

# Curriculum Vitae

**Ying Ding**

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## Academic Interests

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- Survival Analysis and Semiparametric Methods
  - Develop novel statistical methods for complex survival data, including multivariate and interval-censored outcomes
  - Establish new methods and theories for semiparametric models
- Machine Learning Methods for Precision Medicine
  - Develop various neural networks for individualized risk prediction and disease progression, with major applications to age-related macular degeneration and Alzheimer's disease
  - Construct new methods and computational tools for individualized treatment effect estimation, subgroup identification, and treatment rule recommendations, with major applications to age-related macular degeneration and pediatric asthma
- High-dimensional Multi-omics Data Analysis and Integration
  - Statistical modeling of proteomics and genomics data with construction of biological networks
  - Applications to neuropsychiatric disorders (e.g., schizophrenia, Alzheimer's disease) and cancer studies

## Education and Training

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### Undergraduate

| Years of attendance | University, city, state               | Degree, Year Awarded | Field       |
|---------------------|---------------------------------------|----------------------|-------------|
| 1999-2003           | Nanjing University,<br>Nanjing, China | BS, 2003             | Mathematics |

### Graduate

| Years of attendance | University, city, state                               | Degree, Year Awarded | Field         |
|---------------------|---|----------------------|---------------|
| 2005-2010           | University of Michigan,<br>Ann Arbor, MI              | PhD, 2010            | Biostatistics |
| 2003-2005           | Indiana University<br>Bloomington,<br>Bloomington, IN | MA, 2005             | Mathematics   |

## Appointments and Positions

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### Academic

| Years Position Held | Title                               | Department, School,<br>Name and location of institution               |
|---------------------|-------------------------------------|---|
| 2003 - 2005         | Assistant Instructor                | Department of Mathematics,<br>Indiana University Bloomington, IN      |
| 2005 - 2006         | Graduate Student Instructor         | Department of Biostatistics,<br>University of Michigan, Ann Arbor, MI |
| 2006 - 2009         | Graduate Student Research Assistant | Department of Biostatistics,<br>University of Michigan, Ann Arbor, MI |
| 2013 - 2019         | Assistant Professor (Tenure)        | Department of Biostatistics,  |

|                |   |  |
|----------------|---|--|
| 2019 - 2024    | Stream)<br>Associate Professor<br>(Tenured)     | University of Pittsburgh, Pittsburgh, PA<br>Department of Biostatistics,<br>University of Pittsburgh, Pittsburgh, PA |
| 2022 - 2024    | Vice Chair for Education                        | Department of Biostatistics,<br>University of Pittsburgh, Pittsburgh, PA   |
| 2023 - 2024    | Director of PhD Graduate<br>Program             | Department of Biostatistics,<br>University of Pittsburgh, Pittsburgh, PA   |
| 2023 - 2024    | Associate Professor<br>(Secondary)              | Department of Statistics,<br>University of Pittsburgh, Pittsburgh, PA  |
| 2024 - Present | Associate Dean for<br>Graduate Academic Affairs | School of Public Health,<br>University of Pittsburgh, Pittsburgh, PA   |
| 2024 - Present | Professor (Tenured)                             | Department of Biostatistics and Health Data<br>Science, University of Pittsburgh, Pittsburgh, PA                     |

### Non-Academic

| Years       | Position Held | Title                     | Name and location of company/organization |
|-------------|---------------|---------------------------|---|
| 2008 - 2008 |               | Statistics Summer Intern  | Eli Lilly and Company, Indianapolis, IN   |
| 2009 - 2012 |               | Research Scientist        | Eli Lilly and Company, Indianapolis, IN   |
| 2012 - 2013 |               | Senior Research Scientist | Eli Lilly and Company, Indianapolis, IN   |

### Membership in Professional and Scientific Societies

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| Years Inclusive | Name of Society   |
|-----------------|---|
| 2003 - 2005     | Fellow, Women in Science, Indiana University Bloomington  |
| 2003 - 2005     | Member, American Mathematical Society   |
| 2005 - 2007     | Fellow, Public Health Genetics Interdepartmental Concentration                                      |
| 2013 - 2017     | Member, PLOS ONE Statistical Advisory Board   |
| 2007 - Present  | Member, American Statistical Association (ASA)  |
| 2007 - Present  | Member, International Biometric Society, Eastern North American Region (ENAR)                       |
| 2014 - Present  | Member, International Chinese Statistical Association (ICSA)  |
| 2017 - 2022     | Member/Vice Chair/Chair, ASA Statistical Partnerships Across Academe, Industry & Government (SPAIG) |
| 2018 - Present  | Member, ASA Pittsburgh Chapter  |
| 2021 - 2023     | President-Elect/President/Past-President, ASA Pittsburgh Chapter                                    |
| 2019 - Present  | Member, ASA Lifetime Data Science (LiDS) Section  |
| 2022 - 2024     | Program Chair-Elect/Chair/Past-Chair, ASA LiDS Section  |

### Honors

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| Year of Award | Title of Award  |
|---------------|---|
|               | Awarding Association  |
| 2000 - 2003   | People's Scholarship<br>Outstanding Student Award,<br>Nanjing University, China |
| 2003 - 2005   | Women in Science Fellowship<br>Indiana University Bloomington                   |
| 2006          | Best First-Year Master's Student<br>University of Michigan                      |
| 2007          | Best Performance on the PhD Qualifying Exams<br>University of Michigan          |
| 2008          | Midwest SAS User Group (MWSUG) Student Scholarship                              |

|            |   |
|------------|---|
| 2009       | Rackham Predoctoral Fellowship<br>University of Michigan                                |
| 2010       | ENAR Distinguished Student Paper Award  |
| 2013       | ENAR Junior Researcher Travel Award   |
| 2014       | Women in Statistics Conference Travel Award   |
| 2014, 2020 | Nomination for James L. Craig Excellence in Education Award<br>University of Pittsburgh |
| 2021       | James L. Craig Excellence in Education Award<br>University of Pittsburgh                |
| 2022       | Inducted into the Delta Omega Honor Society in Public Health                            |
| 2022       | Ascending Star Award, Health Sciences<br>University of Pittsburgh                       |
| 2023       | American Statistical Association LiDS Section Outstanding Service Award                 |
| 2025       | Elected Fellow<br>American Statistical Association                                      |

## Professional Activities

### Teaching

#### Courses Taught

| Years Taught                         | Institution<br>Program<br>(Graduate or<br>Undergraduate)<br>Course Number:<br>Title | Hours of Lecture/Credits<br>Average Enrollment | Role in Course<br>Primary/Coordinator |
|--------------------------------------|---|--|---------------------------------------|
| 2013, 2014, 2016,<br>2017 Fall       | Pitt, BIOST 2086:<br>Applied Mixed Model<br>Analysis                                | 3 credits, 8-26 enrolled                       | Primary Instructor                    |
| 2014 Spring and Fall                 | Pitt, BIOST 2025:<br>Biostatistics Seminar  | 1 credit, 14-15 enrolled                       | Primary Coordinator                   |
| 2018, 2019, 2022,<br>2023 Spring     | Pitt, BIOST 2054 /<br>STAT2261:<br>Survival Analysis                                | 3 credits, 5-17 enrolled                       | Primary Instructor                    |
| 2019, 2020, 2021,<br>2022, 2023 Fall | Pitt, BIOST 2066:<br>Pitt, Applied Survival<br>Analysis                             | 2 credits, 7-27 enrolled                       | Primary Instructor                    |
| 2022, 2023 Fall                      | Pitt, BIOST 2081:<br>Mathematical<br>Methods for Statistics                         | 3 credits, 11-15 enrolled                      | Faculty Supervisor                    |
| 2022, 2023 Fall                      | Pitt, BIOST 2000:<br>Teaching Practicum   | 3 credits, 2 enrolled                          | Faculty Coordinator                   |
| 2024 Fall                            | Pitt, BIOST 2150:<br>Applied Survival Analysis                                      | 3 credits, 16 enrolled                         | Primary Instructor                    |
| 2024, 2025                           | PUBHLT 2022:<br>The Dean's PH<br>Grand Rounds                                       | 0 credits, 212 - 232 enrolled                  | Faculty Supervisor                    |

**Other Teaching** (lectures, tutorials, and continuing education courses)

| <b>Date(s)</b>  | <b>Type of Teaching</b>    | <b>Title</b>  |
|-----------------|----------------------------|---|
| 11/7/2013       | Continuing education       | Biostatistics for Clinical Research, Department of Surgical Oncology  |
| 6/7/2016        | Continuing education       | Statistics in Basic Science “Research Skills and Career Advancement” Workshop, Pittsburgh Institute of Brain Disorders and Recovery (PIBDR) |
| 2016, 2017 Fall | Guest lecture (2 lectures) | BIOST 2046: Analysis of Cohort Studies  |
| 2017 Spring     | Guest lecture (1 lecture)  | BIOST 2062: Clinical Trials: Methods and Practice   |
| 2022 Spring     | Guest lecture (1 lecture)  | HUGEN 2080: Statistical Genetics  |
| 2023 Spring     | Guest lecture (1 lecture)  | BIOST 2062: Clinical Trials: Methods and Practice   |

