

JAE HO CHANG, PH.D.

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PROFESSIONAL EXPERIENCE

POSTDOCTORAL RESEARCHER <i>Yale University</i>	2026– Connecticut, USA
† Faculty mentor: Dr. Yize Zhao	
† Fields of study: Biostatistics, mental health	

EDUCATION

PH.D. IN STATISTICS <i>The Ohio State University</i>	2021–2026 Ohio, USA
† Dissertation: Methodological Advances in Network Inference and Information Transfer	
† Advisor: Dr. Subhadeep Paul, Dr. Arnab Auddy (co-advisor)	
B.A. & M.A. IN APPLIED STATISTICS <i>Konkuk University</i>	2012–2020 Seoul, ROK

RESEARCH PAPERS

IN PROGRESS

- † **Chang, J.**, Auddy, A., and Paul, S. (2025–). Transfer learning for graphical models and differential graph estimation with FDR control.
- † Residual Learning Enhanced Koopman Model Predictive Control for Unmanned Aerial Vehicles.

UNDER REVIEW

- † **Chang, J.**, Auddy, A., and Paul, S. (2026). Personalized Federated Learning via Variance-Aware Nonparametric Empirical Bayes. *arXiv preprint*.
- † Nath, S., Hong, J., **Chang, J.**, Warren, K. and Paul, S. (2025). Recidivism and Peer Influence with LLM Text Embeddings in Low Security Correctional Facilities. *Journal of Econometrics*. [Revise and resubmit](#).
- † **Chang, J.**, Russo, M. and Paul, S. (2024). Heterogeneous Transfer Learning for High-Dimensional Regression with Feature Mismatch. *arXiv preprint*.

PUBLISHED

- † **Chang, J.** and Paul, S. (2026). Embedding Network Autoregression for Time Series Analysis and Causal Peer Effect Inference. *Journal of Machine Learning Research*, 27(111):1–72, 2026.
- † **Chang, J.**, Lee, S., and Kim, H. (2023). An Asymptotically Efficient Closed-Form Estimator for the Dirichlet Distribution. *Stat*, 12(1).
- † Lee, S., **Chang, J.**, and Kim, H. (2021). Further Sharpening of Jensen’s Inequality. *Statistics*, 55(5).
- † **Chang, J.**, Moon, H., and Kwon, S. (2021). High-Dimensional Linear Discriminant Analysis with Moderately Clipped LASSO. *Communications for Statistical Applications and Methods*, 28(1).

AWARDS AND HONORS

BEST STUDENT POSTER AWARDS <i>Among top 5 out of 20, The 11th Workshop on Biostatistics and Bioinformatics American Statistical Association (ASA) Georgia Chapter</i>	May 2026 Georgia, USA
D. RANSOM & MARIAN WHITNEY AWARD FOR OUTSTANDING RESEARCH ASSOCIATE <i>Department of Statistics, OSU</i>	May 2026 Ohio, USA
TRAVEL AWARDS <i>Conferences and Workshops</i>	2025–2026 USA
† Workshop on Collaborative Research at the Intersection of Statistics and Engineering (CRSE), Wharton School, University of Pennsylvania	

- † Workshop on New Horizons on Model Transportability and Data Integration, Institute for Mathematical and Statistical Innovation (IMSI)
- † The 11th Workshop on Biostatistics and Bioinformatics, Georgia State University
- † Annual Winter Workshop on Frontiers in Learning Under Data Heterogeneity, University of Florida
- † The Inaugural Workshop on Frontiers in Statistical Machine Learning (FSML), Institute of Mathematical Statistics (IMS)

