Newsletter of Spring 2023

Founded in 1935, GW's Department of Statistics was the first statistics department in a College of Arts and Sciences in the United States. Since then, the department has continually produced high quality research in both theoretical and applied areas of statistics and probability. The department offers both M.S. and Ph.D. programs of full-time and part-time enrollments. The great location of being in the heart of Washington, D.C. gives students unique access to the research and employment opportunities in the major government agencies and private companies and connection with the distinguished statisticians from the local Washington Statistical Society.



Message from the Editors

Dear PhD students,

We are happy to present the Spring 2023 newsletter to you. There are many exciting opportunities taking place this spring, both on and off campus, within the DMV area or around the world!

We hope every student will have an enriched and great experience in the statistics department and we all become better and stronger as a whole community.

Thank you, we hope you find the Newsletter informative.

Jiaqian Yu and Yipeng Wei (Editor/Co-Chair of PhD Student Committee)

Conferences and Workshops

Statistics Conferences

Some international and area statistical conferences will take place soon. Students are encouraged to attend these conferences.

- DISS (Duke-Industry Statistics Symposium) 2023 will be held virtually on March 29-31, 2023 with the theme "Empower Clinical Development by Harnessing Data from Diverse Sources". The Duke-Industry Statistics Symposium (DISS) is organized by the Department of Biostatistics and Bioinformatics, Duke University School of Medicine and several industry and non-profit partners. The symposium was established ten years ago to discuss challenging issues and recent advances related to the clinical development of drugs, biologics and devices and to promote research and collaboration among statisticians from industry, academia, and regulatory agencies.
- The Seminar on Stochastic Processes (SSP) 2023 will be held at the University of Arizona in Tucson, March 8–11, 2023, with tutorial lectures by Gérard Ben Arous on March 8. The invited speakers will be Patricia Alonso Ruiz, Francois Delarue (Kai Lai Chung Lecture), Jian Ding (IMS Medallion Lecture), Patricia Gonçalves, and Philippe Sosoe. Registration is open. Travel and lodging expenses may be partially covered from currently pending federal support.
- The third annual workshop on Emerging Data Science Methods for Complex Biomedical and Cyber Data will be held in Augusta, Georgia, USA, March 16–17, 2023. The topics of the workshop include deep learning, statistical machine learning, differential privacy, Bayesian data integration and cybersecurity data modeling, among others.
- The ENAR 2023 Spring Meeting will be held at the JW Marriott Nashville, March 19-22, 2023. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry. Includes an IMS Medallion lecture by Hongyu Zhao from Yale School of Public Health, on statistical issues in genome-wide association studies. Registration is open. The Early Bird registration deadline is February 17.
- The ASA is continuing its long-standing collaboration with the University of Pennsylvania Department of Biostatistics, Epidemiology, and Informatics and is delighted to announce: <u>15th Annual University of Pennsylvania Conference on Statistical Issues in Clinical Trials</u> will be held in Philadelphia, PA on **April 17,2023**.
- The seventh workshop on Games and Decisions in Reliability and Risk (GDRR7) will be organized in Madrid, Spain by ICMAT and the Royal Academy of Sciences from May 22-24, 2023. The workshop is to present novel use of Game and Decision theory in reliability and risk analysis and bring together researchers from diverse disciplines such as Economics, Engineering, Finance, Mathematics, Medical sciences, Probability and Statistics who find themselves working with, and contributing to this theme.
- Conference on Statistical Foundations of Data Science and their Applications will be held at Princeton University from May 8-10, 2023. The conference will bring together collaborators and leading researchers in statistics and data science. The conference will provide an excellent forum for scientific communications and promote collaborations among researchers in statistics and data science.