**Major Advisor for Graduate Student Essays, Theses, and Dissertations**

| <b>Name of Student</b> | <b>Degree Awarded Year</b> | <b>Type of Document Title</b>  | <b>Notes</b>                   |
|------------------------|----------------------------|--|--------------------------------|
| Kidane Ghebrehawariat  | PhD in Biostatistics, 2015 | Dissertation, Parametric methods in quantile residual lifetime analysis  | Co-advised with Dr. Jong Jeong |
| Yi Liu                 | PhD in Biostatistics, 2017 | Dissertation, Novel Single and Gene-based Test Procedures for Large-scale Bivariate Time-to-event Data, with Application to a Genetic Study of AMD Progression |                                |
| Zhe Sun                | PhD in Biostatistics, 2018 | Dissertation, Novel Statistical Methods in Analyzing Single-Cell Sequencing Data   | Co-advised with Dr. Wei Chen   |
| Tao Sun                | PhD in Biostatistics, 2020 | Dissertation, New statistical methods for complex survival data with high-dimensional covariates   |                                |
| Yue (Luna) Wei         | PhD in Biostatistics, 2021 | Dissertation, New Statistical Insights to Precision Medicine, from Targeted Treatment Development to Individualized Tailoring Recommendation                   |                                |
| Xinjun Wang            | PhD in Biostatistics, 2022 | Dissertation, Statistical Learning and Analysis of Single-Cell Multi-Omics Data  | Co-advised with Dr. Wei Chen   |

|              |                                       |  |                             |
|--------------|---------------------------------------|--|-----------------------------|
| Na Bo        | PhD in Biostatistics, 2025            | Dissertation, New Methods for Analyzing Heterogeneous Treatment Effects in Survival Data   |                             |
| Zhiyu Sui    | PhD in Biostatistics, 2025 (expected) | Dissertation, Transfer learning approaches for estimation and evaluation of individualized treatment decisions                               | Co-advised with Dr. Lu Tang |
| Lang Zeng    | PhD in Biostatistics, 2026 (expected) | Dissertation, Deep Learning for Proportional Hazards Model and General Transformation Model  |                             |
| Jiaqian Liu  | MS in Biostatistics, 2023             | Thesis, Prediction of Severe Asthma Outcomes in Children on EHR Data   |                             |
| Jerry Zhou   | MS in Biostatistics, 2024             | Thesis, Impact of COVID-19 on Adverse Outcomes for Congestive Heart Failure Inpatients in the Northeast Mid-Atlantic Using NIS 2020 Database |                             |
| Haoling Wang | MS in Biostatistics, 2025             | Thesis, ODE-based Neural Network for Interval-Censored Survival Data with Application to Prediction of Alzheimer's Disease Progression       |                             |
| Xin Li       | MS in Biostatistics, 2026 (expected)  | Thesis, TBD  |                             |

#### Service on Masters or Doctoral Committees

| Dates Served     | Name of Student | Degree Awarded      | Title of Dissertation/Essay   |
|------------------|-----------------|---------------------|---|
| 1/2013 – 8/2013  | Yimeng Liu      | MS in Biostatistics | "A Comparison of Regression Methods in Data Subject to Non-detect: An Application to Lung Fiber Analysis Among Brake Workers" |
| 4/2018 – 8/2018  | Yuanyuan Jiao   | MS in Biostatistics | "Causal Effects of Baseline Sleep Disturbance on Cognitive Decline Among the Elderly"   |
| 9/2020 - 12/2020 | Chen'Ao Qian    | MS in Biostatistics | "Genome-wide association studies in Samoans give insight into obesity by investigating skinfold thickness"                    |

|                   |                       |                      |  |
|-------------------|-----------------------|----------------------|--|
| 12/2023 – 4/2024  | Paul Mlodgenski       | MS in Epidemiology   | “Quantifying Demographic Disparities of Red Tide Exposure and Complications in Sarasota and Manatee Counties: A Pilot Study”       |
| 06/2013 – 06/2015 | Hui-Min Lin           | PhD in Biostatistics | “Behavior of Statistics for Genetic Association in Genome-Wide Scan Context”   |
| 01/2014 – 04/2015 | Beth Zamboni          | PhD in Biostatistics | “Twisted Survival: Identifying Surrogate Endpoints for Mortality Using Qtwist and Conditional Disease Free Survival”               |
| 06/2014 – 12/2014 | Samia Lopa            | PhD in Biostatistics | “Inference on Quantile Residual Life for Length-biased Survival Data”  |
| 09/2014 – 05/2016 | Jia-Yuh Chen          | Biostatistics        | “Joint Modeling of Bivariate Longitudinal and Bivariate Survival Data in Spouse Pairs”   |
| 07/2015 – 12/2016 | Andrew Potter         | PhD in Biostatistics | “Functional Mixed Models for Vector Valued Physiological Signals”  |
| 10/2015 – 04/2017 | Yuvika Paliwal        | PhD in Biostatistics | “Generalized linear mixed models for analysis of cross-correlated binary response in multi-reader studies in diagnostic radiology” |
| 05/2016 – 05/2017 | Qiyao Wang            | PhD in Statistics    | “Two-Sample Inference For Functional Data”   |
| 06/2016 – 07/2017 | Judah Abberbock       | PhD in Biostatistics | “Surrogate Endpoints in the Design and Analysis of Clinical Trials”  |
| 03/2017 – 12/2017 | Yongli Shuai          | PhD in Biostatistics | “Multinomial Logistic Regression and Prediction Accuracy for Interval-Censored Competing Risks Data”                               |
| 09/2017 – 04/2018 | Tianzhou (Charles) Ma | PhD in Biostatistics | “Differential Expression and Feature Selection in the Analysis of Multiple Omics Studies”  |
| 11/2017 – 05/2018 | Zhou (Ark) Fang       | PhD in Biostatistics | “Integration and Missing Data Handling in Multiple Omics Studies”  |

|                   |                  |                      |  |
|-------------------|------------------|----------------------|--|
| 11/2018 – 04/2019 | Di Zhang         | PhD in Biostatistics | “Inference on Win Ratio for Clustered Semi-competing Risk Data”  |
| 10/2018 – 06/2019 | Md Tanbin Rahman | PhD in Biostatistics | “Clustering and Classification for RNA-seq Data with Variable Selection”   |
| 10/2018 – 12/2020 | Victor Talisa    | PhD in Biostatistics | “Post-hoc Responder Subgroup Identification in Clinical Trials: Variations on the Subgroup Identification based on Differential Effect Search (SIDES) Procedure, and a New Model Extension for Missing Covariate Data” |
| 10/2019 – 04/2020 | Huang Lin        | PhD in Biostatistics | “Some methodological contributions to the analyses of microbiome data with applications”   |
| 03/2020 – 08/2021 | Junyao Wang      | PhD in Biostatistics | “Adaptive Randomization in a Two-stage Sequential Multiple Assignment Randomized Trial”  |
| 11/2020 – 04/2022 | Haeun Moon       | PhD in Statistics    | “Interpoint-ranking based Test of Independence”  |
| 03/2021 – 08/2021 | Liwen Wu         | PhD in Biostatistics | “Interim Monitoring in Sequential Multiple Assignment Randomized Trial (IM-SMART)”   |
| 09/2021 – 04/2022 | Yujia Li         | PhD in Biostatistics | “Clustering and Association Analysis for High-Dimensional Omics Studies”   |
| 09/2021 – 04/2022 | Yichen Jia       | PhD in Biostatistics | “New Model-based and Deep Learning Methods for Survival Data with or without Competing Risks”  |
| 11/2021 – 09/2022 | Yang Qu          | PhD in Statistics    | “Concordance Measure for Variable Screening and Model Evaluation with Competing Risks Data”  |
| 05/2022 – 04/2023 | Yusi Fang        | PhD in Biostatistics | “Methods for combining frequent or sparse signals in omics applications”   |
| 12/2022 – 08/2023 | Xueping Zhou     | PhD in Biostatistics | “Feature selection and outcome prediction for high-dimensional multi-omics data”   |

|                   |            |                     |  |
|-------------------|------------|---------------------|--|
| 09/2023 – 03/2025 | Ziling Mao | PhD in Epidemiology | “The Association Between Timing of Intake and Healthy Aging”   |
| 09/2024 – Present | Jinwoo Cho | PhD in Statistics   | “Dynamic Prediction using Jointly Estimated Landmarking and Network Assisted Localized Functional Principal Component Analysis for Brain MEG Data” |

### Student Awards

| Student's Name | Award Time       | Award Name  |
|----------------|------------------|---|
| Zhe Sun        | 01/2017– 12/2018 | RAC fellowship by Children's Hospital of UPMC for her research proposal: “Statistical method for biological network analysis of omics data”     |
| Yi Liu         | 04/2017          | Mihaela Serban Best Poster Award in ASA Pittsburgh Chapter 2017 Spring Meeting  |
| Yue Wei        | 07/2017          | Best Performance in PhD Qualifying Exams, Biostatistics   |
| Yue Wei        | 03/2018          | Outstanding Research Presentation Award, Biostatistics Student Research Day   |
| Tao Sun        | 03/2018          | Honorable Mention, Biostatistics Student Research Day   |
| Tao Sun        | 12/2018          | ENAR Distinguished Student Paper Award  |
| Zhe Sun        | 12/2018          | ENAR Distinguished Student Paper Award  |
| Tao Sun        | 01/2019-12/2019  | CTSI QuMP grant (co-PI) for the research proposal “Deep Learning with GWAS to Predict AMD Progression”  |
| Yue Wei        | 03/2019          | LiDS (Lifetime Data Science) Conference Student Paper Award   |
| Tao Sun        | 04/2019          | American Statistical Association (ASA) Pittsburgh Chapter Student of the Year Award   |
| Tao Sun        | 04/2019          | Outstanding Teaching Fellow Award, Department of Biostatistics, University of Pittsburgh  |
| Yue Wei        | 04/2019          | Mihaela Serban Best Poster Award in ASA Pittsburgh Chapter 2019 Spring Meeting  |
| Tao Sun        | 04/2019          | ICSA (International Chinese Statistical Association) Student Paper Award  |
| Tao Sun        | 05/2019          | LiDS Conference Student Poster Award  |
| Xinjun Wang    | 09/2019-08/2020  | CTSI QuMP grant (co-PI) for the research proposal “Multi-source Analysis of Cellular Transcriptomes and Epitopes of Sequencing (CITE-seq) Data” |



