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UPCOMING EVENTS

- Ouick List of NISS Hosted & Co-Sponsored Events
- New upcoming NISS hosted events highlighted in this issue!

INGRAM OLKIN FORUMS (IOF)

- Call for Ingram Olkin Forum Proposals! by Sept 2023
- Statistical Challenges in the Analysis of Police Use of Force - Nov 9-10, 2023 - Registration Open!

National Institute of Statistical Sciences STATISTICAL **CHALLENGES IN THE ANALYSIS OF POLICE USE OF FORCE** DATES: THURSDAY - FRIDAY N-PERSON IOF WORKSHOP LOCATION: CARLETON COLLEGE NOVEMBER 9-10, 2023

RECENT EVENTS & RECORDINGS

- Graduate Student Network Research Conference
- CANSSI-NISS Health Data Science Workshop
- NISS at JSM Highlights August 6-11, 2023

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NISS Researchers at JSM Sessions August 6-11, 2023

DIRECORS' NOTES

• Highlights from current NISS Director, James L. Rosenberger, and incoming Director, David S. Matteson.

UPCOMING EVENT HIGHLIGHTS

Thursday, Sept 14, 2023 | 1:30-3 pm ET

ACADEMIC PERSPECTIVES **ON CHATGPT**

Michael Hu, West Virginia University Amanda R. Ellis, University of Kentucky Yue Dong, Statistics at University of California, Riverside Moderator: Analisa Flores, UC, Riverside

Fall 2023 Schedule | 12-1 pm ET

COPSS-NISS LEADERSHIP WEBINAR SERIES

Tuesday, Sept 19, 2023 | 12-1 pm ET Topic: National Scientific Societies Speakers: Lance Waller, Emory Moderator: Natalie Dean, Emory

Tuesday, Oct 17, 2023 | 12-1 pm ET **Topic: Leadership in Statistical Sciences** Speakers: TBD Moderator: Lorin Crawford, Microsoft

Tuesday, Nov 28, 2023 | 12-1 pm ET

Topic: Leadership in Statistical Methods for Electronic Health Records Data Speakers: Dr. Rebecca Hubbard, UPenn Med Moderator: Dr. Yates Coley, Kaiser Permanente

Fridays in October! (Oct. 6, 13 & 20, 2023)

UNDERGRADUATE STUDENT GUIDE FOR **GRAD SCHOOL**

Friday, Oct 6, 2023 | 12-1:15 pm ET Topic: PhD & MS Programs in Stats, Biostats & Data Science Degrees

Friday, Oct 13, 2023 | Time TBD **Topic: Graduate Student Panel**

Friday, Oct 20, 2023 | Time TBD **Topic:** Alumni Panel

Wednesday, Oct 11, 2023 | 12-1:30 pm ET

NISS VIRTUAL GOVERNMENT **CAREER FAIR**

Speakers: Dr. Cha-Chi Fan, Director, U.S. Department of Transportation; Dr. Shanti V. Gomatam, Food & Drug Administration

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Quick List of Upcoming Events

Clickable links to each event:

NISS Hosted Upcoming Events

Thursday, September 14, 2023 | 1:30-3 pm ET Academic Perspectives on ChatGPT

Tuesday, September 19, 2023 | 12-1 pm ET COPSS-NISS Leadership Webinar: National Societies

Friday, October 6, 2023 | 12-1:15pm Undergraduate Student Guide for Grad School: PhD & MS Programs in Stats, Biostats & Data Science Degrees!

Wednesday, October 11, 2023 | 12-1:30 pm ET NISS Virtual Government Career Fair

Friday, October 13, 2023 | Time TBD Undergraduate Student Guide for Grad School: Grad Student Panel Tuesday, October 17, 2023 | 12-1pm ET COPSS-NISS Leadership Webinar

Friday, October 20, 2023 | 12-1:15 pm ET Undergraduate Student Guide for Grad School: Alumni Panel

Thursday-Friday, November 9-10, 2023 IOF Workshop: Statistical Challenges in the Analysis of Police Use of Force

