics, University of Illinois at Urbana-Champaign	2011
M.S. in Applied Math & Statistics, Stony Brook University	2008
B.A. in Mathematics, Stony Brook University	2007

EMPLOYMENT

Associate Professor, Department of Biostatistics at U of Iowa	since 7/2021
Assistant Professor, Department of Biostatistics at U of Iowa	7/2017 - 6/2021
Assistant Professor, Department of Statistics at Western Michigan Univ	8/2013 - 6/2017

PROFESSIONAL EXPERIENCE

Biostatistician, Center for Access & Delivery Research and Evaluation	since 2/2020
Affiliated Faculty, Center for Advancing Multimorbidity Science	since 2/2019
Affiliated Faculty, Clinical Trials Statistical and Data Management Center	since 2/2018
Director, Data Science Program at Western Michigan Univ	9/2014 - 7/2017
Statistical Analyst, Office of Provost at Western Michigan Univ	5/2014 - 12/2016
Graduate Research Assistant, Department of Statistics at U of Illinois	8/2010 - 7/2013
Consultant, Illinois Statistical Office at U of Illinois	8/2010 - 7/2013
Intern, Korea Institute of Finance	12/2005 - 1/2006

AWARD AND HONOR

Carver Trust Associate Professor Advancement Award	2022
Junior Faculty Research Opportunity Award	2018, 2019
NISS Writing Workshop Travel Grant Award	2018
New Faculty Research Award	2017
Norton Prize Finalist for Exceptional Doctoral Thesis	2013
Graduate College Conference Travel Award	2013
Degree Honor 'Magna Cum Laude'	2007

RESEARCH INTERESTS

Longitudinal analysis; Causal inference; Clustering; Nonparametric modeling; Quantile regression; Risk-predictive modeling; Precision medicine; Preventive medicine; Clinical trials.

PUBLICATIONS

(Note: ‡ denotes PhD advisee.)

Hadlandsmyth, K., Burgess, D.J., Leparski, R.F., Odom, A.S., Campbell, M.J., Obrecht, A.A., Adamowicz, J.L., **Cho, H.**, Steffensmeier, K.S., Johnson, N.L., Richards, C.C., VanderWeg, M.W., Lund, B.C., Yoon, P. and Mosher, H.J. (2022). The perioperative pain self-management (PePS) randomized controlled trial protocol: preventing chronic post-surgical pain and prolonged opioid use, *Contemporary Clinical Trials*, in press.

Picillo, M., LaFontant, D-E., Bressman, S., Caspell-Garcia, C., Coffey, C., **Cho, H.**, Burghardt, E., Dahodwala, N., Sanders-Pullman, R., Tanner, C. and Amara, A. W. (2022). Sex-related longitudinal change of motor, non-motor, and biological features in early Parkinson disease, *Journal of Parkinson's Disease*, in press.

Ryckman, K.K., Ramesh, A., **Cho, H.**, Oltman, S.P., Rogers, E.E., Dagle, J.M. and Jelliffe-Pawlowskic, L. L. (2022). Evaluation of heparinized syringes for measuring newborn metabolites in neonates with a central arterial line, *Clinical Biochemistry* 99, 78-81.

Kim, S., **Cho, H.** and Kim, M.O. (2021). Predictive generalized varying-coefficient longitudinal model, *Statistics in Medicine* 40, 6243-6259.

Kim, S., **Cho, H.** and Wu, C. (2021). Risk-predictive probabilities and dynamic nonparametric conditional quantile models for longitudinal analysis, *Statistica Sinica* 31, 1415-1439.

Espay, A. J., Lafontant, D-E., Poston, K. L., Caspell-Garcia, C., Marsili, L., **Cho, H.**, McDaniel, C., Kim, N., Coffey, C., Mahajan, A., Ezzat, K. and Sturchio, A. (2021). Low soluble amyloid-β 42 is associated with smaller brain volume in Parkinson's disease, *Parkinsonism & Related Disorders* 92, 15-21.