|             |                     |  |
|-------------|---------------------|--|
| Tao Sun     | 03/2020             | Best Oral Presentation, Biostatistics Student Research Day   |
| Yue Wei     | 03/2020             | Honorable Mention for Oral Presentation, Biostatistics Student Research Day  |
| Zhe Sun     | 04/2020             | Outstanding PhD Student Award, SPH, University of Pittsburgh   |
| Tao Sun     | 04/2020             | Delta Omega Induction Award, SPH, University of Pittsburgh   |
| Xinjun Wang | 07/2020–<br>06/2022 | RAC fellowship by Children’s Hospital of UPMC for his research proposal: “Machine Learning and Statistical Methods for Analyzing Single-cell Multi-omics Data” |
| Xinjun Wang | 10/2020             | ICSA Student Paper Award   |
| Xinjun Wang | 03/2021             | Biostatistics Research Day Outstanding Research Award  |
| Xinjun Wang | 04/2021             | ASA Pittsburgh Chapter Student of the Year Award   |
| Yue Wei     | 04/2021             | Outstanding Teaching Fellow Award, Department of Biostatistics, University of Pittsburgh   |
| Xinjun Wang | 04/2021             | Outstanding Graduate Student Researcher Award, Department of Biostatistics, University of Pittsburgh   |
| Xinjun Wang | 04/2021             | Dean’s Day Biostatistics Doctoral Award, Graduate School of Public Health, University of Pittsburgh  |
| Na Bo       | 01/2022             | ASA LiDS Section Student Paper Award   |
| Yue Wei     | 04/2022             | Outstanding PhD Student Award, SPH, University of Pittsburgh   |
| Lang Zeng   | 07/2022             | Best Performance in PhD Qualifying Exams, Biostatistics  |
| Lang Zeng   | 01/2023             | ASA Risk Analysis Section Student Paper Award  |
| Na Bo       | 03/2023             | Biostatistics Research Day Best Oral Presentation  |
| Jiaqian Liu | 03/2023             | Biostatistics Research Day Best MS Poster Presentation   |
| Na Bo       | 04/2023             | Best Teaching Assistant Award Honorable Mention, Biostatistics   |
| Lang Zeng   | 04/2023             | Dean’s Day Presentation Biostatistics 2nd Place  |
| Xinjun Wang | 04/2023             | Delta Omega Induction Award, SPH, University of Pittsburgh   |
| Na Bo       | 01/2024             | ASA Health Policy Statistics Section Student Paper Award   |
| Na Bo       | 02/2024             | Biostatistics Research Day Poster Competition Honorable Mention  |
| Na Bo       | 03/2024             | Travel Award for Statistics in the Age of AI Conference  |

|              |         |  |
|--------------|---------|--|
| Na Bo        | 03/2024 | Winner of the 2024 Health Disparities and Social Justice Poster Competition, Doctoral Category, University of Pittsburgh |
| Lang Zeng    | 04/2024 | Best Teaching Assistant Award, Biostatistics   |
| Lang Zeng    | 03/2025 | ENAR RAB Poster Award  |
| Haoling Wang | 04/2025 | Best Performance in MS Comprehensive Exam, Biostatistics   |
| Haoling Wang | 04/2025 | Outstanding Thesis Award, SPH, University of Pittsburgh  |
| Na Bo        | 04/2025 | ASA Pittsburgh Chapter Student of the Year Award   |
| Na Bo        | 05/2025 | ASA BIOP (Biopharmaceutical) Section Scholarship Award   |

**Service on Comprehensive or Qualifying Committees**

| Dates Served      | Student Population         | Type of Exam  |
|-------------------|----------------------------|---|
| 04/2013 – 07/2014 | Biostatistics PhD students | PhD Qualifying Applied Exam (Committee Member)                |
| 04/2015 – 07/2018 | Biostatistics PhD students | PhD Qualifying Applied Exam (Committee Chair)                 |
| 04/2023 – 07/2023 | Biostatistics PhD students | PhD Qualifying Theory Exam and Applied Exam (Committee Chair) |

**Mentoring of Early and Mid-Career Faculty**

| Dates             | Name of Faculty   | Position of Faculty Member                |
|-------------------|---|---|
| 04/2017 – 03/2021 | Brandon Mckinney (Psychiatry, University of Pittsburgh; K23 grant, awarded)   | Assistant Professor                       |
| 02/2019 – 08/2023 | Melanie Grubisha (Psychiatry, University of Pittsburgh; K08 grant, awarded)   | Assistant Professor                       |
| 01/2020 – Present | Jiebiao Wang (Biostatistics, University of Pittsburgh)  | Assistant Professor                       |
| 08/2022 – 08/2024 | Jinling Liu (Engineering Management and Systems Engineering, Missouri University of Science & Technology; K01 grant, awarded) | Assistant Professor                       |
| 12/2022 – Present | Jacqueline Ellison (Health Policy and Management, University of Pittsburgh; K01 grant, awarded)                               | Assistant Professor                       |
| 03/2023 – Present | Shinnyi (Cindy) Chou (Psychiatry, University of Pittsburgh, K08 grant, awarded)   | Postdoc Fellow                            |
| 05/2023 – Present | Lu Tang (Biostatistics, University of Pittsburgh)   | Associate Professor (tenured in 02/2025)  |
| 08/2023 – Present | Jenna Carlson (Human Genetics, University of Pittsburgh)  | Associate Professor (promoted in 03/2025) |
| 08/2024 - Present | Qiong Wu (Biostatistics, University of Pittsburgh)  | Assistant Professor                       |

## Research and Training

### Grants and Contracts Received

**Principal Investigator, Multiple Principal Investigator, or Program Project Director**  
*\*as listed in NIH RePORT and/or on Notice of Award*

| Years Inclusive       | Grant and/or Contract Number and Title  | Source             | Annual Direct Costs | %Effort           |
|-----------------------|---|--------------------|---------------------|-------------------|
| 3/1/2025 – 2/28/2026  | Enhancing Pulmonary Function Assessment and Out-of-Clinic Care through Smartphone-Based Ultrasonic Technology (SURE)            | Pitt SSOE/SPH/CTSI | \$85,000            | In-kind + 75% GSR |
| 6/1/2022-5/31/2026    | R01GM141076<br>New statistical methods and software for modeling complex multivariate survival data with large-scale covariates | NIH/NIGMS          | \$200,000           | 25% + 200% GSR    |
| 6/1/2022-5/31/2023    | Precision care in asthma using EHR analytics  | Pitt SPH/SOM/CTSI  | \$45,000            | In-kind + 75% GSR |
| 8/1/2020-5/31/2022    | R21EY030488<br>Deep-learning-based prediction of AMD and its progression with GWAS and fundus image data                        | NIH/NEI            | \$135,000           | 20% + 100% GSR    |
| 1/1/2019 – 12/31/2019 | UL1TR001857<br>Deep Learning with GWAS to Predict AMD Progression   | NIH/CTSI           | \$10,000            | In-kind + 33% GSR |
| 7/1/2016-6/30/2018    | R03MH108849<br>Novel and Robust Methods for Differential Protein Network Analysis of Proteomics Data in Schizophrenia Research  | NIH/NIMH           | \$50,000            | 15% + 50% GSR     |
| 7/1/2015-6/30/2017    | CMRF<br>Novel and Robust Methods for Protein Network Analysis of Proteomics Data in Psychiatric Disorders                       | UPMC               | \$25,000            | In-kind + 25% GSR |

**Site Principal Investigator**

*\*include grants where serving as a significant Site PI (e.g., in a large clinical study, clinical trial, consortium grant, or center grant) not identifiable in NIH RePORT*

| Years Inclusive     | Grant and/or Contract Number and Title<br>(PI: Name; Institution)   | Source | Annual Direct Costs | %Effort |
|---------------------|---|--------|---------------------|---------|
| 9/30/2019-5/31/2024 | Optimizing a novel intraductal delivery of calcineurin inhibitors as a radiocontrast infusion formulation to prevent post-ERCP pancreatitis (PI: Husain, S., Stanford University) | DoD    | \$300,000           | 5%      |

**Co-Investigator**

*\*include institutional grants as well as inter-institutional subcontracts for which you are officially listed as Co-Investigator (e.g., key personnel designation in NIH grant)*

| Years Inclusive        | Grant and/or Contract Number and Title<br>(PI: Name; Institution)  | Source    | Annual Direct Costs | %Effort      |
|------------------------|--|-----------|---------------------|--------------|
| 09/30/2024 – 7/31/2029 | P30EY008098 Core Grant for NIH/NEI Vision Research – Analytics, Biostatistics, and Machine Learning Module |           |                     | 5%           |
| 12/1/2023 – 10/31/2028 | R01MH132586 Providing New Insight Into Adolescent Dendritic Development                                    | NIH/NIMH  |                     | 10-15%       |
| 5/15/2023 – 5/14/2025  | Epigenetic reprogramming to target senescent ovarian cancer cells and overcome therapeutic resistance      | DoD       |                     | 2.5-5%       |
| 7/15/2022 – 3/31/2026  | R01EB034116 SCH: New Advanced Machine Learning Framework for Mining Heterogeneous Ocular Data              | NIH/NIBIB |                     | 10%          |
| 1/1/2021 – 12/31/2025  | R01AG069912 Genetic and Molecular Correlates of White Matter Pathology in Alzheimer's Disease              | NIH/NIA   |                     | 5% + 50% GSR |
| 1/1/2021 – 12/31/2024  | R01MH125235 Fine-Mapping Genome-Wide Associated Loci using Multi-  | NIH/NIMH  |                     | 5% + 50% GSR |