Tuesday, November 28, 2023 | 12-1 pm ET COPSS-NISS Leadership Webinar: Leadership in Statistical Methods for Electronic Health Records Data

Co-Sponsored Upcoming Events

Friday-Saturday, September 8-9, 2023 Evolution of Data Science Conference

Monday-Tuesday, September 18-19, 2023 3rd Penn Conference on Big Data in Biomedical and Population Health Sciences

Thursday, Sept 28, 2023 at 4pm ET Joint UGA-Clemson Colloquium 2023

Friday-Saturday, October 13-14, 2023 New Frontiers in Reliability and Risk Analysis: A Tribute to Nozer D. Singpurwalla

Wednesday, October 25, 2023 | 11:00am 2023 Myles Hollander Distinguished Lecture



Full List of Co-Sponsored Events available on our Upcoming Events Page!

NISS can Sponsor Events Through Affiliate Program

Learn more about this program here: <u>https://www.niss.org/affiliate</u> <u>-program-information</u> Parameters

NISS Ingram Olkin \mathbf{S}^3 Forums (IOF)

Thursday-Friday, November 9-10, 2023 IOF Workshop: Statistical Challenges in the Analysis of Police Use of Force

During this in-person forum, we hope to shed light not only on unique approaches and perspectives in these areas, but also to develop and suggest steps that statisticians and researchers could consider that would aid in a deeper understanding of these issues and provide better evidence to inform reform efforts.

Dissemination / Expected Output: This forum will be hosted as a two-day workshop to overview research in this area and facilitate research collaborations that advance statistical methodology for analyzing police use of force. The breakout sessions will develop research groups on focused topics within the broader research area. After the workshop, we will write a white paper on the discussion and next steps discussed in the workshop and plan for each working group to produce a manuscript suitable for publishing at a scientific journal. Full details are available on the event page.

National Institute of Statistical Sciences Statistical Sciences





NISS INGRAM OLKIN FORUM \mathbf{S}^{3} SERIES

STATISTICAL CHALLENGES IN THE ANALYSIS OF POLICE **USE OF FORCE**

IN-PERSON IOF WORKSHOP LOCATION: CARLETON COLLEGE DATES: THURSDAY - FRIDAY NOVEMBER 9-10, 2023

IOF Liaison



CLAIRE KELLING Assistant Professor of Statistics, Mathematics and Statistics Department at Carleton College

Please contact for questions:

ckelling@carleton.edu

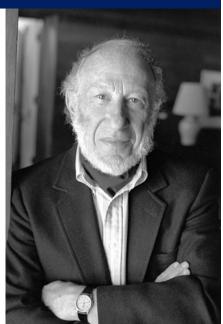
NISS Events | Le NISS Newsletter |

Workshop topics include:

- Quality Issues with Aggregate Policing Data
- Statistical Issues in Analyzing Fairness and Bias •
- Unstructured Data: Prospects and Challenges
- Data Access and Privacy Considerations
- Community Collection and Use of Policing Data
- Funding Opportunities

Please note the upcoming NISS Ingram Olkin Forum, November 9-10 in Minnesota, addressing a very important topic, Police Use of Force, where under the banner "Statistics Serving Society" these forums bring statisticians together with other potential collaborators. This forum will bring together researchers that are established and new researchers interested to engage in this important area of study. Researchers will be present from statistics as well as fields such as criminology and sociology. Note that early career/students may request funding from the NSF grant supporting the forum by emailing Claire Kelling, and anyone from a NISS affiliate department can use their NISS Affiliate Award Funds to support their registration and travel expenses for this regional event.

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Statistics Serving Society

NISS INGRAM OLKIN FORUM \mathbf{S}^{3} series **CALL FOR PROPOSALS**

NISS invites YOU to submit a

proposal to create an IOF!

2023 Deadline: September 30th

Submit Online

Today!