Yamanashi, T., Malicoat, J.R., Steffen, K.T., Zarei, K., Li, R., Purnell, B.S., Najafi, A., Saito, K., Singh, U., Toth, B.A., Lee, S., Dailey, M.E., Cui, H., Kaneko, K., **Cho, H.**, Iwata, M., Buchanan, G.F. and Shinozaki, G. (2021). Bispectral EEG (BSEEG) quantifying neuro-inflammation in mice induced by systemic inflammation: a potential mouse model of delirium, *Journal of Psychiatric Research* 133, 205-211.

Saito, T Malicoat, J.R., Leyden, L.R., Williams, J.C., Jellison, S.S., Long, H., Hellman, M.M., Crutchley, K.J., Anderson, Z.E.M., Lo, D., Modukuri, M.V., Schacher, C.J., Yoshino, A., Toda, H., Shinozaki, E., **Cho, H.**, Lee, S. and Shinozaki, G. (2021). Mortality prediction by bispectral electroencephalography among 502 patients: its role in dementia, *Brain Communications* 3, fcab037.

Jasper, E.A.[‡], **Cho, H.**, Breheny, P.J., Bao, W., Dagle, J.M. and Ryckman, K.K. (2021). Perinatal determinants of growth trajectories in children born preterm, *PLoS ONE* 16, e0245387.

Chasco, E.E, Hoth, A.B., **Cho, H.**, Shafer, C., Siegler, A.J. and Ohl, M.E. (2021). Mixed-methods evaluation of the incorporation of home specimen self-collection kits for laboratory testing in a telehealth program for delivering HIV pre-exposure prophylaxis, *AIDS and Behavior* 25, 2463-2482.

Yamanashi, T., Marra, P., Crutchley, K., Wahba, N., Malicoat, J., Sullivan, E., Akers, C., Nicholson, C., Herrmann, F., Karam, M., Noiseux, N., Kaneko, K., Shinozaki, E., Iwata, M., **Cho, H.**, Lee, S. and Shinozaki, G. (2021). Mortality among patients with sepsis associated with a bispectral electroencephalography (BSEEG) score, *Scientific Reports* 11, 14211.

Chahine, L.M., Brumm, M., Caspell-Garcia, C., Oertel, W., Mollenhauer, B., Amara, A., Fernandez-Arcos, A., Tolosa, E., Simonet, C., Hogl, B., Videnovic, A., Hutten, S., Tanner, C., Weintraub, D., Burghardt, E., Coffey, C., **Cho, H.**, Kieburtz, K., Poston, K., Merchant, K., Galasko, D., Foroud, T., Siderowf, A., Marek, K., Simuni, T. and Iranzo, A. (2021). Dopamine transporter imaging predicts clinically-defined α-synucleinopathy in REM sleep behavior disorder, *Annals of Clinical and Translational Neurology* 8, 201-212.

Cho, H., Kim, S. and Lee, M. (2020). Adjusting a subject-specific time of event in longitudinal studies, *Statistical Methods in Medical Research* 29, 1787-1798.

Saito, T., Braun, P. R., Daniel, S., Jellison, S. S., Hellman, M., Shinozaki, E., Lee, S., **Cho, H.**, Yoshino, A., Toda, H. and Shinozaki, G. (2020). The relationship between DNA methylation in neurotrophic genes and age as evidenced from three independent cohorts: Differences by delirium status, *Neurobiology of Aging* 94, 227-235.

Saito, T., Toda, H., Duncan, G., Jellison, S., Yu, T., Klisares, M., Daniel, S., Andreasen, A., Leyden, L., Hellman, M., Shinozaki, E., Lee, S., Yoshino, A., **Cho, H.** and Shinozaki, G. (2020). Epigenetics of neuroinflammation: immune response, inflammatory response and cholinergic synaptic involvement evidenced by genome-wide DNA methylation analysis of delirious inpatients. *Journal of Psychiatric Research* 129, 61-65.