omics Data to Identify  
Mechanisms Affecting Serious  
Mental Illness

|                            |   |                                      |                  |
|----------------------------|---|--------------------------------------|------------------|
| 9/1/2019 – 7/31/24         | R01MH118497   | NIH/NIMH                             | 10%              |
|                            | Synaptic Protein Networks,<br>Genetic Risk, and Spine Loss<br>in Schizophrenia                      |                                      |                  |
| 9/25/2018 –<br>6/30/2028   | R01MH116046   | NIH/NIMH                             | 10-15%           |
|                            | Accelerating Treatment<br>Development for Psychosis in<br>AD: MODEL-AD+P                            |                                      |                  |
| 5/1/2017 –<br>4/30/2024    | R01AG027224   | NIH/NIA                              | 10% +<br>50% GSR |
|                            | Prediction of Psychosis in<br>Alzheimer's Disease   |                                      |                  |
| 8/1/2020 –<br>8/31/2022    | P30CA047904   | NIH/NCI                              | 15%              |
|                            | Cancer Center Support Grant<br>(Biostatistics Facility)   |                                      |                  |
| 9/1/2021 – 8/29/23         | Exploiting Metabolic<br>Vulnerabilities to Target<br>Multidrug-Resistant Ovarian<br>Cancer          | DoD                                  | 5%               |
| 9/15/2014 –<br>9/15/2015   | Cellular and Molecular<br>Mechanisms of HSC<br>Dysfunction in Chronic<br>Inflammation               | American<br>Hematological<br>Society | 3%               |
| 08/01/2015 –<br>07/31/2016 | R56AI079047   | NIH/NAID                             | 8.5%             |
|                            | Cellular and Molecular<br>Mechanisms of HSC<br>Dysfunction in Chronic<br>Inflammation               |                                      |                  |
| 4/1/2014 –<br>3/31/2017    | R01EY024226   | NIH/NEI                              | 15%              |
|                            | AMD Genetics: Methods and<br>Analysis for Progression,<br>Prediction and Association                |                                      |                  |
| 02/06/2017 –<br>01/31/2019 | R21AI126440   | NIH/NIAID                            | 10%              |
|                            | TLR4 Shapes BM HSCs and<br>Lymphopoiesis  |                                      |                  |
| 4/1/2014 –<br>3/31/2019    | R01MH071533   | NIH/NIMH                             | 15%              |
|                            | Plasticity of Auditory Cortical<br>Circuits in Schizophrenia  |                                      |                  |
| 11/27/2017 –<br>11/30/2022 | Preventing Asparaginase-<br>associated Pancreatitis Using<br>the Novel Dimension of<br>Metabolomics | Stanford/Servier<br>Pharmaceuticals  | 5%               |

|                           |   |   |                      |
|---------------------------|---|---|----------------------|
| 4/1/2015 –<br>3/31/2020   | ADRC/Project III<br>Neuropathology of Psychosis<br>in Alzheimer's disease   | Alzheimer<br>Disease<br>Research Center                   | 5%                   |
| 11/1/2018 –<br>10/31/2021 | Discovering the Protein<br>Signature of Synapse Loss<br>and Cognitive Decline During<br>Aging   | UPMC Immune<br>Transplant and<br>Therapy Center<br>(ITTC) | In-kind +<br>50% GSR |
| 9/15/2020 –<br>5/31/2021  | OIA-2040588<br>NSF Convergence<br>Accelerator - Track D: A<br>Trusted Integrative Model and<br>Data Sharing Platform for<br>Accelerating Artificial<br>Intelligence | NSF   | 10%                  |

#### Grants and Contracts Pending [OPTIONAL FOR PUBLIC VERSION ONLY]

**Principal Investigator, Multiple Principal Investigator, or Program Project Director**  
*\*as listed in NIH RePORT and/or on Notice of Award*

| Years Inclusive            | Grant and/or Contract<br>Number and Title   | Source    | Annual Direct Costs | %Effort |
|----------------------------|---|-----------|---------------------|---------|
| 06/01/2026 –<br>05/31/2028 | R21<br>Integrative Modeling of<br>Multimodal Imaging and<br>Genetics for Prediction and<br>Precision Treatment for<br>Retinal Disease | NIH/NEI   | \$135,000           | 15%     |
| 04/01/2026 –<br>03/31/2031 | R35<br>Advancing Deep Survival<br>Methods for Prediction,<br>Subgroup Identification, and<br>Causal Inference                         | NIH/NIGMS | \$260,838           | 35%     |

#### Co-Investigator

*\*include institutional grants as well as inter-institutional subcontracts for which you are officially listed as Co-Investigator (e.g., key personnel designation in NIH grant)*

| Years Inclusive            | Grant and/or Contract<br>Number and Title<br>(PI: Name; Institution) | Source | Annual Direct Costs | %Effort |
|----------------------------|--|--------|---------------------|---------|
| 10/01/2025 –<br>09/30/2030 | R01<br>UniBrain: An End-to-End<br>Unified Toolkit for                | NIH    |                     | 8.3%    |

|                            |   |         |     |
|----------------------------|---|---------|-----|
| 12/01/2025 –<br>11/30/2030 | Comprehensive<br>Neuroimaging Analysis                                  |         |     |
|                            | R01   | NIH/NCI | 10% |
|                            | AI models for guiding<br>precision chemotherapy in<br>colorectal cancer |         |     |

#### Invited Presentations Related to Your Research

| Date | Title of Presentation   | Venue   |
|------|---|---|
| 2025 | Deep Learning in Survival Data Analysis   | ASA LiDS Conference Short Course                                  |
| 2025 | Mini-batch Estimation for Deep Cox Model via SGD  | Albert Einstein College of Medicine                               |
| 2024 | Meta-learners to analyze treatment heterogeneity in survival data: application to pediatric asthma care under COVID-19 disruption | University of Vanderbilt  |
| 2024 | Causal Survival Analysis on Pediatric Asthma Care Heterogeneity with COVID-19 Disruption  | Department of Biomedical Informatics, University of Pittsburgh    |
| 2023 | Deep Learning in Survival Analysis  | ASA LiDS Section Webinar Series                                   |
| 2023 | Semiparametric Copula Model for Survival Data   | Center for Biostatistics, Icahn School of Medicine at Mount Sinai |
| 2023 | Causal Subgroup Identification via Meta-Learning Algorithms on Time-to-Event Outcomes   | Renmin University, China  |
| 2022 | Logic Inference and Testing in Targeted Treatment Development with Survival Outcomes.   | International Seminar on Selective Inference                      |
| 2022 | Statistics in Precision Medicine: From Targeted Treatment Development to Individualized Treatment Rule Recommendations            | Senior Vice Chancellor's Ascending Star Award Seminar             |
| 2021 | New Statistical Development in Precision Medicine: From Targeted Treatment Development to Individualized Treatment Recommendation | Peking University, China  |
| 2021 | New Statistical Insights in Precision Medicine: From Targeted Treatment Development to Individualized Treatment Recommendation    | Renmin University, China  |
| 2021 | Modeling complex survival outcomes with large-scale covariates: methods and applications  | SUSTech University, China   |
| 2021 | Modeling Complex Survival Outcomes with Large-scale Genetic Covariates: Methods and Applications                                  | ASA Philadelphia Chapter Webinar                                  |
| 2020 | GWAS-based Deep Learning for Survival Prediction  | Department of Public Health, University of California Davis       |

|      |  |   |
|------|--|---|
| 2019 | GWAS-based Deep-Learning for Age-Related Macular Degeneration (AMD) Progression                                      | Department of Statistics, Jilin University, China   |
| 2019 | Copula-based Semiparametric Method for Modeling Bivariate Data Under General Interval Censoring                      | Department of Biostatistics and Data Science, George Mason University                                 |
| 2018 | Copula-based Sieve Semiparametric Transformation Model for Bivariate Interval-Censored Data                          | Department of Biostatistics and Data Science, University of Texas Health Science Center at Houston    |
| 2017 | Network Analysis of Proteomics Data  | with Applications in Psychiatry Research, Critical Care BDMC Speaker Series, University of Pittsburgh |
| 2017 | Copula-based Semiparametric Sieve Models for Bivariate Interval-Censored Data  | Department of Biostatistics, Epidemiology, Informatics, University of Pennsylvania                    |
| 2015 | Simultaneous Confidence Intervals for Assessing SNP effects on Treatment Efficacy                                    | Department of Statistics, Purdue University   |
| 2015 | Logical Inference on Treatment Efficacy in Subgroups and Their Mixture with an Application to Time-to-event Outcomes | ASA FDA/Industry Statistical Workshop   |
| 2013 | Statistical Design and Analysis of Quantitative Proteomic Experiments  | Proteomic Core, University of Pittsburgh Cancer Institute (UPCI)                                      |
| 2014 | Biostatistics for In Vivo Imaging Experiment and Analysis  | Department of Radiology, University of Pittsburgh   |
| 2013 | Confident Effect Method for Assessing the Effects of a SNP on Clinical Efficacy                                      | ASA FDA/Industry Statistical Workshop   |
| 2013 | A Sieve M-Theorem for Bundled Parameters in Semiparametric Models  | Department of Biostatistics, University of Pittsburgh   |
| 2013 | A Sieve M-Theorem for Bundled Parameters in Semiparametric Models  | Department of Statistics, University of Pittsburgh  |
| 2012 | Identifying Representative Trees in Random Forest  | Department of Biostatistics, University of Pittsburgh   |

## Publications

### Refereed Articles – Published or In Press

#### *Statistical Articles (Independent Research)*

1. Sui Z, **Ding Y**, Tang L. (2025). Robust Transfer Learning for Individualized Treatment Rules Under the Presence of Missing Data. *Biostatistics*. *In press*.
2. Liu K, Zu Y, Yi D, **Ding Y**, Sun T\*. (2025). Neural network-based dynamic prediction for interval-censored data with time-varying covariates: Application to Alzheimer's disease. *Statistics in Medicine*. *In press*.



