JSM2023 REGISTRATION GUIDE

Toronto, Ontario, Canada • August 5–10


(Image © Destination Toronto)
See you in Toronto—home of the
CN Tower, the tallest free-standing
structure in the Western Hemisphere!

One Community: Informing Decisions and Driving Discovery

TORONTO

Ontario, Canada • August 5–10

JSM2023

The **2023 Joint Statistical Meetings** offers a unique opportunity for statisticians and data scientists in academia, industry, and government to **exchange ideas and explore opportunities for collaboration.** It's also an excellent venue for early-career statisticians (including students) to learn from and interact with experienced members of the profession.

This year's gathering will cover a broad range of topics, including the following:

- Adaptive Design
- Bayesian Computation
- Causal Inference
- Clinical Trial Design
- Data Science / Modeling
- Life Sciences and Medicine
- Machine Learning
- Spatio-Temporal Statistics
- Statistical Methodology

Register today at *www.amstat.org/jsmregistration.*

One Community: Informing Decisions and Driving Discovery

TORONTO

Ontario, Canada • August 5–10

JSM2023

The Joint Statistical Meetings is the largest annual gathering of **statisticians** and **data scientists** in the world! This year's conference will be held **August 5–10** at the **Metro Toronto Convention Centre.**

Follow us on Twitter using @AmstatNews and #JSM2023

Meet, mingle with, and listen to such well-known statisticians as:

Kimberly Sellers, Georgetown University

Michael Rosenblum, Johns Hopkins University Bloomberg School of Public Health

Michael Pennell, The Ohio State University

Ioannis Kosmidis, University of Warwick

Daniel Weinberg, US Census Bureau

Ingrid Van Keilegom, Orstat, KU Leuven

Roderick Little, University of Michigan

Bin Yu, University of California

Grace Yi, University of Western Ontario

Runze Li, Penn State University

Ali Shojaie, University of Washington

Karen Kafadar, University of Virginia

David Banks, Duke University

David Donoho, Stanford University

Daniela Witten, University of Washington

Rafael Irizarry, Dana-Farber Cancer Institute

Students meet and greet each other during the 2022 JSM Opening Mixer in Washington, DC.

STUDENT PERKS

- Enjoy reduced registration, professional development, and Career Service fees
- Meet other students at the Student Mixer Monday night
- Explore the EXPO to learn about emerging technologies
- Network with renowned statisticians
- Learn during technical presentations
- Join the ASA for only $25

5,000+
attendees

1,000+
students

600+
sessions, including invited, contributed, and poster presentations

40+
professional development short courses and workshops

75+
employers hiring for more than **200** positions

52
countries represented

100+
exhibitors

What's Included in Your Registration?

Special Events

Sunday, August 6

JSM First-Time Attendee Orientation and Reception
12:30 p.m. – 2:00 p.m.
Sponsored by Novartis

JSM Opening Mixer & Invited Poster Session
8:30 p.m. – 10:30 p.m.
Sponsored by Westat and Eli Lilly

Monday, August 7

International Indian Statistical Association Mixer and General Body Meeting
5:30 p.m. – 7:30 p.m.

JSM Student Mixer
**All student registrants are welcome*
6:00 p.m. – 8:00 p.m.
Sponsored by Two Sigma

Korean International Statistical Society Annual Meeting
7:00 p.m. – 8:00 p.m.

ASA Longtime Member Reception
(by invitation only)
6:30 p.m. – 7:30 p.m.

IMS Awards Ceremony and Presidential Address
**Followed by a reception*
8:00 p.m. – 11:00 p.m.

Attendees make time to have fun during the 2022 JSM Opening Mixer in Washington, DC.

Tuesday, August 8

Town Hall on Accessibility at JSM
4:00 p.m. – 5:00 p.m.

JSM Dance Party
9:30 p.m. – 12:00 a.m.
Sponsored by Beigene

Wednesday, August 9

International Chinese Statistical Association General Membership Meeting
5:00 p.m. – 6:30 p.m.

Follow us on Twitter using @AmstatNews and #JSM2023

Register Early *(May 31 for discounted rates)*

Register online at *www.amstat.org/jsmregistration* or by returning the form in this guide.

Featured Speakers

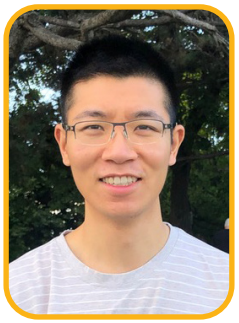
Sunday, August 6

IMS Lawrence D. Brown PhD Student Award Session

2:00 p.m.