Simuni, T., Uribe, L., **Cho, H.**, Caspell-Garcia, C., Coffey, C., Siderowf, A., Trojanowski, J.Q., Shaw, L.M., Seibyl, J., Singleton, A., Toga, A.W., Galasko, D., Foroud, T., Tosun, D., Poston, K., Weintraub, D., Mollenhauer, B., Tanner, C.M., Kieburtz, K., Chahine, L.M., Reimer, A., Hutten, S.J., Bressman, S. and Marek, K. (2020). Clinical and DAT imaging characteristics of non-manifest LRRK2 and GBA mutation carriers in the Parkinson's Progression Markers Initiative (PPMI): A cross sectional study, *Lancet Neurology* 19, 71-80.

Weintraub, D., Caspell-Garcia, C., Simuni, T., **Cho, H.**, Coffey, C., Aarsland, D., Alcalay, R.N., Barrett, M.J., Chahine, L.M., Eberling, J., Espay, A.J., Hamilton, J., Hawkins, K., Leverenz, J., Litvan, I., Richard, I., Rosenthal, L., Siderowf, A. and York, M. (2020). Neuropsychiatric symptoms and cognitive abilities over the initial quinquennium of Parkinson disease, *Annals of Clinical and Translational Neurology* 7, 449-461.

Saito, T., Shinozaki, G., Koga, M., Tanichi, M., Takeshita, S., Nakagawa, R., Nagamine, M., **Cho, H.**, Morimoto, Y., Kobayashi, Y., Yoshino, A. and Toda, H. (2020). Effect of interaction between a specific subtype of child abuse and the FKBP5 rs1360780 SNP on DNA methylation among patients with bipolar disorder, *Journal of Affective Disorders* 272, 417-422.

Niu, X.[‡] and **Cho, H.** (2019). Adjusting for baseline information in comparing the efficacy of treatments using bivariate varying-coefficient models, *Journal of Nonparametric Statistics* 31, 680-694.

Niu, X.[‡] and **Cho, H.** (2019). Efficient regression modeling for correlated and overdispersed count data, *Communications in Statistics-Theory and Methods* 48, 6005-6018.

Niu, X.[‡] and **Cho, H.** (2019). Simultaneous estimation and inference for multiple response variables, *Communications in Statistics-Theory and Methods* 48, 2734-2747.

Kim, S., **Cho, H.** and Zhang, X. (2019). Initial severity-dependent longitudinal model with application to a randomized controlled trial of women with depression, *Statistics in Medicine* 38, 1678-1689.

Andrews, N.[‡] and **Cho, H.** (2019). Generalized growth curve models for longitudinal data in application to a randomized clinical trial, *Journal of the Korean Statistical Society* 48, 40-49.

Shinozaki, G., Bormann, N. L., Chan, A. C., Zarei, K., Sparr, N. A., Klisares, M., Jellison, S. S., Heinzman, J., Dahlstrom, E. B., Duncan, G. N., Coon, N. A., Gaul, L., Robles, J., Yu, T., Wansek, R., Ando, T., Wong, T., Chicchelly, H., Cramer, E., Wimmel, C., Chronis, T., Sabbagh, S., Yuki, K., Weckmann, M., Yamada, T., Karam, M., Noiseux, N., Shinozaki, E., **Cho, H.**, Lee, S. and Cromwell, J. W. (2019). Identification of patients with high mortality risk and prediction of outcomes in delirium by bispectral EEG, *Journal of Clinical Psychiatry* 80, 19m12749.

Cho, H. (2018). Statistical inference in a growth curve quantile regression model for longitudinal data, *Biometrics* 74, 855-862.

Andrews, N.[‡] and **Cho, H.** (2018). Validating effectiveness of subgroup identification for longitudinal data, *Statistics in Medicine* 37, 98-106.