- The 21st INFORMS/Applied Probability Society meeting will take place June 28–30, 2023 in Nancy, France. Featuring an IMS Medallion Lecture by Sylvie Méléard (Ecole Polytechnique) and the Marcel Neuts Lecture by Beatrice Meini (Università di Pisa); other Plenary Lectures by Frédéric Chazal (INRIA), Sean Meyn (University of Florida) and Amy R. Ward (University of Chicago). Tutorial speakers are Paul Embrechts (ETH Zürich) and Sarah Penington (University of Bath). The conference offers support grants for PhD students, funded by the APS: apply by February 27.
- The 2023 ICSA China Conference will be held at Chengdu, Sichuan, China from June 30 to July 3, 2023. It is co-organized by the Southwest Jiaotong University. The theme of this conference is "Data Science with Applications to Big Data Analysis and AI", in recognition of the big data era. The executive and organizing committees have put together a strong and comprehensive program, including keynote lectures, invited sessions, poster sessions, junior researcher award session, and exciting social events.

Local Conferences

There will also be local conferences held in the DMV area. Please find the information below and consider attending.

- Ninth international conference on agricultural statistics will be held from May 17 19, 2023 in Washington, DC, and will be organized by the U.S. Department of Agriculture (USDA) and the World Bank, in coordination with the Food and Agriculture Organization of the United Nations (FAO), and under the aegis of the Committee on Agricultural Statistics of the ISI. This will be the 25th anniversary of the first ICAS, which also took place in Washington, DC, in 1998
- The 2023 Annual Meeting of the American Association for the Advancement of Science will be held in Washington, DC, on March 2nd–5th, 2023. More specifically, AAAS is seeking undergraduate and graduate students to assist session presenters, liaison with meetings staff if there is an emergency, and evaluate the overall attendee experience.

Upcoming Career Events and on-campus opportunities

Career Events

Federal Resume WorkshopWed Feb 22, 12:00 pm-1:00 pm ESTKnow Your Talents and Find Success with CliftonStrengthsThu Feb 23, 4:00 pm-5:00 pm EST2023 Sports Industry Networking and Career (SINC) ConferenceFeb 24, 9:00 am - Feb 25, 5:00 pmEmployer Info Session: Center for Strategic & International Studies (CSIS)Tue Feb 28, 3:30 pm-5:00 pm ESTMarketing & Communication Industry Fair 2023 (Virtual)Wed Mar 1, 3:30pm - 5:30pm ESTInternational Student & Alumni Networking NightWed Mar 1, 6:30 pm-8:00 pm ESTEducation Recruitment Day 2023Wednesday, March 8th 2023, 9:00 am - 11:30 am EST

For more career events, please see <u>https://careerservices.gwu.edu/graduate-student-career-series</u> and <u>https://gwu.joinhandshake.com/stu/events?collection=ALL&eventFormat=HYBRID&sort=RELEVANCE&date=ALL</u>

On-campus Events

Python Workshop by GW Data

February 21, 4:30-6 p.m. Funger Hall 221

During this workshop, you will gain an introduction to and hands on experience with Python's numpy and pandas packages. These are important skills to have for analysis and data science in Python. It is suggested that you have a basic knowledge of Python prior to attending the workshop.

CCAS Research Showcase

CCAS will be running a Research Showcase event for students from all CCAS undergraduate and graduate programs on **April 11th 2023.** The CCAS Research Showcase is an opportunity for all graduate and undergraduate students in CCAS programs to present their work to the broader CCAS community in a poster session. Everyone is encouraged, students, staff, and faculty alike, to come to the Research Showcase, interact with our early-career researchers, and learn more about the diverse and impactful work of our students and their research mentors. The abstract submission portal is <u>here</u>.

Three Minute Thesis Competition

February 22, 3-5 pm, Amphitheater in the University Student Center

The Three Minute Thesis (3MT®) Competition celebrates the existing research conducted by PhD students. Developed by The University of Queensland (UQ), 3MT cultivates students' academic, presentation, and research communication skills. The competition supports their capacity to effectively explain their research in three minutes, in a language appropriate to a non-specialist audience. GW's 3MT winner or a runner-up will go on to compete in the Northeastern Association of Graduate School's regional competition in April 2023. The public is welcome to attend the 2023 GW 3MT competition on Wednesday, February 22, from 3:00 pm - 5:00 pm in the Amphitheater in the University Student Center. Please register to attend in advance. Spring 2023 PhD ETD Copyright Workshop

February 23, 3-4 pm

When do you need permission to use the work of others or your own previous or future publications in your dissertation? Join us for this informative online workshop hosted by the GW Libraries Scholarly Communications Team and learn about the steps you must take to protect your work. Spring 2023 potential graduates whose dissertations will include previously published works are strongly encouraged to attend this workshop.