3. Bo N, Jeong J-H, Forno E, **Ding Y\***. (2025). Evaluating meta-learners to analyze treatment heterogeneity in survival data: application to electronic health records of pediatric asthma care in COVID-19 pandemic. (**An earlier version won the 2024 JSM Health Policy Statistics section student paper award**). *Statistics in Medicine*. DOI: [10.1002/sim.10333](https://doi.org/10.1002/sim.10333) PMID: 39853815
4. Zeng L, Zhang J, Chen W, **Ding Y\***. (2025). tdCoxSNN: Time-dependent Cox survival neural network for continuous-time dynamic prediction. (**An earlier version won the 2023 JSM Risk Analysis section student paper award**). *Journal of the Royal Statistical Society Series C*. 71(1): 187-203. DOI: [10.1093/jrssc/qlae051](https://doi.org/10.1093/jrssc/qlae051). PMID: 39807175
5. Zhou X, Cai M, Yue M, Celedon J, **Ding Y**, Chen W, Li Y. (2024). Molecular Group and Correlation Guided Structural Learning for Multi-Phenotype Prediction. *Briefings in Bioinformatics*. DOI: [10.1093/bib/bbae585](https://doi.org/10.1093/bib/bbae585) PMID: 39541190
6. Hu H, Wang X, Feng S, Xu Z, Liu J, Heidrich-O'Hare E, Chen Y, Yue M, Zeng L, **Ding Y**, Huang H, Duerr R, Chen W. (2024). A unified model-based framework for doublet/multiplet detection in single-cell multiomics data. *Nature Communications* 15, 5562. <https://doi.org/10.1038/s41467-024-49448-x>
7. Liu J, Bo N, Zhou X, Forno E, **Ding Y\***. (2024). Predicting Pediatric Asthma Severe Outcomes using Machine Learning Methods for EHR Data with Repeated Clinic Visits. *Journal of Statistical Research*. 58(1): 131-149. <https://doi.org/10.3329/jsr.v58i1.75419>
8. Bo N<sup>+</sup>, Wei Y<sup>+</sup>, Zeng L, Kang C, **Ding Y\***. (2024). A Meta-Learner Framework to Estimate Individualized Treatment Effects for Survival Outcomes (**An earlier version won the 2022 JSM LiDS section student paper award**). *Journal of Data Science*. <https://doi.org/10.6339/24-JDS1119>
9. Sun T, Lang W, Zhang G, Yi D, **Ding Y**, Zhang L. (2024). Penalised semiparametric copula method for semi-competing risks data: Application to hip fracture in elderly. *Journal of the Royal Statistical Society Series C*. 73(1): 241-256 <https://doi.org/10.1093/jrssc/qlad093> PMID: 37065470
10. Zhou X, Zhang J, **Ding Y**, Li Y, Huang H, Chen W. (2023) Predicting Late-Stage Age-Related Macular Degeneration by Integrating Marginally Weak SNPs in GWA Studies. *Frontiers in Genetics*. <https://doi.org/10.3389/fgene.2023.1075824> PMID: 37065470
11. Sun T, Li Y, Xiao Z, **Ding Y**, Wang X. (2023) Semiparametric copula method for semi-competing risks data subject to interval censoring and left truncation: Application to disability in elderly. *Statistical Methods in Medical Research*. <https://doi.org/10.1177/09622802221133552> PMID: 36735020
12. Sun T, Cheng Y, **Ding Y\***. (2022) An Information Ratio based Goodness-of-fit Test for Copula Models on Censored Data. *Biometrics*. <https://doi.org/10.1111/biom.13807> PMID: 36440608
13. Wang X, Xu Z, Zhou X, Zhang Y, Huang H, **Ding Y**, Duerr RH, Chen W. (2022) SECANT: a biology-guided semi-supervised method for clustering, classification, and annotation of single-cell multi-omics. *PNAS Nexus*. 1(4): 165. PMID: 36157595
14. Sun T, **Ding Y**. (2023) Neural Network on Interval Censored Data with Application to the Prediction of Alzheimer's Disease. *Biometrics*. 79(3): 2677-2690. doi: 10.1111/biom.13734. PMID: 35960189
15. Ganjdanesh A<sup>+</sup>, Zhang Z<sup>+</sup>, Chew EY, **Ding Y**, Chen W<sup>\*</sup>, Huang H<sup>\*</sup> (2022) LONGL-Net: A Temporal Correlation Structure Guided Deep Learning Framework for Predicting Longitudinal Age-related Macular Degeneration Severity. *PNAS Nexus*. 1:1-13. PMID: 35360552
16. Wei Y, Hsu JC, Chen W, Chew EY, **Ding Y\***. (2021) Identification and inference for subgroups with differential treatment efficacy from randomized controlled trials with survival outcomes through multiple testing. (**An earlier version won the Best Poster Award in ASA Pittsburgh Chapter 2019 Meeting**.) *Statistics in Medicine*. 40(29):6523-6540. PMID: 34542190.
17. Wei Y, Wang X, Chew EY, **Ding Y\***. (2021) Confident Identification of Subgroups from SNP Testing in RCTs with Binary Outcomes. *Biometrical Journal*. 64(2):256-271. PMID: 33751636.
18. Yan Q, Jiang Y, Huang H, Xin H, Swaroop A, Chew EY, Weeks DE, Chen W<sup>\*</sup>, **Ding Y\***. (2021) GWAS-based Machine Learning for Prediction of Age-Related Macular Degeneration Risk. *Translational Vision Science & Technology (TVST)*. 10(2):29. PMID: 34003914.

19. Sun T, **Ding Y\***. (2021) Copula-based semiparametric transformation model for bivariate data under general interval censoring. (**An earlier version won the 2019 ENAR Distinguished Student Paper Award.**) *Biostatistics*. 22(2): 315–330. PMID: 31506682
20. Chen L-W, Cheng Y, **Ding Y**, Li R. (2021) Quantile Association Regression on Bivariate Survival Data. *Canadian Journal of Statistics*. 49(3):612-636. PMID: 34720345
21. Sun T, Wei Y, Chen W, **Ding Y\***. (2020) Genome-wide Association Study-based Deep Learning for Survival Prediction. *Statistics in Medicine*. 39(30):4605-4620. PMID: 32974946
22. Sun T, **Ding Y\***. (2020) CopulaCenR: Copula-based Regression Models for Bivariate Censored Data in R. *The R Journal*. 12(1): 266-282. <https://doi.org/10.32614/RJ-2020-025>
23. Wang X\*, Sun Z\*, Zhang Y, Xu Z, Huang H, Duerr R, Chen K, **Ding Y**, Chen W. (2020) BREM-SC: A Bayesian Random Effects Mixture Model for Joint Clustering Single Cell Multi-Omics Data. (**An earlier version won the 2020 ICSA Student Paper Award.**) *Nucleic Acid Research*. 48(11):5814-5824. PMID: 32379315.
24. Yan Q, Weeks DE, Xin H, Huang H, Swaroop A, Chew EY, **Ding Y\***, Chen W\* (2020) Deep-learning-based Prediction of Late Age-Related Macular Degeneration Progression. *Nature Machine Intelligence*. 2(2):141-150. PMID: 32285025
25. Wei Y\*, Liu Y\*, Sun T, Chen W, **Ding Y\***. (2020) Gene-based Association Analysis for Bivariate Time-to-event Data through Functional Regression with Copula Models. (**An earlier version won the 2019 LiDS Conference Student Paper Award.**) *Biometrics*. 76:619–629. PMID: 31625595
26. Sun Z, Chen L, Xin H, Huang Q, Cillo AR, Tabib T, Kolls JK, Bruno TC, Lafyatis R, Vignali DAA, Chen K, **Ding Y\***, Hu M\*, Chen W\*. (2019) A Bayesian mixture model for clustering droplet-based single cell transcriptomic data from population studies. (**The earlier version won the 2019 ENAR Distinguished Student Paper Award.**) *Nature Communications*. 10(1):1649. PMID: 30967541
27. Sun T\*, Liu Y\*, Cook RJ, Chen W, **Ding Y\***. (2019). Copula-based Score Test for Bivariate Time-to-event Data, with Application to a Genetic Study of AMD Progression. (**An earlier version won the Best Poster Award in ASA Pittsburgh Chapter 2017 Meeting.**) *Lifetime Data Analysis*. 25(3):546-568. PMID: 30560439
28. Lin HM, Xu H, **Ding Y**, Hsu JC. (2019). Correct and Logical Inference on Efficacy in Subgroups and Their Mixture for Binary Outcomes. *Biometrical Journal*. 61(2): 8-26. PMID: 30353566
29. **Ding Y\***, Li GY, Liu Y, Ruberg SJ, Hsu JC. (2018). Confident Inference For SNP Effects On Treatment Efficacy. *Annals of Applied Statistics*. 12(3): 1727-1748.
30. **Ding Y\***, Kong S\*, Kang S, Chen W. (2018). A Semiparametric Imputation Approach for Regression with Censored Covariate, with Application to an AMD Progression Study. *Statistics in Medicine*. 37(23): 3293-3308. PMID: 39845616
31. Yan Q\*, **Ding Y\***, Liu Y, Sun T, Fritsche LG, Clemons T, Ratnapriya R, Klein ML, Cook RJ, Liu Y, Fan R, Wei L, Abecasis GR, Swaroop A, Chew EY, Weeks DE, Chen W. (2018). Genome-wide Analysis of Disease Progression in Age-related Macular Degeneration. *Human Molecular Genetics*. 27(5):929-940. PMID: 29346644
32. Sun Z, Wang T, Deng K, Wang X-F, Lafyatis R, **Ding Y**, Hu M, Chen W. (2018). DIMM-SC: A Dirichlet mixture model for clustering droplet-based single cell transcriptomic data. *Bioinformatics*. 34(1):139-146. PMID: 29036318
33. **Ding Y**, Liu Y, Yan Q, Fritsche LG, Cook RJ, Clemons T, Ratnapriya R, Klein ML, Abecasis GR, Swaroop A, Chew EY, Weeks DE, Chen W. (2017). Bivariate Analysis of Age-Related Macular Degeneration Progression Using Genetic Risk Scores. *Genetics*. 206(1):119-133. PMID: 28341650 (**Received editorial highlight and media reports.**)
34. Wang T, Ren Z, **Ding Y**, Zhou F, Sun Z, MacDonald ML, Sweet RA, Wang J, Chen W. (2016). FastGGM: An efficient algorithm for the inference of Gaussian graphical model in biological networks. *PLoS Computational Biology*. 12(2):e1004755. PMID: 26872036