Yaqi Duan
Massachusetts Institute of Technology

Optimal Policy Evaluation Using Kernel-Based Temporal Difference Methods



Yuetian Luo
University of Wisconsin - Madison

Tensor-on-Tensor Regression: Riemannian Optimization, Over-Parameterization, Computational Barriers, and Their Interplay

Tudor Manole
Carnegie Mellon University

Plugin Estimation of Smooth Optimal Transport Maps

Featured Speakers

Monday, August 7

Medallion Lecture I

8:30 a.m.

Ingrid Van Keilegom
Université catholique de Louvain

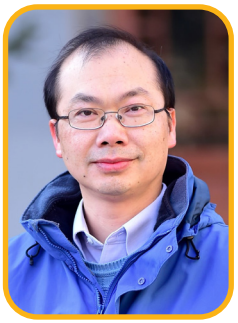
Copula-Based Cox Proportional Hazards Model for Dependent Censoring

Wald Lecture I

10:30 a.m.

Bin Yu
University of California, Berkeley

Seeking Boolean Interactions in Biomedicine and Proofs



Medallion Lecture II

2:00 p.m.

Runze Li
Penn State University

Feature Screening for Ultra-High Dimensional Data: Methods and Applications

ASA President's Invited Address

4:00 p.m.

Robert Santos
US Census Bureau

IMS Presidential Address

8:00 p.m.

Peter Bühlmann
ETH Zurich

IMS: What Does It Stand For? What Could It Stand For?

Featured Speakers

Tuesday, August 8

IMS Grace Wahba Award Lecture

10:30 a.m.

Wing-Hung Wong
Stanford University

Causal Inference by Encoding Generative Modeling

Blackwell Award Lecture

2:00 p.m.

Ya'acov Ritov
University of Michigan

Minimax vs. (Empirical) Bayes Prediction

Florence Nightingale David Award

2:00 p.m.

Karen Bandeen-Roche
Johns Hopkins University

More Than Freedom from Disease: A Quest to Determine 'Health'

Wald Lecture II

4:00 p.m.

Bin Yu
University of California, Berkeley

Sparse Dictionary Learning and Deep Learning in Practice and Theory

Deming Lecture

4:00 p.m.

Malay Ghosh
University of Florida

Small Area Estimation: A Personal Perspective

ASA President's Address and Awards

8:00 p.m.

Dionne Price
US Food and Drug Administration

Our Mission in Action: Past, Present, and Future

Featured Speakers

Wednesday, August 9

Medallion Lecture III

10:30 a.m.

Yingying Fan
University of Southern California

High-Dimensional Random Forests Estimation and Inference

Medallion Lecture IV

2:00 p.m.

Aurore Delaigle
University of Melbourne

Measurement Errors in Diet and Nutrition

COPSS Distinguished Achievement Award and Lectureship

4:00 p.m.

Bin Yu
University of California, Berkeley

Veridical Data Science Toward Trustworthy AI

Register Early

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Register online at *www.amstat.org/jsmregistration* or by returning the form in this guide.

Attendees hang out in the EXPO during JSM 2022 in Washington, DC.

EXPO 2023

Where is the best place to **grab a treat** and **network** with other attendees? Inside the JSM EXPO, of course! Learn about emerging technologies and services, network with colleagues, and celebrate!

Planning to join us in Toronto so far are:

Berry Consultants

Boehringer-Ingelheim Pharmaceuticals

Bureau of Economic Analysis

Bureau of Labor Statistics

Bureau of Transportation Statistics

Cambridge University Press

Cytel

Daiichi Sankyo

Everest Clinical Research

FDA

Hawkes Learning

Institute for Mathematical and Statistical Innovation

Institute of Mathematical Statistics

JMP Statistical Discovery

JSM 2024

Merck

Exhibitors mingle with attendees in the EXPO during JSM 2022 in Washington, DC.