8th Annual Diversity Summit

March 1-3

The George Washington University is pleased to announce the theme of this year's Diversity Summit: Toward a More Perfect Union: With Liberty, Justice & Civility for All.

This theme calls on us to recognize the diversity of our thoughts, voices, contributions, and ideas that strengthen our community and the world. As we engage in difficult conversations and intense debates, we must be willing to seek the humanity in other people, challenge ourselves to understand another point of view, and empower each other to disrupt and reject all forms of oppression. Our collective ability to make meaningful change is unstoppable.

Completing Your Degree in Spring 2023

If you are completing your graduate certificate, Master's degree or Doctoral degree requirements in Spring 2023, you must apply to graduate for Spring 2023. If you have not already applied, you can do so through GWeb. Instructions can be found on the <u>Office of the Registrar's website</u>. If you wish to participate in commencement/celebration activities in May 2023, then you must apply no later than March 15, 2023. To ensure there are no delays or issues, we strongly recommend that you apply much earlier than the deadline. You may apply for graduation as soon as you are registered.

If you are completing your degree requirements during the summer semester, but wish to participate in commencement/celebration activities in May 2023, then you must wait until Summer registration opens on March 15, register for Summer, and then apply for Summer 2023 graduation no later than April 1, 2023. Do not apply for Spring graduation if you do not intend to complete your degree requirements until the summer semester. Doing so will cause delays with your graduation clearance process.

Funding opportunities for Current Graduate Students

Columbian College graduate students may be eligible to apply for additional funding opportunities that support research or academic activities. Interested students are invited to review the eligibility requirements and deadlines for each award.

For information about graduate student assistantships, employment opportunities and more, visit the **Funding for Prospective Students** page.

Dean's Dissertation Completion Fellowship (DCF) for AY 2023-2024

CCAS invites eligible PhD candidates to apply for the Dean's Dissertation Completion Fellowship (DCF) for the 2023-2024 academic year. Each DCF includes a stipend equivalent to the normal GA salary and stipend in the recipient's respective department for one semester as well as an award of required candidacy tuition for the period of the fellowship. The deadline to apply is **March 1, 2023**.

For more information and to submit an application, visit the DCF website.

Statistics Department Events

Statistics Department Seminars

Confirmed departmental Seminars (other ones will be finalized later)

- Feb 10 2pm-3pm in person at MPA 309: Kimberly Sellers, Georgetown University
- Feb 17 2pm-3pm in person at MPA 309: Susan Ellenberg, University of Pennsylvania
- Mar 3 TBA: Tailen Hsing, University of Michigan
- Apr 14 TBA: Nell Sedransk, NISS
- Apr 28 TBA: Xiaojia Guo, University of Maryland

ASA student chapter events

The ASA student chapter is a student organization in the statistics department run by current Stat PhD and master students. It provides a platform for all students who are interested in Statistics to connect with each other. Events including info sessions, alumni career panel, data mining clubs will be held to help members with both professional development and academic research. Please stay tuned for the upcoming events!

Ph.D. Student Committee event

We are planning fun events like hiking or outings in **March**! Stay tuned for the announcement.

Kudos & Milestones

Songratulations to the graduating Phd students for successfully defending their dissertations this year and getting their Doctoral degree!

A Ph.D. graduate Dr. Samuel Luxenberg defended his dissertation in October and joined Liberty Mutual Insurance.

The following students in our department received the 2023 AAAS Section U Student Travel Award: Han Su, Geifei Lin, Xinyue Zhao and Sean Dalby. The awardees will be supported to attend the 2023 AAAS Annual Meeting. Congratulations!