35. Fan R, Wang Y, Yan Q, **Ding Y**, Weeks DE, Lu Z, Ren H, Cook R J, Xiong M, Swaroop A, Chew E Y, Chen W. (2016). Gene-based Association Analysis for Censored Traits Via Fixed Effect Functional Regressions. *Genetic Epidemiology*. 40(2):133-43. PMID: 26782979
36. **Ding Y**, Lin HM, Hsu JC. (2016). Subgroup Mixable Inference on Treatment Efficacy in Mixture Populations, with an Application to Time-to-Event Outcomes. *Statistics in Medicine*. 35(10):1580-94. PMID: 26646305
37. **Ding Y**, Nan B. (2015). Estimating Mean Survival Time: When is it Possible? *Scandinavian Journal of Statistics*. 42(2):397-413. PMID: 26019387
38. **Ding Y**, Fu H. (2013). Bayesian Indirect and Mixed Treatment Comparisons Across Longitudinal Time Points. *Statistics in Medicine*. 32 (15):2613-28. PMID: 23229717
39. Banerjee M, **Ding Y**, Noone A. (2012). Identifying Representative Trees from Ensembles. *Statistics in Medicine*. 31(15):1601-16. PMID: 22302520
40. **Ding Y**, Nan B. (2011). A Sieve M-theorem for Bundled Parameters in Semiparametric Models, with Application to the Efficient Estimation in a Linear Model for Censored Data. (**An earlier version won the 2010 ENAR Distinguished Student Paper Award.**) *Annals of Statistics*. 39(6):3032-3061. PMID: 24436500
41. **Ding Y**, Choi H, Nesvizhskii AI. (2008). Adaptive Discriminant Function Analysis and Reranking of MS/MS Database Search Results for Improved Peptide Identification in Shotgun Proteomics. *Journal of Proteome Research*. 7(11):4878-89. PMID: 18788775

#### *Collaborative Articles (Interdisciplinary Research)*

42. Swaminathan G, Lin Y-C, Ni J, Khalid A, Tsai C-Y, **Ding Y**, **Bo N**, Murayi J-A, Jayaraman T, Poropatich R, Bottino R, Papachristou GI, Sheth SG, Wen L, Barakat MT, Frymoyer AR, Yu M, Husain SZ. (2025) Why is the rectal route for NSAIDS favorable for preventing post-ERCP pancreatitis? *Pancreatology*. <https://doi.org/10.1016/j.pan.2025.02.004>
43. Krivinko JM, Fan P, **Sui Z**, Hensler HC, Gilardi J, Ikonovic MD, McKinney BC, Newman J, **Ding Y**, Wang L, Sweet RA. (2024). Age-related loss of large dendritic spines in the precuneus is statistically mediated by proteins which are predicted targets of existing drugs. *Molecular Psychiatry* 30, 2059–2067. <https://doi.org/10.1038/s41380-024-02817-w>
44. Chen L, Wang Y, Cai C, **Ding Y**, Kim RS, Lipchik C, Fumagalli D, Gavin PG, Yothers G, Allegra CJ, Petrelli NJ, Suga JM, Hopkins JO, Saito NG, Evans T, Jujavarapu S, Wolmark N, Lucas PC, O'Connell MJ, Paik S, Sun M, Pogue-Geile KL, Lu X. (2024). Machine Learning Predicts Oxaliplatin Benefit in Colon Cancer Adjuvant Therapies. *Journal of Clinical Oncology*. PMID: 38315963. DOI: 10.1200/JCO.23.01080
45. Rahman MA, Cai C, **Bo N**, McNamara D, **Ding Y**, Cooper GF, Lu X, Liu J. (2023). An individualized Bayesian method for estimating genomic variants of hypertension. *BMC Genomics*. 23 (Suppl 5): 863. PMID: 37936055. <https://doi.org/10.1186/s12864-023-09757-9>
46. Lin Y-C, Ni J, Swaminathan G, Khalid A, Barakat MT, Frymoyer AR, Tsai C-H, **Ding Y**, Murayi J-A, Jayaraman T, Poropatich R, Bottino R, Wen L, Papachristou GI, Sheth SG, Yu M, Husain SZ. (2023). Rectal administration of tacrolimus protects against post-ERCP pancreatitis in mice. *Pancreatology*. <https://doi.org/10.1016/j.pan.2023.09.080>
47. Gomez Marti JL, Nasrazadani A, **Ding Y**, Normolle D, Brufsky AM. (2023) Twenty-Year Follow-up of a Phase II Trial of Taxotere/Carboplatin/Herceptin in Patients with Metastatic HER2-Positive Breast Cancer. *The Oncologist*. <https://doi.org/10.1093/oncolo/oyad258>
48. Krivinko JM, DeChellis-Marks MR, **Zeng L**, Fan P, Lopez OL, **Ding Y**, Wang L, Kofler J, MacDonald ML, Sweet RA. (2023) Targeting the Post-Synaptic Proteome in Alzheimer's Disease with Psychosis. *Communications Biology*. 6: 598. PMID: 37268664 <https://doi.org/10.1038/s42003-023-04961-5>

49. Fan P, Zeng L, **Ding Y**, Kofler J, Sweet RA, Wang L. (2023) Combination of Antidepressants and Antipsychotics as A Novel Treatment Option for Psychosis in Alzheimer's Disease. *CPT: Pharmacometrics & Systems Pharmacology*. DOI: <https://doi.org/10.1002/psp4.12979>
50. Ni J, Khalid A, Lin Y-C, Barakat M, Wang J, **Ding Y**, Oparaji J-A, Jayaraman T, Poropatich R, Bottino R, Wen L, Papachristou G, Swaminathan G, Yu M, Husain SZ. (2023) Preclinical safety evaluation of calcineurin inhibitors delivered through an intraductal route to prevent post-ERCP pancreatitis demonstrates endocrine and systemic safety. *Pancreatology*. PMID: 37031049 DOI: [10.1016/j.pan.2023.03.009](https://doi.org/10.1016/j.pan.2023.03.009)
51. Tsai C-H, Saito T, Sarangdhar M, Abu-El-Haija M, Wen L, Lee B, Manohar M, Barakat MT, Contrepois K, Bo N, **Ding Y**, Stevenson K, Ladas EJ, Silverman LB, Quadro L, Anthony TG, Jegga AG, Husain SZ. (2022) A systems approach points to a therapeutic role for retinoids in asparaginase-1 associated pancreatitis. *Science Translational Medicine*. 16(687). DOI: [10.1126/scitranslmed.abn2110](https://doi.org/10.1126/scitranslmed.abn2110)
52. Chen X, Chen L, Kürten CHL, Jabbari F, Vujanovic L, **Ding Y**, Kulkarni A, Tabib T, Lafyatis R, Cooper G, Ferris R, Lu X. (2022) An individualized causal framework for learning intercellular communication networks that define microenvironments of individual tumors. *PLOS Computational Biology*. DOI: [10.1101/2021.11.11.467838](https://doi.org/10.1101/2021.11.11.467838)
53. Fan P, DeChellis-Marks MR, **Ding Y**, Kofler J, Sweet RA, Wang L. (2022) Efficacy Difference of Antipsychotics in Alzheimer's Disease and Schizophrenia: Explained with Network Efficiency and Pathway Analysis Methods. *Briefings in Bioinformatics*. <https://doi.org/10.1093/bib/bbac394>
54. Barakat MT, Khalid A, Yu M, **Ding Y**, Murayi J-A, Jayaraman T, Poropatich R, Akshintala V, Juakiem W, Wen L, Papachristou G, Husain SZ. (2022) A review of the rationale for the testing of the calcineurin inhibitor tacrolimus for post-ERCP pancreatitis prevention. *Pancreatology*. 22(6):678-682. PMID: 35872075
55. McKinney BC, Hensler CM, Wei Y, Lewis DA, Wang J, **Ding Y**, Sweet RA. (2022) Schizophrenia-associated differential DNA methylation in brain is distributed across the genome and annotated to MAD1L1. *Translational Psychiatry*. 12(340). doi: <https://doi.org/10.1101/2020.08.02.20166777>
56. DeChellis-Marks MR, Wei Y, **Ding Y**, Krivinko JM, MacDonald ML, Lopez OL, Sweet RA, Kofler J. (2022) Transcriptome-wide Study of Psychosis in Alzheimer's Disease Nominates Reduced Vulnerability of Excitatory Neurons and Post-Transcriptional Synaptic Compensation as Mechanisms Conferring Resilience. *Frontiers in Neurology*. <https://doi.org/10.3389/fneur.2022.778419>
57. Grubisha MJ, Sun T, Erickson SL, Eisenman L, Helmer CD, **Ding Y**, Homanics GE, Penzes P, Wills ZP, Sweet RA. (2021) A Kalirin Missense Mutation Enhances Dendritic RhoA Signaling and Leads to Regression of Cortical Dendritic Arbors Across Development. *PNAS*. 118(49): e2022546118. PMID: 34848542
58. Saito T<sup>+</sup>, Wei Y<sup>+</sup>, Wen L<sup>+</sup>, Srinivasan C, Wolthers BO, Tsai C-Y, Harris MH, Stevenson K, Byersdorfer C, Oparaji J-A, Fernandez C, Mukherjee A, Abu-El-Haija M, Agnihotri S, Schmiegelow K, Showalter MR, Fogle PW, McCulloch S, Contrepois K, Silverman LB, **Ding Y**<sup>\*</sup>, Husain SZ<sup>\*</sup>. (2021) Impact of acute lymphoblastic leukemia (ALL) induction therapy: a metabolomic approach. *Metabolomics* 17(7):64. PMID: 34175981
59. Shi L, Sun Z, Su W, Xu F, Zhang Q, Dai X, Iyer K, Xie D, Hitchens KT, Foley LM, Stolz DB, Chen K, **Ding Y**, Thomson AW, Leak RK; Chen J, Hu X. (2021). Treg cell-derived osteopontin promotes microglia-mediated white matter repair after ischemic stroke. *Immunity*. 54(7):1527-1542. PMID: 34015256.
60. Grubisha MJ, Sun X, MacDonald ML, Garver M, Sun Z, DeGiosio RA, Lewis DA, Yates NA, Camacho C, **Ding Y**, Sweet RA. (2021) MAP2 is Differentially Phosphorylated in Schizophrenia, Altering Its Function. *Molecular Psychiatry*. 26(9):5371-5388. PMID: 33526823
61. MacDonald ML, Garver M, Newman J, Sun Z, Kannarkat J, Salisbury R, Glausier J, **Ding Y**, Lewis DA, Yates NA, Sweet RA. (2020) Synaptic Proteome Alterations in the Primary Auditory Cortex of Schizophrenia. *JAMA Psychiatry*. 77(1):86-95. PMID: 31642882