Minitab

National Center for Education Statistics, AIR

National Science Foundation

National Security Agency

Pacific Northwest National Laboratory

Penn State University

Pennfield Search Partners

Plat AI

Prosensus

Realtime CRO

Rho

SAS

SIAM

Softlytics

Springer Nature

StataCorp

Statgraphics Technologies

Statistical Society of Canada

The Center for Statistical Science, Peking University

Taylor & Francis

The Lotus Group

The Sensible Code Company

University of Florida Department of Biostatistics

University of Kansas Department of Biostatistics and Data Science

US Census Bureau

Washington University in St. Louis

EXPO Hours

SUNDAY
1:00 p.m. – 6:00 p.m.
8:30 p.m. – 10:30 p.m. (Opening Mixer)

MONDAY
9:00 a.m. – 5:30 p.m.

TUESDAY
9:00 a.m. – 5:30 p.m.

WEDNESDAY
9:00 a.m. – 2:30 p.m.

Spotlight Toronto

Spotlight Toronto, located in the center of the EXPO, is where you can **take a break** from sessions and make new connections. There is something fun to try every day.

Sunday August 6

1:00 p.m. – Spotlight Kick-Off

Swing by and get JSM started off right with retro ice cream bars.

3:30 p.m. – Sample Canadian Cheese

Who loves cheese? Stop by for a taste or two of Canadian cheeses, mingle with other attendees, and compare notes!

Monday August 7

10:00 a.m. – JSM Coffee House

Refresh with a cup of freshly brewed coffee or tea.

Attendees take a break in the Spotlight during JSM 2022 in Washington, DC.

1:30 p.m. –
Popcorn Break
Sponsored by
National Security Agency
Can you resist the smell of popcorn? Neither can we. Come by for a warm and tasty bag of this tempting treat.

3:30 p.m. –
Microbrew Tasting
Stop here for a variety of local microbrews and cider (while supplies last).

Tuesday August 8

10:00 a.m. – JSM Coffee House
Sponsored by
RTI International
Refresh with a cup of freshly brewed coffee or tea.

1:30 p.m. –
Popcorn Break
Do I smell popcorn? Come by for a warm and tasty bag of this favorite snack.

3:30 p.m. –
Sample Wines
Sponsored by Everest Clinical Research
Don't have time to visit Niagara while in Canada? Sample Niagara-area wine instead. We will have reds and whites from vineyards such as Château des Charme, Cave Spring Cellars, Henry of Pelham Estate Winery, and Trius Winery (while supplies last).

Wednesday August 9

10:00 a.m. – JSM Coffee House
Refresh with a cup of freshly brewed coffee or tea.

Sessions

Parallel Sessions

With so many sessions taking place at once, we guarantee everyone will find presentations of interest.

Seema Sangari, from Kennesaw State University, gives her oral presentation (top) and shows her digital poster (bottom) during the Statistical Methods and Applications in Medical Research, Risk Analysis, and Marketing session at JSM 2022 in Washington, DC.

Speed Sessions

Speed sessions consists of 20 oral presentations of approximately four minutes each, followed by a poster session later in the meeting.

Speed session topics for 2023 include the following:

Bayesian Statistics

Biopharmaceutical Methods

Data Challenge

Epidemiology

Medical Devices

Nonparametrics

Physical and Engineering Sciences

Statistical Computing

Statistical Graphics

Statistical Learning and Data Science

Defense and National Security

Statistics in Genomics and Genetics

Introductory Overview Lectures

The popular introductory overview lectures are back for 2023, with the following sessions:

Applications of Computational Social Science to Diverse Fields
Ashton Anderson, University of Toronto; James Cochran, University of Alabama; and Sali Tagliamonte, University of Toronto

Astronomers Speak Statistics
Joel Leja, Penn State University; Jo Bovy, University of Toronto; Kaisey Mandel, University of Cambridge; and Ashley Villar, Penn State University

Fundamentals of Interpretable Machine Learning
Cynthia Rudin, Duke University, and Alina Barnett, Duke University

Randomized Clinical Trials with Surrogate Markers
Lu Tian, Stanford University, and Layla Parast, The University of Texas at Austin

Genomic Risk Prediction: Algorithms, Fairness, and Applications
Nilanjan Chatterjee

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Register Early

(May 31 for discounted rates)

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What Can You Add On to Your Registration?

In addition to everything included in your registration, there are activities to enhance your program at an additional cost: **Courses and Workshops, Speakers with Lunch and Roundtable Discussions, and the Career Service.**

Sign up for these opportunities when you register. Some sell out, so register early! Tickets for those with available seating are sold onsite until 2 p.m. the day prior to the event.