NISS YouTube | www.NISS.org | 4





Upcoming NISS Hosted Event Highlights

Thursday, September 14, 2023 at 1:30-3pm ET Academic Perspectives on ChatGPT



In recent years, the rise of advanced language models, such as ChatGP1, has presented both opportunities and challenges in the realm of education. One growing concern is the misuse of these powerful tools by students who rely on them to complete their assignments instead of engaging in independent learning and critical thinking. To address this pressing issue, our NISS Academic Affiliates are organizing a webinar dedicated to exploring opportunities and constraints. Join us for this insightful webinar as we bring together esteemed academics, educators, and researchers to examine the phenomenon of students using ChatGPT and similar language models used for student learning! Through thought-provoking presentations and interactive discussions, we aim to delve into the underlying factors contributing to this and identify effective measures to determine its impact. Panelists: Michael Hu, Health Sciences at West Virginia University Amanda R. Ellis, Biostatistics at University of Kentucky Yue Dong, Statistics at University of California, Riverside. This event is moderated by Analisa Flores, Statistics at University of California, Riverside. Visit our <u>event page</u> for full details!

Click here to Register on Zoom!

The webinar will kick off with an overview of the uses of on ChatGPT for student's coursework. Distinguished experts in the field of education and pedagogy will share their insights on promoting academic integrity and fostering a culture of independent thinking. They will discuss innovative teaching methodologies that encourage critical analysis, problem-solving, and creative expression, which can help students develop essential skills beyond rote memorization or reliance on external resources. This webinar will also shed light on the ethical considerations surrounding the use of language models in education. We will explore responsible ways of integrating these tools into the curriculum, emphasizing the importance of teaching students how to effectively leverage technology while maintaining academic honesty and intellectual growth.

VIEW ALL NISS EVENTS AT NISS.ORG/EVENTS

The interactive sessions will provide opportunities for attendees to engage in discussions and share their experiences, challenges, and successful strategies in addressing the issue of student reliance on ChatGPT. Participants will have the chance to collaborate with like-minded educators, exchange practical ideas, and gain valuable insights from diverse perspectives. By attending this webinar, academic faculty members will gain a deeper understanding of the factors influencing student behavior, discover effective instructional methods, and explore ethical frameworks for integrating technology into teaching practices. Together, we can cultivate an educational environment that fosters independent thinking, academic integrity, and the development of essential skills for the future.



Upcoming NISS Hosted Event Highlights

Tuesday, September 19, 2023 - 12 pm - 1 pm ET COPSS-NISS Leadership Webinar

COPSS NISS National Institute of Statistical Sciences Leadership Webinar Series



LANCE WALLER Emory University

Professor of Biostatistics, Emory University

Co-chair of the National Academies Committee on Applied and Theoretical Statistics



TOM LOUIS Johns Hopkins University

Professor Emeritus of Biostatistics, Johns Hopkins University Former Chair of the AAAS

Statistics Section



Topic: Leadership in National Scientific Societies Join us for our another insightful webinar on the topic of leadership in the field of statistics and data science.

The purpose of this event will be to discuss how national scientific societies promote interaction between statisticians and the broader scientific community, and how these committees can elevate the voices of statisticians.

Statisticians and data scientists at any stage in their careers are invited to attend.

TUESDAY, SEPTEMBER 19, 2023 12-1 P.M. ET / 9-10 A.M. PT





https://www.niss.org/events/copss-niss-leadership-webinar-1





Saturday, May 20, and Sunday, May 21, 2023 GSN 3rd Annual Graduate Student Research Conference Showcased Promising Scholars and **Cutting-Edge Research**

The NISS Graduate Student Network was brimming with excitement as they announced the 3rd two-day Graduate Student Network Research Conference. The event, which took place on Saturday, May 20, and Sunday, May 21, 2023, from 12 pm to 5 pm ET, marked a much-anticipated gathering of scholarly brilliance and innovation. Building on the resounding success of the previous year's conference in 2022, this year's edition proved to be an even more remarkable affair, presenting a challenge in selecting the winners from among the many fantastic presentations.

The GSN Research Conference was a multifaceted event, featuring an array of activities that aimed to foster academic excellence within the graduate student community. The centerpiece of the conference was the graduate student presentations, where students showcased their research findings and insights through either oral or poster presentations. These presentations were grouped into three categories: Original Research, Literature Research, and Literature Review. In addition to the captivating student presentations, the conference offered a Scientific Writing Short Course, presented by Don Richards from the Department of Statistics at Penn State. This course aimed to equip attendees with invaluable insights into refining their scientific writing skills, enabling them to communicate their research effectively to a broader audience.