Kim, S. and **Cho, H.** (2018). Efficient estimation in the partially linear quantile regression model for longitudinal data, *Electronic Journal of Statistics* 12, 824-850.

Shinozaki, G., Braun, P. R., Hing, B. W., Ratanatharathorn, A. D., Klisares, M., Heinzman, J., Nagahama, Y., Close, L., Sabbagh, S., Dlouhy, B. J., Howard, M., Kawasaki, H. and **Cho, H.** (2018). Epigenetics of delirium: potential role of DNA methylation change on cytokine genes in glia and blood along with aging, *Frontiers in Aging Neuroscience* 10, 1-10.

Cho, H. and Kim, S. (2017). Model specification test in semiparametric regression models for longitudinal data, *Journal of Multivariate Analysis* 160, 105-116.

Cho, H., Wang, P. and Qu, A. (2017). Personalized treatment for longitudinal data using unspecified random-effects model, *Statistica Sinica* 27, 187-205.

Cho, H., Kim, S. and Kim, M.O. (2017). Multiple quantile regression analysis of longitudinal data: Heteroscedasticity and efficient estimation, *Journal of Multivariate Analysis* 155, 334-343.

Cho, H., Hong, H.G. and Kim, M.O. (2016). Efficient quantile marginal regression for longitudinal data with dropouts, *Biostatistics* 17, 561-575.

Cho, H. (2016). The analysis of multivariate longitudinal data using multivariate marginal models, *Journal of Multivariate Analysis* 143, 481-491.

Cho, H., Son, S. J., Kim, S. and Park, J. (2016). A randomized comparison of medication and cognitive behavioral therapy for treating depression among low-income young minority women, *Medical Science Monitor* 22, 4947-4953.

Cho, H. and Qu, A. (2015). Efficient estimation for longitudinal data by combining large-dimensional moment conditions, *Electronic Journal of Statistics* 9, 1315-1334.

Park, J., Lawrence, C.B. and **Cho, H.** (2015). A discursive assessment of narrative journalism using coh-metrix and principal component analysis, *Journal of the 21st Century Association of English Language and Literature* 28, 383-400.

Dev, D., Mcbride, B., Speirs, K., Donovan, S. and **Cho, H.** (2014). Predictors of head start and child-care providers' healthful and controlling feeding practices with children aged 2 to 5 years, *Journal of the Academy of Nutrition and Dietetics* 114, 1396-1403.

Dev, D., McBride, B., Fiese, B., Jones, B. and **Cho, H.** (2013). Risk factors for overweight/obesity in preschool children: an ecological approach, *Childhood Obesity* 9, 399-408.

Cho, H. and Qu, A. (2013). Model selection for correlated data with diverging number of parameters, *Statistica Sinica* 23, 901-927.

BOOK
REVIEW

Cho, H. (2015). Growth curve analysis and visualization using R, *The American Statistician* 69, 425-434.

GRANTS

<u>*Active Grants*</u>

US Department of Veterans Affairs   since 1/2021
    Title: Veterans Affairs Interagency Personnel Agreement (IPA) - Veteran's Rural Health Resource Center Project
    Role: Principal Investigator
    Effort: 10%

Veterans Affairs Medical Research Foundation   since 3/2020
    Title: Memorandum of Understanding (MOU) Veterans Affairs Center for Access & Delivery Research
    Role: Principal Investigator
    Effort: 10%

The Michael J. Fox Foundation for Parkinson's Research   since 2/2018
    Title: Parkinson's Progression Markers Initiative Statistics Core
    Role: Co-Investigator (Coffey, PI)
    Effort: 20%

R01 AG077436 US Department of Health & Human Services, NIH   since 6/2022
    Title: Emergency preparedness and support of caregivers of persons with dementia: The Disaster PrepWise study
    Role: Co-Investigator (Ashida, PI)
    Effort: 15%

