

Jongik Chung, Ph.D.

CONTACT INFORMATION Department of Statistics & Data Science University of Central Florida Orlando, FL 32816 Phone: +1 (407) 823 – 2289 Email: Jongik.Chung@ucf.edu

EDUCATION **University of Georgia, Athens, GA**
Ph.D. Statistics, August 2020

- Adviser: Dr. Cheolwoo Park
- Dissertation Title: Joint Estimation and Regularized Aggregation in Brain Network Analysis

M.S., Statistics, May 2016

Korea University, Seoul, Republic of Korea

M.B.A. Finance, August 2014

- Adviser: Dr. Joonho Hwang
- Thesis Title: A Study on the Association between Employment and Financial Performance in the Recession

B.B.A. Business Administration, August 2011

EMPLOYMENT HISTORY **Assistant Professor** Aug 2020 to Current
Department of Statistics & Data Science, University of Central Florida Orlando, FL

Research Assistant Aug 2018 to May 2020
Department of Statistics, University of Georgia Athens, GA

Teaching Assistant Jan 2016 to May 2020
Department of Statistics, University of Georgia Athens, GA

Research Assistant Mar 2013 to Feb 2014
Department of Business Administration, Korea University Seoul, Republic of Korea

HONORS AND AWARDS The Graduate School Travel Award, University of Georgia, July 2019
Regents' Out-of-State Tuition Waiver Award, University of Georgia, April 2015
The Ministry of SMEs and Startups (MSS) Award, The Korea Economy Daily – KT&G 2011 Asian Students Venture Forum, Dec 2010
Honors Scholarships, Korea University, Sep 2010

TEACHING **Instructor**
STA 6346: Advanced Statistical Inference I (Class size: 8, 10, 8, SP 2026, SP 2025, 10) SP 2024, FA 2020
STA 6238: Logistic Regression (Class size: 8, 12, 23) SP 2026, SP 2023,
Curriculum Vitae, Jongik Chung, 1 of 9

		SP 2021
STA 2023H: Honors Statistical Methods I	(Class size: 20, 12, 18)	SP 2025, SP 2024 FA 2023
STA 5206: Statistical Analysis	(Class size: 11)	FA 2024
STA 6236: Regression Analysis	(Class size: 30, 26, 22, 30)	FA 2024, FA 2023 FA 2022, FA 2021
STA 4852: Applied Time Series	(Class size: 65, 57, 79)	SP 2023, SP 2022 SP 2021
STA 5104: Advanced Computer Processing of Statistical Data	(Class size: 21)	FA 2022
STA 6908: Directed Independent Studies	(Class size: 1)	FA 2022
STA 2014: Principles of Statistics	(Class size: 225)	FA 2021

Comprehensive & Qualifying Exam Committees

Big Data Analytics (PhD) Qualifying exam committee	2024 – current
Statistics and Data Science (MS) Comprehensive exam committee	2021 – 2023

Dissertation / Thesis / Research Project Advising

PhD Dissertation Committee chair (Tong Wang, Big Data Analytics)	FA 2024 to current
MS Thesis Committee chair (Rakchanok Chavanachat, Statistics)	SP 2026 to current
MS Research Project Committee chair (Panita Vaishnavi Kanaguduru, Statistics)	FA 2024 to current
MS Thesis Committee chair (Adam Wehr, Statistics)	FA 2024 to FA 2025
MS Thesis Committee member (Daniel Cisneros, Statistics)	SP 2026 to current
PhD Dissertation Committee member (Godfred Ahenkroa Kesse, Big Data Analytics)	FA 2025 to current
MS Thesis Committee member (William Thew, Statistics)	FA 2025 to current
PhD Dissertation Committee member (Kacey Massena, Big Data Analytics)	FA 2025 to current
MS Thesis Committee member (Jackson Cushing, Statistics)	FA 2025 to current
MS Thesis Committee member (Cameron Ezazi, Statistics)	FA 2025 to current
PhD Dissertation Committee member (Uibeom Chun, Civil Engineering)	FA 2025 to current