As a highlight of the event, two Invited Talks featured esteemed scholars from renowned institutions. Day 1 welcomed Dan Jeske from the Department of Statistics at UC Riverside on "A Neutral Zone Classifier for Three Classes with an Application to Text Mining", while Day 2 featured the brilliant Xihong Lin from Harvard University on her talk "A Multi-Dimensional Integrative Scoring Framework for Predicting Functional Variants in the Human Genome". Both speakers shared their expertise and knowledge, adding significant value to the conference.

One of the most awaited moments of the conference was the recognition and reward of exemplary graduate students. Four best presentation awardees were selected based on the content and quality of their presentations. The 1st and 2nd Tier winners received a prestigious prize of \$150 USD each, while the 3rd Tier presentation winner was granted \$100. Additionally, an outstanding poster award recipient also received \$100. The awardees were not only celebrated during the conference but will also receive recognition at the NISS Reception and Awards Ceremony during JSM 2023 in Toronto, Canada, further amplifying the significance of their achievements.

- 1st Tier Winner Rashmi Ranjan Bhuyan, University of Southern California .
- 2nd Tier Winner 1 Durbadal Ghosh, Florida State University
- 2nd Tier Winner 2 Pengfei Lyu, Florida State University
- Poster Winner Priyanjali Bukke, George Mason University







Recent Events & Recordings







Thursday-Friday, August 3-4, 2023 2nd CANSSI-NISS Health Data Science Workshop

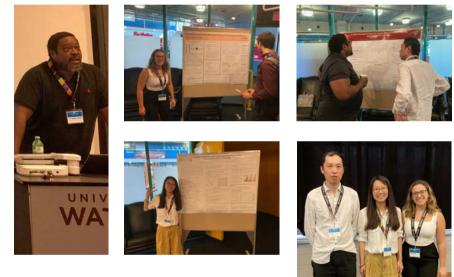


In a remarkable display of interdisciplinary synergy, statisticians and health data scientists united at the <u>2nd CANSSI-NISS Health Data Science Workshop</u> held on August 3-4, 2023, at the University of Waterloo. This event served as a vibrant platform for the convergence of minds from both sides of the border, with participants hailing from the United States and Canada, all driven by a common goal: advancing the frontiers of biological, medical, and public health research through the lens of data science. NISS gives a huge thank you to the CANSSI for sponsoring this workshop and University of Waterloo for hosting and facilitating the enlightening workshop and all the staff that made the incredible event possible!

As a prelude to the workshop, two engaging short courses were conducted on August 2, 2023, within the verdant campus of the University of Waterloo. These sessions provided an exclusive opportunity for attendees to delve into the intricacies of the subject matter before the main event kicked off.

Highlights of the workshop included two captivating keynote presentations that shed light on the overarching theme of the event. Additionally, three specially curated invited sessions delved deep into the nuances of Statistical Methods for Precision Health, Causal Inference for Big Health Data, and the burgeoning intersection of Artificial Intelligence and Health Data Science.

A key feature of the workshop was the spirited poster competition, where students and emerging researchers showcased their groundbreaking work.



The competition not only offered a platform for burgeoning talent to shine but also enriched the scientific discourse with fresh perspectives and innovative methodologies. The culmination of the first day saw participants gather for a grand banquet and dinner, fostering an atmosphere conducive to networking, idea exchange, and the forging of lifelong professional connections.

Remarkably, this workshop unfolded just days before the commencement of JSM 2023 in Toronto, Canada, further underscoring the prominence of this region as a hub for scientific discourse and innovation. With a mere 1-hour and 30-minute train journey between the University of Waterloo and Toronto, and a convenient hour's commute from the Toronto Pearson Airport, attendees had seamless access to two marquee events in the realm of data science and statistics. The 2nd CANSSI-NISS Health Data Science Workshop stood as a testament to the transformative potential of collaborative efforts. As the embers of this year's gathering continue to smolder, the torch of innovation and interdisciplinarity has been unequivocally passed on, promising an even brighter future for the burgeoning field of Health Data Science.