R01 HD102381 US Department of Health & Human Services, NIH   since 8/2020
    Title: Targeted metabolic profiling to predict major neonatal morbidity in very preterm newborns
    Role: Co-Investigator (Ryckman, PI)
    Effort: 10%

Carver Trust Associate Professor Advancement Award, University of Iowa since 4/2022
    Title: Causal mediation and network analyses in randomized clinical trials
    Role: Principal Investigator
    Total amount of award:: $9,930

Completed Grants

R25 HL147231 National Heart, Lung, and Blood Institute 3/2019 - 6/2021
    Title: Iowa Summer Institute in Biostatistics
    Role: Co-Investigator (Zamba, PI)
    Effort: 6%

R21 AB056716 National Institute of Aging 7/2018 - 6/2021
    Title: Building a bridge (between clinical and community care): post-diagnosis support of persons with dementia and their family
    Role: Co-Investigator (Ashida, PI)
    Effort: 5%

U01 NS077352 National Institute of Neurological Disorders and Stroke 1/2018 - 9/2020
    Title: Network for Excellence in Neuroscience Clinical Trials-Data Coordinating Center
    Role: Co-Investigator (Coffey, PI)
    Effort: 10%

Michigan Department of Transportation 1/2016 - 12/2017
    Title: Evaluating the impacts of speed limit changes on identified case studies
    Role: Co-Principal Investigator (Kwigizile, PI)
    Effort: 8%

Transportation Research Center 5/2014 - 12/2015
    Title: Big data analytics to aid developing livable communities
    Role: Co-Investigator (Yang, PI)
    Effort: 5%

Junior Faculty Research Opportunity Award, University of Iowa 2019
    Title: Support to develop my academic career in longitudinal studies
    Role: Principal Investigator
    Total amount of award:: $4,732

New Faculty Research Award, University of Iowa 1/2018 - 8/2019
    Title: Decision support tool: Initial severity-dependent longitudinal model
    Role: Principal Investigator
    Total amount of award:: $8,326

Junior Faculty Research Opportunity Award, The University of Iowa 2018
    Title: Decision support tool in randomized clinical trials
    Role: Principal Investigator
    Total amount of award: $4,244

TEACHING EXPERIENCE

Graduate courses

- BIOS 7310 Longitudinal Data Analysis	Spring 2021, 2013
- BIOS 6310 Introductory Longitudinal Data Analysis	Fall 2017 - 2022
- BIOS 6210 Applied Survival Analysis	Spring 2019, 2022
- BIOS 5730 Biostatistical Methods Categorical Data	Spring 2020
- STAT 6810 Survival Data Analysis	Spring 2014, 2016
- STAT 6610 Multivariate Statistical Analysis	Spring 2015, 2017
- STAT 5850 Applied Data Mining	Fall 2015, 2016

Undergraduate courses

- STAT 3660 Data Analysis for Biosciences	Summer 2014
- STAT 3640 Foundations of Data Analysis	Fall 2013, Spring 2014
- STAT 2600 Data Analysis using R	Fall 2014 - Summer 2017
- STAT 200 Statistical Analysis	Fall 2011, 2012
- MAT 126 Calculus B	Fall 2007

ADVISING	*Doctoral Student Supervision*	
	- David-Erick Lafontant	Ph.D. in Biostatistics, expected 2024
	- Daren Kuwaye	Ph.D. in Biostatistics, expected 2023
	- Zhuangzhuang Liu	Ph.D. in Biostatistics, expected 2022
	- Xiaomeng Niu	Ph.D. in Statistics, 5/2018

Thesis title: Statistical Models for Correlated Data
Current position: Biostatistician at Allergan

- Nichole R. Andrews — Ph.D. in Statistics, 5/2017
Thesis title: Subgroup Analysis and Growth Curve Models for Longitudinal Data
Current position: Faculty Specialist in Department of Statistics at Western Michigan