PhD Dissertation Committee member (Samira Jahangiri, Big Data Analytics)	SP 2025 to current
PhD Dissertation Committee member (Dimitri Ditombi Bamba Dilalou, Big Data Analytics)	SP 2025 to current
MS Thesis Committee member (Michelle Miller, Statistics)	SP 2025 to current
PhD Dissertation Committee member (Poorna Sandamini Senaratne, Big Data Analytics)	FA 2024 to current
PhD Dissertation Committee member (Ibrahim Almansour, Big Data Analytics)	FA 2024 to current
MS Thesis Committee member (Andres Rosales, Statistics)	FA 2023 to current
Honors Thesis Committee member (Jackson Small, Burnett Honors College)	Summer 2025 to FA 2025
PhD Dissertation Committee member (Md Rezwan Hossain, Civil Engineering)	FA 2024 to FA 2025
PhD Dissertation Committee member (Victor Nkwocha, Big Data Analytics)	FA 2023 to Summer 2025
MS Research Project Committee member (Benjamin Garcia, Statistics)	SP 2025
MS Research Project Committee member (Kacey Massena, Statistics)	SP 2025
MS Thesis Committee member (Thien Pham, Statistics)	SP 2024 to SP 2025
PhD Dissertation Committee member (Samgyu Yang, Civil Engineering)	FA 2023 to SP 2025
MS Thesis Committee member (Shahabeddin Abbaspour Tazehkand, Statistics)	FA 2023 to Summer 2024
MS Thesis Committee member (Joshua Head, Statistics)	SP 2024 to Summer 2024

Teaching Assistant

STAT 8350: Bayesian Statistical Methodology with Applications	SP 2020
STAT 4/6365: Modern Statistical Programming	FA 2019
STAT 6210: Introduction to Statistical Methods I	Summer 2019
STAT 8620: Categorical Data Analysis and Generalized Linear Models	FA 2018
STAT 4/6360: Statistical Software Programming	SP 2018, FA 2017 SP 2017, FA 2016
STAT 8260: Theory of Linear Models	SP 2017
STAT 6220: Introduction to Statistical Methods II	FA 2016

RESEARCH –
PUBLICATIONS

Journal Articles:

Chung, J., Park, C., McDowell, J., & Zhang, Q. (2025) “Joint Graphical Lasso with Regularized Aggregation”, *Journal of Multivariate Analysis*, 105509. (Refereed, first author had greatest contribution; co-corresponding author, IF: 1.7)

Zhang, Q., **Chung, J.**, & Park, C. (2025) “Joint Estimation of Precision Matrices for High-Dimensional Time Series with Long-Memory”, *Computational Statistics & Data Analysis*, 108234. (Refereed, first author had greatest contribution; co-corresponding author, IF: 1.6)

Maboudou-Tchao, E., Agbemade, E., & **Chung, J.** (2025) “Rescale Hinge Loss Support Vector Data Description”, *Journal of Data Science*, 1-25. doi:10.6339/25-JDS1185 (Refereed, first author had greatest contribution, IF: 0.5)

Lee, E., Sukhu, B., Daruge, M., **Chung, J.**, Hines, R., Loerzel, V. (2025) “Recruitment Feasibility of Hispanic Women in Breast Cancer Survivorship Research Using State Cancer Registry Procedures”, *Journal of Racial and Ethnic Health Disparities*, 1-10. (Refereed, first author had greatest contribution, IF: 2.4)

Torralba, L., Sukhu, B., Daruge, M., **Chung, J.**, Loerzel, V., Lee, E. (2025) “Evaluating fatalism among breast cancer survivors in a heterogeneous Hispanic population: A cross-sectional study”, *Current Oncology*, 32, 461. (Refereed, first author had greatest contribution, IF: 3.4)

Warren, N., Maskin, S., Gurupur, V., Rector, D., Adelman, D., Howell, S., McAree, J., Dibble, R., Carlisano, C., Maconi, D., Schrottenboer, D., Jaimes, M., Marte, N., Carlisano, T., Toland, C., **Chung, J.**, Cremers, S., & Corbin, G. (2024) “Engaging Stakeholders to Develop a Roadmap for Dry Eye and MGD PCORI-Funded Research”, *Patient Related Outcome Measures*, 12 May 2024 Volume 2024:15 Pages 143-186. (Refereed, all authors contributed equally to this work, IF: 1.8)