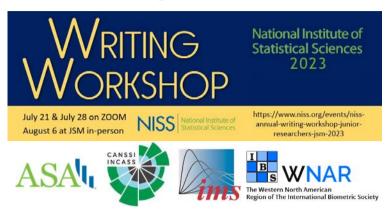
See Full Slideshow for this event here







Friday, July 21, Friday July 28, & Sunday August 6, 2023 NISS Annual Writing Workshop for Junior Researchers at JSM 2023



The synergy of the NISS Writing Workshop for Junior Researchers and the NISS Graduate Student Network culminated in an engaging meetup held during the Joint Statistical Meetings (JSM) in Toronto. The meetup took place the morning of Sunday, August 6th and provided attendees with a unique opportunity to expand their professional networks. With a blend of students and seasoned professionals in attendance, the event seamlessly fostered the exchange of information, insights, and aspirations. Participants eagerly embraced the chance to meet new faces, with conversations flowing freely and connections taking root.

At the heart of the event were the esteemed guest speakers, who added exceptional value to the networking session. The panel titled "Speaking from Experiences and Career Development" featured renowned figures in the statistical arena. Ali Shojaie from the University of Washington, Edsel Pena from the NSF, Piaomu Liu from Bentley University, and Yanling Zuo from Minitab came together to share their insights on effective communication of statistical research. Guiding the discussion was moderator James Rosenberger from NISS/PSU, who skillfully steered the conversation towards valuable takeaways for the attendees.

The meetup not only served as a hub for expanding networks but also provided a space for professional growth. Interacting with experts and experienced professionals facilitated the acquisition of industry-specific knowledge and insights. Attendees were able to glean practical advice and guidance, enhancing their understanding of their respective career paths. The diverse backgrounds and expertise of the participants paved the way for future joint endeavors that promise to push the boundaries of statistical science.

The NISS Writing Workshop for Junior Researchers and the NISS Graduate Student Network succeeded in creating a vibrant environment that fostered networking, learning, and growth, making their meetup at JSM 2023 a resounding success. Connecting with fellow attendees from the writing workshop and graduate student network offered participants access to peers and mentors who readily shared their expertise. Aspiring researchers and junior professionals found a platform where they could seek guidance on research, writing, and professional matters, further enriching their learning journey. The Writing Workshop Short Course was hosted by NISS for another year! This year, it was a hybrid event with virtual lectures and meetings with mentors on Friday, 7/21, and 7/28, prior to the meetup at JSM. An wrap-up networking meeting took place on Sunday morning, 8/6, at JSM in Toronto, Canada in collaboration with the Graduate Student Network. Support was also provided by the ASA and other sponsoring statistical organizations. Various students and recent graduates of doctoral programs improve their communication skills with the lineup of incredible mentors this year.

During the virtual sessions, participants at the workshop initially provided a recent sample of their writing, which was assigned to and reviewed by a senior mentor. Full list of mentors and more details about the event are listed on the <u>event page</u>.













See Full Slideshow for this event here



Parameters

Recent Event Highlights

Sunday, August 6, 2023 | 12-2pm ET JSM 2023: NISS Affiliate Luncheon & Awards Ceremony



The NISS Affiliate Luncheon took place from 12-2pm at the InterContinental Toronto Centre in the Oakville Room. This exclusive event brought together esteemed statisticians, researchers, and professionals in a relaxed and interactive setting. During this luncheon, participants had the opportunity to network with fellow affiliates and discuss cutting-edge statistical methodologies, research findings, and industry trends. This year, we focused on activities in which our affiliates are involved, particularly those that highlight the cross-disciplinary nature of the challenges or the benefits derived from the synergy of statisticians from industry, government institutions, and academia.