Master Student Preceptorship Supervision

- Leianne Pallagao		M.S. in Biostatistics, expected 2022
- Ris Kallem		M.S. in Biostatistics, expected 2022
- Zhuangzhuang Liu		Ph.D. in Biostatistics, expected 2022
- Daren Kuwaye		M.S. in Biostatistics, 5/2019

Ph.D. Thesis Committee Member

- Tao Xu	Ph.D. in Epidemiology, expected 5/2024
- Abhismitha Ramesh	Ph.D. in Epidemiology, expected 5/2024
- Amy Ogilvie	Ph.D. in Epidemiology, expected 5/2023
- Daniel Corry	Ph.D. in Epidemiology, expected 5/2023
- Javier Flores	Ph.D. in Biostatistics, 5/2021
- Clarissa Shaw	Ph.D. in Nursing, 5/2021
- Ashamsa Aryal	Ph.D. in Occupational & Environmental Health (OEH), 12/2020
- Elizabeth Jasper	Ph.D. in Epidemiology, 12/2019
- Yang Pan	Ph.D. in Marketing, 8/2019
- Bezawit Teshome Agiro	Ph.D. in Economics, 5/2018
- Ama Agyeiwaa Abrokwah	Ph.D. in Economics, 8/2017

Director of Data Science Major & Minor Programs — 9/2014 - 7/2017
- Coordinate programs and supervise undergraduate students at Western Michigan

DataFest Team Advisor — 9/2016 - 4/2017
- Forster students in the Data Science program and organize a team
- Win the Grand Prize at DataFest, Chicago, 4/2017

UNIVERSITY SERVICE		
Internal peer review committee		2021 - 2022
Ph.D. comprehensive exam committee in Epidemiology		2021 - 2022
Ph.D. comprehensive exam committee in Biostatistics		2020 - 2022
Ph.D. comprehensive exam review committee		2019 - 2022
Admissions and student recruitment committee		2018 - 2022
Student awards committee		2018 - 2022
M.S. core exam committee		2018 - 2021
Ph.D. comprehensive exam committee in OEH		2021 - 2022
Woolson lecture committee		2018 - 2019
Open-rank faculty search committee		2017 - 2019
Ph.D. and M.S. curriculum committee		2017 - 2018
Computing development committee		2015 - 2017
Program review and development committee		2014 - 2017
Statistics colloquium committee		2013 - 2017
Ph.D. comprehensive and qualifying exam committee		2015 - 2017
Junior faculty search committee		2014 - 2016
Chair appointment executive committee		2015

PROFESSIONAL SERVICE	*Associate Editor*

- Communications for Statistical Applications and Methods   since 2020

Program Chair   2/2016
  - Great Lakes International Symposium: Interdisciplinary Research in Data Science

Organizer for Invited Session
  - New horizons in longitudinal studies, *EcoSta*, Kyoto   6/2022
  - Recent advancement in complex data, *WNAR meeting*, Anchorage, Ak   6/2020
  - Recent advances in statistical modeling for multivariate/correlated/time-varying longitudinal data, *Joint Statistical Meetings*, Denver, Co   7/2019
  - Statistical methods for time-varying/stratified correlated data analysis, *WNAR meeting*, Portland, OR   6/2019
  - Modern developments in statistical analysis, *Korean Statistical Society Conference*, Seoul, Korea   5/2017

Session Chair
  - Statistical methods for time-varying/stratified correlated data analysis, *WNAR meeting*, Portland, OR   6/2019
  - Modern Topics in applied statistics, *Korean Statistical Society Conference*, Daejeon, Korea   11/2016
  - Rank-Based & Nonparametric Procedures, *International Conference on Robust Rank Based and Nonparametric Methods*, Kalamazoo, MI   4/2015