SELECTED PRESENTATIONS

RESIDUAL LEARNING ENHANCED KOOPMAN MODEL PREDICTIVE CONTROL FOR UAVs

- † Talk, CRSE Workshop, Wharton School at University of Pennsylvania Aug 2026

PERSONALIZED FEDERATED LEARNING VIA VARIANCE-AWARE NONPARAMETRIC EMPIRICAL BAYES

- † Poster, CRSE Workshop, Wharton School at University of Pennsylvania Aug 2026
- † Talk, Transfer Learning through Empirical Risk Minimization, JSM Aug 2026
- † Poster, New Horizons on Model Transportability and Data Integration, IMSI Jun 2026
- † Poster, The 11th Workshop on Biostatistics and Bioinformatics, Georgia State University May 2026
- † Poster, 2026 Annual Joint Biostatistics Symposium, OSU Jan 2026

HETEROGENEOUS TRANSFER LEARNING FOR HIGH-DIMENSIONAL REGRESSION WITH FEATURE MISMATCH

- † Poster, Statistics Annual Winter Workshop, University of Florida Jan 2026
- † Talk, Advances in Transfer Learning, JSM Aug 2025
- † Poster, IMS Inaugural FSML Workshop, Vanderbilt University Aug 2025

EMBEDDING NETWORK AUTOREGRESSION FOR TIME SERIES ANALYSIS AND CAUSAL PEER EFFECT INFERENCE

- † Talk, Virtual Workshop for Junior Researchers in Time Series Mar 2026

SELECTED PROJECTS

HETEROGENEOUS TRANSFER AND PERSONALIZED FEDERATED LEARNING METHODS FOR DIGITAL TWIN IN UNMANNED AERIAL VEHICLES Sep 2025–Aug 2026 USA

NSF Award 2529302 – \$570K (PI: Subhadeep Paul)

- † Worked as a graduate researcher developing statistical and algorithmic foundations for heterogeneous transfer learning and personalized federated learning with aerodynamic digital twin applications.

TRANSFER, FEDERATED, AND PRIVATE STATISTICAL LEARNING FOR TRUSTWORTHY AI 2024–2025 USA

OSU College of Arts and Sciences (NMS) Exploration Grants Program

- † Worked as a graduate researcher developing heterogeneous transfer learning for high-dimensional regression with feature mismatch.

PREDICTIONS OF ALLOGROOMING IN THE VAMPIRE BAT SOCIAL NETWORK May–Aug 2024 USA

Collaboration with Department of EEOB, OSU

- † Investigated social bonding and cooperative behavior in vampire bats using network analysis to predict allogrooming patterns.

ANTIBIOTIC STEWARDSHIP SYSTEM DEVELOPMENT Jun–Sep 2018 ROK

SK C&C, Korea University Medical Center

- † Built classification models for predicting methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant enterococci (VRE).
- † Developed APIs for clinical deployment of predictive models.

PROFESSIONAL AFFILIATIONS AND SERVICE

PROFESSIONAL AFFILIATIONS

- † Member of ASA and IMS

PEER REVIEW

- † 2026: Journal of the Royal Statistical Society: Series C, Statistics & Probability Letters

- † 2025: Computational Statistics & Data Analysis
- † 2021: Communications for Statistical Applications and Methods

TEACHING EXPERIENCE

GRADUATE TEACHING ASSOCIATE

2021–2026

Department of Statistics, OSU

Ohio, USA

- † [STAT 4201](#), [STAT 4202](#): Introduction to Mathematical Statistics I & II (AU 22, SP 23)
- † [STAT 3202](#): Introduction to Statistical Inference (SU 23, AU 23, SP 24, SP 25)
- † [STAT 1350](#): Elementary Statistics (SP 22)

WORKSHOP LECTURER

Jul–Oct 2020

Department of Human Resources, GS E&C

Seoul, ROK

- † Delivered tutorials on SPSS and introductory statistics, including probability and linear regression.

GRADUATE TEACHING ASSISTANT

2018–2019

Department of Applied Statistics, Konkuk University

Seoul, ROK

- † Supported courses in Regression Analysis, Likelihood Theory, Distribution Theory, Nonparametric Estimation, and Mathematical Statistics.

TECHNICAL SKILLS

- † R and Python (advanced), C++ (intermediate)
- † Git, Unix, SLURM-based HPC workflows
- † LaTeX, SQL