We commenced with the Buffet Lunch Service, creating an atmosphere of conviviality. David S. Matteson, our new Director at NISS, took the stage to extend a warm welcome, initiating the proceedings with introductions and an exploration of innovative new initiatives. This sequed into a lively open discussion with our affiliates, where ideas flowed freely and connections were forged. Afterwards, the NISS Annual Awards Announcement took place where the distinguished Jerome Sacks Award for Cross-Disciplinary Research was presented to Bhramar Mukherjee (University of Michigan), the NISS Distinguished Alumni Award presented to Murali Huran (The Pennsylvania State University) and the NISS Distinguished Service Award presented to Lingzhou Xue (The Pennsylvania State University) were unveiled, shining a spotlight on exemplary achievements and dedication within the NISS community. A glance at the NISS Program Highlights followed, showcasing the vitality of the Ingram Olkin Forums, the growth and achievements of our Graduate Student Network, the impactful contributions of Research Associates of NISS-NCES and NISS-NASS.

Visit the full news story

See Full slideshow



Ways to Get Involved as a **NISS** Affiliate

NISS Affiliates, if you would like to be featured in upcoming events (such as career fairs, panels, tutorials, research webinars, etc.), please do not hesitate to contact NISS! NISS is always looking for ways to support the missions of each affiliate.

NISS continues to work to identify topics of interest to statisticians from all different sectors and then gather experts to contribute to a conversation that helps to not only inform but also provoke further thinking on these topics. Keep your eye on the NISS website for future events that might be of interest to you or your colleagues.

Become a Sponsor of **NISS Hosted Events!**

NISS Invites corporations, universities or institutions and individuals to sponsor events that are hosted by NISS.

Sponsorship helps to defray the cost of organizing events and is a great way to give your organization visibility that targets statisticians and other related professions who attend NISS events! Learn More!

Take the NISS **Affiliate Survey!**

We will be sending a survey after JSM to seek your input as an affiliate!



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Monday-Thursday, August 6-11, 2023 JSM 2023: Jerry Sacks Memorial Session

The Jerry Sacks Memorial Session at JSM 2023 was chaired by James Rosenberger (Penn State University and NISS) and organized by Lingzhou Xue & James Rosenberger (Pennsylvania State University and NISS). Alan Karr (AFK Analytics, LLC) presented "Jerry Sacks and NISS" where he highlighted the ups and downs of the early years of NISS when Alan spent eight years as Associate Director under Jerry and 14 years as Director. Alan also focused on Jerry's and NISS' scientific heritage, both in terms of specifics and in making cross-disciplinary research commonplace in statistics. Alan's presentation included many photographs, not only of Jerry, but also others who helped put NISS on the path that has enabled it to thrive for more than 30 years.

William Welch (University of British Columbia) presented "Jerry Sacks and the Birth of Design and Analysis of Computer <u>Experiments</u>" where he portrayed Jerry's central role in the creation of a new, and eventually enormous, field of research and application: the Design and Analysis of Computer Experiments (DACE). Various papers Jerry had co-authored established a methodology for analysis of computer experiments which is still ubiquitous today and the basis for efficient statistical design of computer experiments. His talk also recounted some of the story of how Jerry developed and adapted statistical tools for the scientific revolution where physical experiments are complemented or supplanted by computer models of complex systems.

Piyushimita 'Vonu' Thakuriah (Rutgers University, New Brunswick, New Jersey) presented "<u>Remembering the Life and Work of Jerry Sacks as a NISS</u> <u>Postdoctoral Researcher</u>" and provided an overview of the contributions made by Jerry Sacks in the early stages of his postdoctoral fellowship program, as seen through the lens of an NSF-funded infrastructure project. This interdisciplinary project involved a number of research centers from across the US. This talk covered some of the project's key research questions, many of which were shaped by Jerry, its connections to later work, and the collaborative atmosphere and social environment that Jerry fostered as part of the working life at the institute.

James Berger (Duke University) presented "<u>The Rapid Growth of Uncertainty Quantification in the 21st Century</u>" and highlighted Jerry's involvement during his time at the National Institute of Statistical Sciences where made UQ one of the central initiatives, and started the growth of UQ. From Jerry's contributions, this growth became exponential in the 21st century, including a joint initiative in UQ between the ASA and the Society for Industrial and Applied Mathematics (SIAM), involving interest groups, a new journal, and meetings.