62. Bokvist KB, **Ding Y**, Landschulz WH, Sinha V, Pastrak A, Belin RM. (2019) Gastrin Analogue Administration Adds No Significant Glycaemic Benefit to a GLP-1 Receptor Agonist Acutely or After Washout of Both Analogues. *Diabetes, Obesity and Metabolism*. 21(7):1606-1614. PMID: 30848033
63. MacDonald ML, Favo D, Garver M, Sun Z, Arion D, **Ding Y**, Yates NA, Sweet RA, Lewis D. (2019). Laser Capture Microdissection – Targeted Mass Spectrometry: A Method for Multiplexed Protein Quantification Within Individual Layers of The Cerebral Cortex. *Neuropsychopharmacology*. 44(4):743-748. PMID: 30390066
64. Krivinko JM, Erickson SL, **Ding Y**, Sun Z, Penzes P, MacDonald ML, Jones-Laughner J, Yates NA, Ikonovic MD, Lopez OL, Sweet RA, Kofler J. (2018). Synaptic Proteome Compensation and Resilience to Psychosis in Alzheimer's Diseases. *The American Journal of Psychiatry*. 175(10):999-1009 PMID: 30021459
65. Liu A, Chen M, Kumar R, Stefanovic-Racic M, O'Doherty RM, **Ding Y**, Jahnen-Dechent W, Borghesi L. (2018). Bone marrow lympho-myeloid malfunction in obesity requires precursor cell-autonomous TLR4. *Nature Communications*. 9(1):708 PMID: 29453396
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### Referred Articles – Submitted or Preprint [OPTIONAL]

1. Dumrongprechachan V, Zhu Y, Klei L, Gilardi L, Salisbury RB, Happe C, Newman J, **Ding Y**, Lewis DA, Chikina M, Devlin B, Sweet RA, MacDonald ML (2025+). Multilevel proteomics links aberrant synaptic proteostasis and kinase signaling to dendritic spine pathology in schizophrenia. *The American Journal of Psychiatry*. Under revision.
2. Zeng L, Tang W, Ren Z, **Ding Y\***. (2025+). Mini-batch Estimation for Deep Cox Model via SGD: Statistical Foundations and Practical Guidance. *Journal of the American Statistical Association*. Under revision.
3. Zhang J, Zhao C, Zeng L, Huang H, **Ding Y**, Chen W. (2025+). TV-LSTM: Multimodal Deep Learning for Predicting the Progression of Late Age-Related Macular Degeneration Using Longitudinal Fundus Images and Genetic Data. *AI Sensors*. Under revision.
4. Bo N, **Ding Y\***. (2025+). Estimating Interpretable Heterogeneous Treatment Effect with Causal Subgroup Discovery in Survival Outcomes. Under review.
5. Mao Z, Grant H, Costacou T, **Ding Y**, Dashti H, Newman AB, Farsijani S. (2025+). A data-driven trajectory analysis reveals associations between temporal patterns of within-day energy intake and mortality risk in U.S. adults: NHANES 2005–2018. Under review.

### Books and Book Chapters

#### Book

1. Cui X, Dickhaus T, Ding Y, Hsu JC. Handbook of Multiple Comparisons. Chapman & Hall/CRC, 2021. ISBN 9780367140670

#### Book Chapters

2. Ding Y\*, Sun T. Copula Models and Diagnostics for Multivariate Interval-Censored Data. In: Sun J, Chen D-G, editors. Emerging Topics in Modeling Interval-Censored Survival Data p141–165 New York: Springer, 2022.
3. Ding Y\*, Wei Y, Wang X, Hsu JC. Testing SNPs in Targeted Drug Development. Book Chapter In: Cui X, Dickhaus T, Ding Y, Hsu JC. Handbook of Multiple Comparisons. Chapman & Hall/CRC, 2021
4. Yan Q, Ding Y, Weeks, DE, Chen W. AMD Genetics: Methods and Analyses for Association, Progression, and Prediction. Book Chapter In: Adv Exp Med Biol, Vol. 1256, Emily Chew and Anand Swaroop (Eds): Age-related Macular Degeneration. Springer Nature, 2021
5. Ding Y\*, Wei Y, Wang X. Logical Inference on Treatment Efficacy When Subgroups Exist. Book Chapter In: Ting N, Cappelleri JC, Ho S, Chen DG. Design and Analysis of Subgroups with Biopharmaceutical Applications. New York: Springer, 2020
6. **Ding Y\***, Lin HM. Data Analysis of in vivo Fluorescence Imaging Studies. In: Bai M, editors. In Vivo Fluorescence Imaging: Methods and Protocols. New York: Springer, 2016.
7. Shen L, Ding Y, Battiou CA. A Framework of Statistical Methods for Identification of Subgroups with Differential Treatment Effects in Randomized Trials. In: Chen Z, Liu A, Qu Y, Tang L, Ting N, Tsong Y, editors. Applied Statistics in Biomedicine and Clinical Trials Design: Selected Papers from 2013 ICSA/ISBS Joint Statistical Meetings. (pp. 411-425). New York: Springer, 2015.

### Presentations

1. Mini-batch Estimation for Deep Cox Model. Statistical Properties and Practical Guidance, LiDS Conference, 2025.
2. Meta-learners to Estimate Individualized Treatment Effects on Delaying AMD Progression. JSM, 2024.
3. Meta-learners to analyze treatment heterogeneity in survival data. EcoStat, 2024.
4. Estimating Interpretable Heterogeneous Treatment Effect with Survival Outcomes. ICSA China, 2024.
5. tdCoxSNN: Time-dependent Cox Survival Neural Network for Continuous-time Dynamic Prediction. ENAR, 2024.
6. Dynamic Prediction of AMD Progression Using Longitudinal Fundus Images. JSM, 2023.
7. Neural Network on Interval Censored Data with Application to the Prediction of Alzheimer's Disease. ICSA Applied Statistical Symposium, 2023.
8. An Information Ratio based Goodness-of-fit Test for Copula Models on Multivariate Censored Data. ASA Lifetime Data Science (LiDS) Conference, 2023.
9. Deep Learning on Interval Censored Survival Data. ENAR, 2023.
10. Multi-omics Analysis of Psychosis in Alzheimer's Disease. Joint Statistical Meeting (JSM), 2021.
11. Modeling Complex Survival Outcomes with Large-scale Genetic Covariates: Methods and Applications. ASA Philadelphia Chapter Webinar, 2021.
12. Deep Neural Network for Interval-Censored Survival Outcome Using Genetic Data, with an Application to Predict AD Progression. International Chinese Statistical Association (ICSA) Symposium, 2020.
13. Logical Inference on Treatment Efficacy When Subgroups Exist. JSM, 2019.
14. Bivariate Sieve Transformation Model for Interval-Censored Data. ICSA Conference, China, 2019.
15. A Novel Bivariate GWAS of AMD Progression. ICSA Symposium, 2019.
16. A Copula-Based Semiparametric Model for Progression Prediction of AMD using GWAS Data. 2nd Lifetime Data Science (LiDS) Conference, 2019.
17. A Bayesian Hierarchical Mixture Model for Clustering Droplet-based Single Cell Transcriptomic Data from Population Studies. ICSA Symposium, 2018.
18. Progression Risk Prediction with Copula Model in Age-related Macular Degeneration (AMD) Patients. JSM, 2017.
19. Confident Inference for SNP Effects on Treatment Efficacy. ICSA Symposium, 2017.
20. Confident Inference for SNP Effects on Treatment Efficacy. Multiple Comparison Procedures (MCP) Conference, 2017.
21. Progression risk estimation with Copula Model in Age-related Macular Degeneration (AMD) patients. Lifetime Data Analysis Conference (LIDA), 2017.
22. Logical Inference on Treatment Efficacy in Subgroups and Their Mixture. Presented at: The 10th ICSA International Conference, 2016.
23. A General Semiparametric AFT Model Imputation Approach for Censored Covariate. ICSA Symposium, 2016.
24. Emerging Methods for Biomarker and Subgroup Identification – Review and Compare. ICSA Symposium, 2013.
25. Logical Inference on Treatment Efficacy in Subgroups and Their Mixture, with an Application to Time-to-event Outcomes. Eastern North American Region (ENAR) International Biometric Society Spring Meeting; 2016.
26. Bivariate Analysis and Prediction of AMD Progression Using Genetic Scores. Poster presented at: The American Society of Human Genetics (ASHG) Annual Meeting; 2015.
27. Subgroup Mixable Inference with Time-to-Event Outcomes for Mixture Treatment Efficacy. JSM; 2015.
28. Subgroup Mixable Inference for Time-to-Event Outcomes in Personalized Medicine Development. Women in Statistics Conference, 2014.
29. Simultaneous Confidence Intervals for Assessing the Effects of a SNP on Treatment Efficacy in Personalized Medicine Development. ENAR, 2014.
30. Estimating Mean Survival Time: When is it Possible? IMS China International Conference on Statistics and Probability; 2013.
31. Bayesian Indirect and Mixed Treatment Comparisons Across Longitudinal Time Points. ENAR, 2012.
32. Combining Multiple Biomarkers using U-Scores to Assess Treatment Effects in Early Phase Clinical Studies. ENAR, 2011.
33. Sieve Maximum Likelihood Estimation Using B-Splines for the AFT Model. ENAR, 2010.