Data Safety Monitoring Board Member of R01 grants   since 2019

Review of NSF Proposals   since 2018

Journals Refereed
  - Statistics in Medicine (7)
  - Statistica Sinica (5)
  - Journal of the American Statistical Association (4)
  - Electronic Journal of Statistics (4)
  - Journal of the American Medical Association (3)
  - Biometrics (2)
  - Computational Statistics and Data Analysis (2)
  - Journal of Biopharmaceutical Statistics (2)
  - Journal of Multivariate Analysis (2)
  - Journal of the Korean Statistical Society (2)
  - Journal of Applied Statistics (2)
  - Statistics and Probability Letters (1)
  - Multivariate Behavioral Research (1)
  - Annals of the Institute of Statistical Mathematics (1)
  - Communications in Statistics - Simulation and Computation (1)
  - International Journal of Statistics (1)
  - Statistical Science (1)
  - Statistical Methods and Applications (1)
  - Science China Mathematics (1)
  - Precision Clinical Medicine (1)
  - BMJ Open (1)
  - Liver Transplantation (1)
  - Medical Science Monitor (1)
  - BMJ Open (1)
  - Plus One (1)

Invited Talks

Modeling the population mean outcome trajectory in an observational study with a guideline-based intervention, *Indiana University-Purdue University Indianapolis*, Indianapolis, IN, 1/2022.

Modeling the population mean outcome trajectory in an observational study with a guideline-based intervention, *University of California at San Fransisco*, San Fransisco, CA, 11/2021.

Evaluating causal effects of timing of treatment in marginal structural models for longitudinal data, *Econometrics and Statistics*, Hong Kong, 6/2021.

Evaluating causal effects of timing of intervention in observational studies, *Korean Statistical Society Conference*, Seoul, Korea, 12/2020.

Evaluating the population mean trajectory of an outcome in longitudinal studies with a subject-specific time of an event, *University of Nebraska Medical Center*, Omaha, NE, 10/2019.

Statistical inference in a growth curve quantile regression model, *Joint Statistical Meetings*, Denver, CO, 8/2019.

Uses and new developments of quantile regression analysis of longitudinal data, *Rush University*, Chicago, IL, 6/2019.

Risk predictive modeling, *Statistics Korea*, Daejeon, Korea, 5/2019.

Various statistical models for longitudinal data, *Yonsei University*, Wonju, Korea, 5/2019.

Risk predictive modeling with longitudinal data, *Korean Biostatistics Meeting*, Seoul, Korea, 5/2019.

Statistical methods with varying coefficient models in biomedical studies, *Yeonsei University*, Seoul, Korea, 7/2018.

Statistical methods with varying coefficient models in longitudinal studies, *University of Iowa*, Iowa City, IA, 3/2018.

Statistical methods with varying coefficient models in longitudinal studies, *University of Illinois*, Champaign, IL, 3/2018.

Various statistical models for longitudinal data with application to a randomized controlled trial, *University of Iowa*, Iowa City, IA, 2/2018.

Statistical inference in a growth curve quantile regression model for longitudinal data, *University of Iowa*, Iowa City, IA, 10/2017.

Statistical inference in a growth curve quantile regression model for longitudinal data, *Kensas State University*, Mahattan, KS, 10/2017.

Growth curve quantile regression model for longitudinal data, *Yonsei University*, Seoul, Korea, 6/2017.

Growth curve quantile regression model for longitudinal data, *Statistics Korea*, Daejeon, Korea, 6/2017.

Growth curve quantile regression model for longitudinal data, *Korea University*, Seoul, Korea, 5/2017.

Various statistical models for longitudinal data with application to a randomized controlled trial, *Korean Statistical Society Conference*, Seoul, Korea, 5/2017.

Efficient quantile marginal regression for longitudinal data with dropouts, *San Diego State University*, San Diego, CA, 1/2017.

Efficient quantile marginal regression for longitudinal data with dropouts, *California State Polytechnic University*, Pomono, CA, 1/2017.

Efficient quantile marginal regression for longitudinal data with dropouts, *University of Iowa*, Iowa City, IA, 1/2017.