Faculty & Student Research



Prof. Hu is serving as the Director of the Ph.D. program of the department. He earned his BSc in Mathematics from Hangzhou Normal University, China , MSc in Statistics in Zhejiang University, China and Ph.D. in Statistics from University of British Columbia, Canada. Hu's research areas in statistics include adaptive design of clinical trials, bootstrap methods, biostatistics, A/B testing, big data study designs, bioinformatics and statistical issues in precision medicine. Hu has extensive experience and expertise in statistical design of clinical research and drug development. He served as DSMB

members for several clinical trials in industries from 2017-2022. He also served as the associate editor for top statistical journal JASA (Journal of the American Statistical Association) and AOS (Annals of Statistics) from 2007-2020. Prof. Hu has published two books and hundreds of papers. The publications can be found in his recent CV:

https://statistics.columbian.gwu.edu/sites/g/files/zaxdzs4811/files/2022-07/cv2022julygwu.pdf

Appendix

Social Media Page (please follow us on LinkedIn and Facebook!)

GW Department of Statistics linkedin page: <u>https://www.linkedin.com/company/gw-statistics/</u> Statistics Students & Alumni of GWU linkedin group: <u>https://www.linkedin.com/groups/14114113/</u> GWU STATISTICS faceBook page: <u>https://www.facebook.com/GWU.STAT/</u>



Contact Us

American Statistical Association (ASA) Student Chapter

Students from the GWU Statistics department are actively organizing and participating in statistical events through the <u>GWU ASA Student Chapter</u>. The purpose of the student chapter is to provide students at the George GWU with opportunities to connect with other students interested in statistics and interact with prominent statisticians locally and at national meetings. If you are interested to be an officer or participate in the event, please contact Jiaqian Yu (jiaqian7@gwu.edu) or Lei Song (leisong@gwu.edu).

Full-time Faculty & Their Research Interests

| Tatiyana Apanasovich Measurement error models, Spatial statistics, Positive definite kernels, Non/Semiparametric regression, Vector valued random fields. | Srinivasan Balaji Diffusion processes, Markov chains, Stochastic differential equations and applications. |
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| Sudip Bose Bayesian statistics, Bayesian robustness, Pitman closeness. | Joseph L. Gastwirth Statistics in law and public policy, Robust statistical methods, Grouped data. |
| Feifang Hu Adaptive design of clinical trials, Bioinformatics, Biostatistics, Bootstrap methods, Statistical issues in personalized medicine, Statistical methods in financial econometrics, Stochastic process. | Fang Rachel Jin Deep learning, Natural language processing, Data mining, Machine learning, Social network analysis. |
| Subrata Kundu Sequential analysis, Density estimation, Software reliability, Hypothesis testing, Nonparametric statistics. | Yinglei Lai Bioinformatics, Computational biology, Statistical genetics. |
| Joshua Landon Bayesian statistics, Stochastic processes, Markov chain, Monte Carlo methods, Decision analysis, Reliability. | Zhaohai Li Genetic epidemiology, Statistical methods for meta analysis, Empirical Bayes, Methods for clinical trials, Clinical biostatistics. |
| Hua Liang Partially linear models, High-dimensional semiparametric modeling, Model averaging and model selection, Longitudinal data analysis, Measurement error models, Nonlinear and nonparametric mixed effect models, HIV/ AIDS clinical trial and dynamic modeling. | Hosam M. Mahmoud Probabilistic analysis of algorithms, Random discrete structures, Analytic probability. |
| Reza Modarres Statistical computing, Multivariate analysis, Environmental statistics, Nonparametric statistics. | Tapan Nayak Inference, Prediction, Software reliability, Randomized response design. |
| Qing Pan Survival analysis, Recurrent event data, Observational studies, Costs analysis. | Huixia Judy Wang Quantile regression; Extreme value theory and applications; Bioinformatics; Nonparametric (Semiparametric) regression; Inference; Variable selection; Survival analysis; Longitudinal data analysis; Spatial analysis; Measurement error; Missing data |
| Xiaoke Zhang Functional data analysis, longitudinal data analysis, smoothing, dimension reduction, nonparametric statistics, statistical learning, and neuroimaging. | John M. Lachin Biostatistics Epidemiology |

Contribute to the Newsletter

We will issue the next Newsletter in Fall 2023. If you would like to contribute to the sections `Research Spotlight` or `Reading Recommendations`, or want to join the editorial team for the Newsletter, please contact Jiaqian Yu (<u>jiaqian7@gwu.edu</u>) or Yipeng Wei (<u>yipeng_wei@gwu.edu</u>). Welcome to join us.