Lee, W., Wahman, D. G., Lytle, D. A., Pressman, J. G., & **Chung, J.** (2023) “Microelectrode evaluation of in situ oxidant reactivity and pH variability at new ductile iron and copper coupon surfaces”, *Water Research*, Volume 243, 120352. (Refereed, first author had greatest contribution, IF: 12.4)

Lee, W., Park, C., Diaz, D., Rodriguez, K., **Chung, J.**, Church, J., Willner, M., Lundin, J., & Paynter, D. (2022) “Predicting Bilgewater Emulsion Stability by Oil Separation using Image Processing and Machine Learning”, *Water Research*, Volume 223, 118977. (Refereed, first author had greatest contribution, IF: 12.4)

Chung, J., Jackson, B. S., McDowell, J. E., & Park, C. (2021) “Joint Estimation and Regularized Aggregation of Brain Network in fMRI Data”, *Journal of Neuroscience Methods*, Volume 364, 109374. (Refereed, first author had greatest contribution, IF: 2.3)

Zhang, Q., Park, C., & **Chung, J.** (2021) “Minimax Estimation of Covariance and Precision Matrices for High-Dimensional Time Series with Long-Memory”, *Statistics & Probability Letters*, 109177. (Refereed, first author had greatest contribution, IF: 0.7)

Wang, L. Y., **Chung, J.**, Park, C., Choi, H., Rodrigue, A. L., Pierce, J. E., Clementz, B.A. & McDowell, J. E. (2019) “Regularized aggregation of statistical parametric maps”, *Human brain mapping*, 40(1), 65-79. (Refereed, first author had greatest contribution, IF: 3.3)

Symposium:

Lee, E., Daruge, M., **Chung, J.**, Park, J., Hines, R., Loerzel, V. (2025), “Evaluating health-related quality of life among Hispanic breast cancer survivors”, *Society for Epidemiology Research 2025 Conference*. (Not refereed, first author had greatest contribution)

Lee, E., Sukhu, B., Lakshmanan, M., **Chung, J.**, Rovito, M. J., Hines, R. B., & Loerzel, V. (2025). Abstract P3-01-06: Differences in health-related quality of life among breast cancer survivors by Hispanic origins. *Clinical Cancer Research*, 31(12_Supplement), P3-01. (Not refereed, first author had greatest contribution)

Rodriguez, K., Park, C.Y., **Chung, J.**, Church, J., Lundin, G. J., Paynter, D.M., & Lee, W.H. (2021), “Emulsion Stability Study of Simulated Bilgewater Samples with Varying Parameters for Improved Bilgewater Treatment and Management”, *2021 SERDP/ESTCP Symposium*. (Not refereed, first author had greatest contribution)

Under review or in preparation:

Bae, J., Shim, G., **Chung, J.**, & Kang, I. (2026) “Transfer-Learning CNNs for Robust Plant-Health Classification: A Tomato and Rose Smart-Farming Case Study”, *Scientific Reports*, under revision. (Refereed, first author had greatest contribution)

Lee, E., **Chung, J.**, Rovito, M. J., Hines, R. B., & Loerzel, V. (2026) “Factors associated with health-related quality of life among breast cancer survivors in a heterogeneous Hispanic population: A cross-sectional study”, *Journal of Cancer Survivorship*, under review. (Refereed, first author had greatest contribution)

Wang, T., Kang, I. & **Chung, J.** (2026+) “Dynamic Evolution of Financial Stock Networks via Precision Matrix Estimation”, in preparation.

Wehr, A., **Chung, J.**, & Kang, I. (2026+) “Optimizing Parameter Estimation for Human Performance Modeling: A Case Study on Seek-and-Place Tasks”, *Communications in Statistics: Case Studies, Data Analysis and Applications*, in preparation.

Kanaguduru, P. & **Chung, J.** (2026+) “Evaluating Large Language Models for Automated Data Cleaning: A Comparative Study”, in preparation.

Chavanachat, R. & **Chung, J.** (2026+) “Enhanced Brain Network Interpretability using Large Language Models with Spatial Principal Component Analysis”, in preparation.