Monday-Thursday, August 6-11, 2023 JSM 2023: NISS Reception, A Night of Celebration and Networking

The annual NISS Reception, a highly anticipated event within the statistical community, took place on Monday night, August 7th at the Delta Hotel Toronto Marriott. Set against the elegant backdrop of the Parkdale Room on the 3rd floor, the reception brought together statisticians, researchers, and industry professionals for an evening of camaraderie and celebration. Amidst the vibrant and relaxed atmosphere, attendees seized the opportunity to engage with colleagues and friends, discussing the latest advancements in statistical science, groundbreaking research findings, and innovative methodologies.

Highlighting the significance of the evening, the NISS Reception served as a platform for honoring exceptional contributions to the field of statistics. The gathering witnessed the announcement and celebration of the recipients of esteemed awards, including the Jerome Sacks Award for Outstanding Cross-Disciplinary Research, the NISS Distinguished Alumni Award, and the NISS Distinguished Service Award. These luminaries were recognized for their unwavering commitment to advancing statistical science, fostering interdisciplinary collaboration, and demonstrating outstanding service to the community.

The enchanting ambiance of the venue further elevated the experience, creating an inviting space for attendees to connect and engage in meaningful conversations. Whether industry professionals, academic researchers, or government representatives, the NISS Reception provided a unique opportunity to forge connections, share insights, and nurture partnerships that will continue to shape the trajectory of statistical research and application.









🎎 NISS Events | 峰 NISS Newsletter | 🎔 @NISS_DataSci. | in NISS LinkedIn | 存 NISS Facebook | 🕨 NISS YouTube | www.NISS.org. | 3



Research Highlights

Monday-Thursday, August 6-11, 2023 JSM 2023: NISS Researchers Presentations & Sessions

At the Joint Statistical Meetings (JSM) conference, our accomplished NISS researchers unveiled a series of innovative and impactful statistical projects that garnered significant attention and acclaim. The conference, known as a premier gathering for statisticians and data scientists, served as the perfect platform for NISS researchers to showcase their cutting-edge work, spanning a diverse array of disciplines. From groundbreaking advancements in machine learning-driven predictive modeling to novel methodologies for analyzing complex longitudinal data, the NISS presenters illuminated the conference with their data-driven insights, fostering a rich environment of collaboration and knowledge exchange among fellow attendees.









NISS researchers included Luca Sartore, Lu Chen, Ruiyi Zhang working at NASS and Haley Jeppson working at Iowa State University. Each of our researchers presented a collection of projects that reflected the institute's commitment to advancing statistical theory and practice while addressing real-world challenges. Their presentations underscored the pivotal role of statistics in shaping decision-making processes across sectors ranging from healthcare and finance to social sciences and beyond. By sharing their expertise and novel approaches at the JSM conference, NISS researchers not only contributed to the forefront of statistical research but also inspired a broader community of statisticians to explore new avenues of inquiry and innovation.

Some of the sessions that our NISS Researchers took part in included:

- <u>Use of Color in Statistical Charts</u> 1551 Invited Panel Session was organized by Haley Jeppson and chaired by Heike Hofmann, Iowa State University.
- Machine Learning & Imputation Techniques for Survey Design & Missing Data - 0021 Contributed Papers included two presentations from papers coauthored by Luca Sartore: Presentation #2: Early Season Corn Acreage Estimates in the Presence of Extreme Weather, and Presentation #6: Optimizing Imputation for an Area Survey.
- <u>Hierarchical Models for Survey Data</u> 0046 Contributed Papers included a presentation co authored by Lu Chen and Yang Cheng: Presentation: Mixture Model and Its Application
- <u>Cell Suppression Methods for Economic Census and Establishment Surveys</u> -1835 Topic-Contributed Paper Session was organized and chaired by Yang Cheng, co-authored by Lu Chen, Yang Chen, Ruiyi Zhang
- Weighting Adjustments 0141 Contributed Papers; Presentation: Consistency of Survey Estimates through Adjusted Integer Weights First Author & Presenting Author: Luca Sartore and was co-authored by Lu Chen