34. Efficient Estimation Method for the AFT Model. JSM, 2009.
35. Asymptotics of Intercept Estimator in the Semiparametric Linear Model for Censored Data. ENAR, 2009.
36. Strong Consistency of the Intercept Estimator in the Semiparametric Accelerated Failure Time Model. JSM, 2008.
37. Identifying Representative Trees in Random Forest for Survival Data. ENAR, 2008.

**Non-Print Media (Software, electronic)**

1. R package: {CopulaCenR}, <https://cran.r-project.org/web/packages/CopulaCenR/index.html>
2. GitHub packages: {SME}, {CE4}, {HTEsurv}, {tdCoxSNN}

**Technical and Government Reports**

1. Authors (same order as publication, Last name, first and middle initials). Title of Article. *Journal Title*. Year and Date. Volume (Issue): pages

**Other Publications**

1. Natanegara F, **Ding Y**. Committee Spotlight: ASA Statistical Partnerships Among Academe, Industry, and Government (SPAIG), AMSTATNEWS, June 1, 2021. <https://magazine.amstat.org/blog/2021/06/01/spotlight-spaig/>
2. **Ding Y**, Jensen W, Lee J, Natanegara F. SPAIG Award Goes to Two. AMSTATNEWS, November 1, 2019. <https://magazine.amstat.org/blog/2019/11/01/spaig-award-goes-to-two/>.
3. Jensen W, Natanegara F, **Ding Y**. 2018 SPAIG Award Lauds Forensic Science Collaboration. AMSTATNEWS, October 1, 2018. <https://magazine.amstat.org/blog/2018/10/01/2018-spaig-award/>.
4. Natanegara F, Jensen W, **Ding Y**. 2017 SPAIG Award Winner Announced. AMSTATNEWS, December 1, 2017. [https://magazine.amstat.org/blog/2017/12/01/spaig\\_2017/](https://magazine.amstat.org/blog/2017/12/01/spaig_2017/).

**Service**

**Service to School and University**

**Department Committees**

| Years             | Activity                               | Position |
|-------------------|--|----------|
| 01/2014 – 07/2018 | PhD Admissions Committee               | Member   |
| 03/2017 – 12/2023 | PhD Student Award Committee            | Member   |
| 01/2018 – Present | Faculty Award Nomination Committee     | Member   |
| 09/2013 – 12/2022 | Doctoral Monitoring Committee          | Member   |
| 04/2021 – 02/2022 | Biostatistics Faculty Search Committee | Chair    |
| 08/2019 – 03/2024 | PhD Admissions Committee               | Chair    |
| 09/2022 – 03/2024 | PhD Program Working Group              | Chair    |
| 02/2023 – 03/2024 | Doctoral Monitoring Committee          | Co-Chair |
| 01/2023 – 04/2023 | PhD Student Award Committee            | Co-Chair |
| 09/2024 – 03/2025 | Faculty Search Committee               | Chair    |
| 07/2024 - Present | Alumni Award Committee                 | Member   |

|                   |                         |        |
|-------------------|-------------------------|--------|
| 10/2024 – Present | MS Admissions Committee | Member |
|-------------------|-------------------------|--------|

School Committees

| Years             | Activity  | Position                  |
|-------------------|---|---------------------------|
| 09/2014 – 08/2020 | EPCC (Educational Policies and Curriculum Committee)              | Department Representative |
| 05/2016 - 04/2017 | Biostatistics Department Chair Search Committee                   | Member                    |
| 10/2018 – 03/2019 | Biostatistics Department Faculty Search Committee                 | Member                    |
| 03/2020 – 11/2020 | Graduate School of Public Health Dean Search Committee            | Member                    |
| 01/2023 – 07/2023 | School of Public Health BSPH Faculty Search Committee             | Member                    |
| 09/2023 – 08/2024 | School of Public Health Faculty Senate Executive Committee (FSEC) | President-Elect           |
| 09/2024 – 08/2025 | School of Public Health FSEC                                      | President                 |

University Committees

| Years             | Activity  | Position |
|-------------------|---|----------|
| 11/2020 – 08/2023 | Basic Science Council                               | Member   |
| 09/2022 - 07/2023 | Advisory Council on Instructional Excellence (ACIE) | Member   |
| 04/2024 – 02/2025 | Provost’s Postdoctoral Affairs Advisory Committee   | Member   |
| 09/2024 – Present | University Council on Graduate Study (UCGS)         | Member   |

Service to Field of Scholarship

Editorial Boards, Editorships

| Date           | Organization                    | Position         |
|----------------|---------------------------------|------------------|
| 2021 - Present | Statistics in Medicine          | Associate Editor |
| 2019 - Present | Journal of Statistical Research | Associate Editor |

Study Sections, Review Panels, and Advisory Boards

| Date | Organization | Position |
|------|--------------|----------|
|------|--------------|----------|

|                   |  |                                   |
|-------------------|--|-----------------------------------|
| 2013 - 2017       | PLS ONE  | Statistical Advisory Board Member |
| 9/2016 - 10/2016  | DoD Clinical Research Intramural Initiative Program, Precision Medicine Research Award | Panelist                          |
| 3/2019 – 4/2019   | LiDS Conference Student Paper Awards Committee   | Reviewer                          |
| 6/2021 - 7/2021   | NEI Study Section ZEY VSN (05)   | Panelist                          |
| 2/2022 - 3/2022   | NIA Study Section ZAG1 ZIJ-D (M4)  | Panelist                          |
| 9/2022 - 10/2022  | NIA Study Section ZAG1 ZIJ-Y (J3)  | Panelist                          |
| 10/2022 - 12/2022 | NEI Study Section ZEY1 VSN 02  | Panelist                          |
| 2020 - 2022       | ENAR Student Paper Awards Committee  | Reviewer                          |
| 2022 - 2023       | JSM LiDS Student Paper Awards Committee  | Reviewer                          |
| 2023 - 2024       | JSM LiDS Student Paper Awards Committee  | Chair                             |
| 08/2024           | Gavin Herbert Eye Institute and ICTS grant at the University of California, Irvine     | Reviewer                          |
| 12/2024 – 01/2025 | William H. Gates Sr. Fellowship applications from the AD Data Initiative               | Reviewer                          |
| 03/2025 – 04/2025 | NIH ASPA Study Section   | Panelist                          |

## Manuscript and other Documentation/Publication Review

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### Journal Title

Biostatistics  
 Biometrics  
 Biometrika  
 Statistics in Medicine  
 Statistics and Its Interface  
 Lifetime Data Analysis  
 Statistics in Biosciences  
 Electronic Journal of Statistics  
 Journal of Biopharmaceutical Statistics  
 Statistics in Biopharmaceutical Research  
 Journal of Statistical Theory and Practice  
 Journal of Applied Statistics  
 Statistica Sinica  
 Bioinformatics  
 Biometrical Journal

Scandinavian Journal of Statistics  
Journal of the American Statistical Association  
Annals of Statistics  
Annals of Applied Statistics  
Journal of Statistical Theory and Practice  
The American Statistician  
Journal of Computational and Graphical Statistics

#### Leadership in Scholarly and Professional Organizations and Honorary Societies

| Date              | Organization  | Position                  |
|-------------------|---|---------------------------|
| 1/2017 - 12/2021  | The Statistical Partnerships Among Academe, Industry & Government Committee (SPAIG), American Statistical Association | Member                    |
| 12/2017 - 5/2019  | Lifetime Data Science 2019 Conference Local Organization Committee  | (co-)Chair                |
| 8/2019 - 7/2020   | Nomination Committee for Lifetime Data Science (LiDS) Section, American Statistical Association (ASA)                 | Member                    |
| 2/2020 - 12/2021  | Webinar Committee ASA LiDS Section  | (co-)Chair                |
| 9/2020 - 08/2021  | ASA Pittsburgh Chapter  | President-Elect           |
| 1/2021 - 12/2021  | Statistical Partnerships Among Academe, Industry & Government (SPAIG) Committee, ASA                                  | Vice Chair                |
| 9/2020 – 07/2022  | International Conference on Multiple Comparison Procedures (MCP) Organization Committee                               | Member                    |
| 5/2020 - Present  | National Institute of Statistical Sciences (NISS)   | Affiliate Faculty Liaison |
| 9/2021 – 08/2021  | ASA Pittsburgh Chapter  | President                 |
| 1/2022 – 12/2022  | SPAIG Committee, ASA  | Chair                     |
| 1/2022 – 12/2022  | ASA, LiDS Section   | Program-Chair-Elect       |
| 1/2022 – 12/2024  | ICSA publication committee  | Member                    |
| 9/2022 – 8/2023   | ASA Pittsburgh Chapter  | Past President            |
| 1/2023 – 12/2023  | ASA, LiDS Section   | Program-Chair             |
| 1/2024 – 12/2024  | ASA, LiDS Section   | Past Program-Chair        |
| 10/2024 – Present | ICSA 2025 Taipei Conference Program Committee   | Member                    |

#### Non-Professional Service

| Date | Organization/Agency | Position and/or Type of Service |
|------|---------------------|---------------------------------|
|------|---------------------|---------------------------------|

|                   |   |           |
|-------------------|---|-----------|
| 07/2013 – 06/2018 | Member, Chinese Association for Science and Technology, Pittsburgh Chapter (CAST-P) | Volunteer |
| 05/2019 – 05/2020 | Board Member, Pittsburgh Chinese School   | Volunteer |
| 06/2020 – 05/2021 | Vice Chair of Board, Pittsburgh Chinese School                                      | Volunteer |
| 06/2021 – 06/2022 | Chair of Board, Pittsburgh Chinese School   | Volunteer |
| 07/2022 – 06/2025 | Secretary of Board, Pittsburgh Chinese School                                       | Volunteer |