RESEARCH –

Invited:

PRESENTATIONS

2025 Joint Statistical Meetings, Nashville, Tennessee, August 2025

2025 Joint Mathematics Meetings, Seattle, Washington, January 2025

7th International Conference on Econometrics and Statistics (EcoSta 2024), Beijing, China, July 2024

2024 Korean Statistical Society Summer Conference, Seoul, South Korea, July 2024

“Joint Graphical Lasso with Regularized Aggregation”, Colloquium at Department of Information Statistics in Chungbuk National University, Cheongju, South Korea, June 2024

6th International Conference on Econometrics and Statistics (EcoSta 2023), Tokyo, Japan, August 2023

“Joint Estimation of Precision Matrices for High-Dimensional Time Series with Long-Memory”, 2023 Annual ASA Florida Chapter Meeting, Gainesville, FL, March 2023

Contributed:

UCF Statistics & Data Science Colloquium Series, Orlando, FL, April 2025

UCF Statistics & Data Science Colloquium Series, Orlando, FL, April 2024

“Joint Estimation of Precision Matrices for High-Dimensional Time Series with Long-Memory”, UCF Statistics & Data Science Colloquium Series, Orlando, FL, February 2023

“Estimation of Covariance and Precision Matrices for Graphical Models”, UCF Statistics & Data Science Colloquium Series, Orlando, FL, March 2022

UCF Statistics & Data Science Colloquium Series, Orlando, FL, November 2020

Advancing Informatics in Government and Industry, Athens, GA, November 2019

Georgia Statistics Day, Atlanta, GA, October 2019

“Joint Estimation and Regularized Aggregation of Brain Network in fMRI Data”, Joint Statistical Meeting, Denver, CO, August 2019

“Regularized Aggregation of Statistical Parametric Maps”, Georgia Statistics Day, Athens, GA, October 2018

RESEARCH –

Completed:

CREATIVE WORKS UCF Office of Research Grant Writing Academy 2024, University of Central Florida, Fall 2024

Invited:

Not A Dry Eye Convening for “Engaging Stakeholders to Develop a Roadmap for Dry Eye and MGD PCORI-Funded Research”, Online, March 2022

RESEARCH –

Active:

GRANTS &

COS Seed Funding Program Track 1 (DN15424)

PROPOSALS

Title: Robust Network Estimation for Depression Biomarkers

My role: **Principal Investigator (sole-PI)**

Total amount: **\$3,000** (my role: 100%)

Period: 02/23/2026 – 02/22/2027

Florida Breast Cancer Foundation Scientific Research Grants (GR108368)

Title: Mediators of Disparity of Quality of Life in Hispanic Breast Cancer Survivors

My role: **Co-Investigator** (PI: Eunkyung Lee (Health Science), Co-Is: Victoria Loerzel (Nursing), **Jongik Chung (Statistics and Data Science)**)

Total amount: **\$98,692** (my role: 5%)

Period: 07/01/2023 – 06/30/2026

Pending / Proposed:

Florida Breast Cancer Foundation Scientific Research Grants

(FP00012884)

Title: Nutrition Intervention and Immune Health among Hispanic Breast Cancer Survivors

My role: **Co-Investigator** (PI: Eunkyung Lee (Health Science), Co-Is: Jennifer Crook (Nursing), Qun Huo (Chemistry), **Jongik Chung (Statistics and Data Science)**, Jae Park (Global Health Management and Informatics))

Total amount: **\$99,600** (my role: 5%)

Period: 07/01/2026 – 06/30/2027

Florida Department of Health – Florida Cancer Innovation Fund

(FP00012665)

Title: FRESCO Program: Fresh Produce and Cooking Education to Support Hispanic Breast Cancer Survivors

My role: **Co-Investigator** (PI: Eunkyung Lee (Health Science), Co-PI: Jennifer Crook (Nursing), Co-Is: **Jongik Chung (Statistics and Data Science)**, Qun Huo (Nanoscience Technology Center), Victoria Loerzel (Nursing), Jae Park (School of Global Health Management and Informatics))

Total amount: **\$614,741.05** (my role: 10%)

Period: 05/01/2026 – 04/30/2027

2026 Korean-American Scientists and Engineers Association (KSEA)

Young Investigator Grant (YIG) (FP00012536)

Title: Heterogeneity-Aware and Outlier-Resistant fMRI Network Estimation for Biomarker Discovery in Major Depressive Disorder