Efficient quantile marginal regression for longitudinal data with dropouts, *Sungkyunkwan University*, Seoul, Korea, 11/2016.

Consistent moment selection from high-dimensional moment conditions, *Western Michigan University*, Kalamazoo, MI, 9/2016.

Efficient quantile marginal regression for longitudinal data with dropouts, *ICSA Applied Statistics Symposium*, Atlanta, GA, 6/2016.

Efficient estimation for longitudinal data with multiple responses: application to transportation safety study, *Michigan State University*, East Lansing, MI, 1/2016.

Efficient quantile regression for longitudinal data with dropouts, *Western Michigan University*, Kalamazoo, MI, 1/2016.

Quantile marginal regression for longitudinal data with dropouts, *Michigan State University*, East Lansing, MI, 1/2016.

Quantile regression models for longitudinal data, *Sookmyung Women's University*, Seoul, Korea, 1/2016.

Quantile regression models for longitudinal data, *The University of Suwon*, Hwaseong, Korea, 12/2015.

Weighted varying-coefficient models for longitudinal data, *Western Michigan University*, Kalamazoo, MI, 12/2015.

Efficient estimation for longitudinal data by combining high-dimensional moment conditions, *Joint Statistical Meetings*, Seattle, WA, 8/2015.

Multivariate marginal model for multivariate longitudinal data, *Spring Research Conference*, Cincinnati, OH, 5/2015.

Varying-coefficient modeling for longitudinal data, *Ajou Univeristy*, Suwon, Korea, 12/2014.

Subgroup identification for longitudinal data with unspecified random effects, *Joint Statistical Meetings*, Boston, MA, 8/2014.

Subgroup identification for longitudinal data, *Western Michigan University*, Kalamazoo, MI, 5/2014.

Personalized treatment for longitudinal data, *ENAR meeting*, Baltimore, MD, 3/2014.

Variable selection for longitudinal data with diverging number of parameters, *Korean Statistical Society Conference*, Seoul, Korea, 11/2013.

Big data meets text-mining, *International Conference on Text-mining*, Suwon, Korea, 10/2013.

Model selection for correlated data with diverging number of parameters, *International Workshop on the Perspectives on High-dimensional Data Analysis III*, Vancouver, Canada, 5/2013.

Model selection for correlated data with diverging number of parameters, *University of Missouri*, Saint Louis, MI, 1/2013.

Model selection for correlated data with diverging number of parameters, *Western Michigan University*, Kalamazoo, MI, 1/2013.

Model selection for correlated data with diverging number of parameters, *Marquette University*, Milwaukee, WI, 12/2012.

Consistent moment selection from high-dimensional moment conditions, *Ajou University*, Suwon, Korea, 11/2012.

Efficient moment selection from high-dimensional moment conditions, *Midwest Statistics Research Colloquium*, Madison, WI, 3/2012.

<u>Conference Presentations</u>

Adjusting a subject-specific timing of event in longitudinal studies, *Joint Statistical Meetings*, Vancouver, Canada, 8/2018.

Statistical methods with varying coefficient models, *Young Statistician's Meeting*, Seoul, Korea, 7/2018.

Statistical inference in a growth curve quantile regression model for longitudinal data, *International Biometrics Conference*, Barcelona, Spain, 7/2018.

Various statistical models for longitudinal data with application to a randomized controlled trial, *Young Statistician's Meeting*, Yangpeong, Korea, 7/2017.

Consistent moment selection from high-dimensional moment conditions, *Joint Statistical Meetings*, San Diego, CA, 8/2012.

Model selection for correlated data with diverging number of parameters, *ENAR meeting*, Miami, FL, 3/2011.

AFFILIATIONS   American Statistical Association
Institute of Mathematical Statistics
International Biometric Society (ENAR)
Korean International Statistical Society
Korean-American Scientists and Engineers Association