NISS also had a few sessions where our NISS Directors and Affiliate Liaisons had participated:

- <u>Statistical Challenges in Public Health and Medicine</u> 1278 Invited Paper Session was organized by Lingzhou Xue & Jim Rosenberger, Jim also chaired the session.
- <u>Contributed Poster Presentations: Section on Statistical Learning and Data</u> <u>Science</u> - Contributed Posters, Contributed Poster Presentation: 33 Inference for Nonstationary Economic Time Series was co-authored by David Matteson

Parameters

Directors' Notes

Greetings from NISS!

News on NISS Activity at JSM

As usual, the JSM in Toronto was a very enjoyable time, seeing many longtime friends of NISS. We presented the Sacks award and the distinguished alumni and service awards. On Sunday morning the NISS annual writing workshop participants began with a final in-person gathering and heard from a panel of experts on the impact of writing on their careers, followed by a networking hour with the members of the Graduate Student Network (GSN) where Professor Piaomu Liu (Bentley U) described her leadership role in NISS. At noon the affiliate luncheon was the occasion for announcing the winners of the 2023 Sacks award, which was presented to Bhramar Mukherjee (U Michigan), the Distinguished NISS Alumni Award, presented to former NISS postdoc Professor Murali Haran (Penn State), and the Distinguished Service Award to Professor Lingzhou Xue (NISS & Penn State). The Sunday Affiliate luncheon also included an open discussion about the future of NISS led by David Matteson and ended with lightning talks by four of the NISS research associates on the impact and focus of their work at the National Agriculture Statistics Service (NASS) and the National Center for Education Statistics (NCES).

News on Recent Event Highlights:

Prior to JSM, NISS held a satellite meeting, the 2nd CANSSI NISS Health Data Science Workshop at the University of Waterloo. As reported below in this newsletter it was very successful with stimulating keynote talks by Charmaine Dean (U Waterloo) and Eric T Tchetgen (U Penn), three invited sessions, and the banquet hosted by the department chair and where the outstanding poster awards were presented to three graduate students. We anticipate a third workshop in 2025 to be held in the US at one of our NISS affiliates. Let us know if you are interested in hosting it.

News on Upcoming Event Highlights

Please note the upcoming NISS Ingram Olkin Forum, November 9-10 in Minnesota, addressing a very important topic, Police Use of Force, where under the banner "Statistics Serving Society" these forums bring statisticians together with other collaborators. This forum will bring together researchers that are established and new researchers interested to engage in this important area of study. Researchers will be present from statistics as well as fields such as criminology and sociology. Note that early career/students may request funding from the NSF grant supporting the forum, and anyone from a NISS affiliate department can use their NISS Affiliate Award Funds to support their registration and travel expenses for this regional event. Please reach out to ckelling@carleton.edu for details and questions.

News from our NISS Affiliates:

Our affiliates continue to sponsor and host events, most again in person, which NISS co-sponsors and advertises. See the upcoming events at: https://www.niss.org/events/calendar and participate. Affiliates can utilize their travel funds to register and attend these co-sponsored events.

To learn more about our affiliate program, or any upcoming events, see our website www.niss.org and click on the Affiliates link for the information on how to participate and the benefits of joining.



Jim Rosenberger NISS Director



David Matteson NISS Deputy Director

ABOUT NISS

The National Institute of Statistical Sciences (NISS) is a national institute that delivers high-impact research in science and in public policy by leveraging the rich expertise of its staff with that of its base of affiliated organizations in academia, industry, and government. NISS works on issues where information and quantitative analysis are keys to solutions and decisions. NISS functions in three ways: as an expert advisor, researcher, and collaborator.

OUR MISSION

The National Institute of Statistical Sciences (NISS) is an independent research organization that serves as a neutral, objective expert in delivering research in science and public policy to its affiliates in academia, industry and government. NISS identifies, catalyzes and fosters high-impact cross-disciplinary and cross-sector research involving the statistical and data sciences.



Affiliates!

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