My role: **Principal Investigator (sole-PI)**

Total amount: **\$10,000**

Period: 08/01/2026 – 07/31/2027

The Center for Behavioral Health Research and Training (CBHRT):

Community-Connected Research Initiative

Title: The Feasibility Study of Attending Community Nutrition Education and Cooking Classes to Improve Anti-inflammatory Potential and Behavioral Health among Hispanic Breast Cancer Survivors

My role: **Co-Investigator** (PI: Eunkyung Lee (Health Science), Co-Is: Jennifer Crook (Nursing), **Jongik Chung (Statistics and Data Science)**)

Total amount: **\$15,000**

Period: 07/01/2026 – 06/30/2027

NIH R21 SF424 R&R and PHS-398

Title: Validation and Feasibility of the Activities Completed Over Time in 24-hours (ACT24) in Youth

My role: **Co-Investigator** (PI: A'Naja Newsome (Health Science), Co-Is: Brazendale Keith (College of Health Professions & Sciences), **Jongik Chung (Statistics and Data Science)**)

Total amount: **\$418,000** (my role: 10%)

Period: 09/01/2024 – 08/31/2026

SERVICES

College of Science, University of Central Florida

- Graduate Curriculum: Sp 2026
- RIA Selection Committee: 2024 – 2025
- TIP Selection Committee: 2023 – 2024
- Research Committee: 2023 – 2024

Department of Statistics and Data Science, University of Central Florida

- Graduate Curriculum: Sp 2026, 2023 – 2025
- Undergraduate Curriculum: Sp 2026, 2020 – 2021
- Graduate Programs: Sp 2026, Sp 2023, Fall 2020
- 2025 ASA Annual Florida Chapter Meeting Session Chair: Sp 2025
- 2025 ASA Annual Florida Chapter Meeting Presentation Judge: Sp 2025
- Search Committee (Instructor / Lecturer): Sp 2025, Sp 2022
- Bylaws and Strategic Goal: 2024 – 2025, 2023 – 2024
- Scholarship Committee: 2022 – 2023, Sp 2022, Sp 2021
- Assessment (Ph.D. Big Data Analytics): 2022 – 2023, Fall 2021
- P&T Revision Committee: 2022 – 2023
- M.S. Program Revision Committee: Fall 2022 (**Chair**)
- Colloquium Committee: 2020 – 2021, 2021 – 2022 (**Chair**)
- 2021 FL ASA Traveling Course Coordinator: Fall 2021 (**Coordinator**)
- STA 2014 Coordinator: Fall 2021 (**Coordinator**)
- Assessment (M.S. Statistical Computing): Fall 2021
- I/L Promotion Criteria development: Sp 2021
- Assessment (B.S. Statistics): Fall 2020

Journal Reviews

- The American Statistician
- American Journal of Undergraduate Research
- Colloids and Surfaces A: Physicochemical and Engineering Aspects
- Journal of Neuroscience Methods

- Journal of Multivariate Analysis
- Computational Statistics & Data Analysis

Book Proposal Reviews

- John Wiley & Sons
- CRC Press – Taylor & Francis Group

ADDITIONAL
EXPERIENCE

Research Assistant Aug 2018 to May 2020

Department of Statistics, University of Georgia Athens, GA

- Supported by the National Science Foundation (NSF IIS-1607919)
- Develop statistical methods to reveal the relationships in brain networks

Neuroimaging Data Analysis Group Member Aug 2017 to May 2020

Department of Statistics, University of Georgia Athens, GA

- A group of faculties and graduate students from the Departments of Statistics and Psychology meet each week to discuss general problems in Neuroimaging data analysis
- Present research and review papers in neuroimaging science

Research Assistant Mar 2013 to Feb 2014

Department of Business Administration, Seoul,
Korea University Republic of Korea

- Supported by the university for the Brain Korea 21 Project
- Collect research data and organize them to write a business plan book

PROFESSIONAL
ACTIVITIES

Organization Membership

- American Statistical Association (ASA)
- Institute of Mathematical Statistics (IMS)
- Korean – American Scientists and Engineers Association (KSEA)
- Korean International Statistics Society (KISS)

PROGRAMMING
SKILLS

R, SAS, Python, JMP