Speakers with Lunch and Roundtable Discussions

Speakers with Lunch

$50, includes lunch

If listening to a fascinating talk while having lunch with friends and colleagues sounds good to you, sign up for one of the speakers with lunch events. These lunches—offered Sunday through Wednesday from 12:30 p.m. to 1:50 p.m.—also offer great discussion and networking opportunities.

Roundtable Discussions

A.M. - $25 / P.M. - $50

For an interesting discussion and networking event that doesn't bust your wallet, register for an A.M. roundtable discussion, offered Monday through Wednesday from 7:00 a.m. – 8:15 a.m. If early morning isn't your style, P.M. roundtables also offer great discussion and networking opportunities and are held Sunday through Wednesday from 12:30 p.m. – 1:50 p.m.

Be sure to indicate your meal preference when you register.

Sunday, August 6

SPAIG Lunchtime Speaker Session

$50, includes lunch

SL01

W.Y. Lou

University of Toronto

Partnerships Promoting Cross-Sector Collaborations: Why, How, and What?

Partnerships among academe, industry, and government organizations promoting cross-sector collaborations have been found useful for tackling complex scientific and public health problems. This kind of collaborative effort leverages the strengths and expertise of professionals working in different settings, oftentimes trained in different fields. Four case studies from clinical research, hospital operation, higher education, and public health will demonstrate that practicing partnerships and collaborations is extremely valuable to building community, driving discovery, and informing decisions. The audience will be invited to join the discussion about how successful cross-sector (industry-academia, government-academia, industry-government-academia) partnerships get started, what the characteristics of a successful partnership are, and how improvements to collaborations can be made. The roles statisticians play in these partnerships, as well as the skills essential for building partnerships, will also be discussed. This interactive presentation is a collaboration with Madhu Mazumdar.

Speakers with Lunch and Roundtable Discussions

Monday August 7

A.M. Roundtables

$25

Biopharmaceutical Section

ML01: **Best Practices for Adjusting Overall Survival for Switchover to Subsequent Anti-Cancer Therapies**
Jing Wang, Pfizer

Section on Statistics in Sports

ML02: **How Do We Teach Sports Analytics Research?**
Ronald Yurko

Survey Research Methods Section

ML03: **Record Linkage: Connecting Government, Industry, and Academe**
Michael Larsen, St. Michael's College

P.M. Roundtables

$50

Biopharmaceutical Section

ML05: **Leveraging External Data to Augment or Serve as Control Arm in Rare Disease Studies**
Qi Zhang

ML06: **Are We Ready to Tackle the Health Technology Assessment (HTA) Hurdle Beyond Regulatory Approval?**
Shahrul Mt-Isa, Merck Sharp & Dohme

ML07: **Statistical Methods for Neurodegenerative Diseases**
Suzanne Hendrix, Pentara Corporation

Health Policy Statistics Section

ML08: **Statisticians and Artificial Intelligence: What Do We Need to Understand?**
Melanie Poulin-Costello, Roche

Mental Health Statistics Section

ML09: **Real-Time Tracking of Mental Health Prevalence: Are We There Yet?**
Hoang Nguyen, The University of Texas Medical Branch

Section on Statistical Computing

ML10: **How and When to Stay Current Teaching Computational Skills in a Statistics Classroom**
Brennan Bean

Section on Statistics and Data Science Education

ML11: **Student-Led Inclusive Excellence Initiatives: You Can Start One, Too!**
Taylor Krajewski, The University of North Carolina at Chapel Hill

Section on Statistics in Epidemiology

ML12: **Things to Consider When Preparing a Grant Proposal**
Julia Soulakova, University of Central Florida

Social Statistics Section

ML13: **Social Statistics of Refugee Camps in the Context of Climate Change**
David Banks, Duke University

Survey Research Methods Section

ML14: **A Relatively Easy Guide to Applying Large-Sample Theory in Survey Sampling**
Phillip Kott, RTI International

Tuesday August 8

A.M. Roundtables

$25

Biopharmaceutical Section

TL01: **Investigator-Initiated Studies: A Solution for Rare Diseases When Industry and Academia Collaborate**
Song Pham, Roche Canada

Section on Bayesian Statistical Science

TL02: **Social Networks and Health: Data Collection, Methods, and Open Questions**
Tyler McCormick, University of Washington

Section on Physical and Engineering Sciences

TL03: **Analyzing Big Data Using Smart Experimental Design Ideas**
John Stufken, George Mason University

Section on Statistics in Sports Speaker

$50, includes lunch

ML04

Andrew Thomas
SportsMEDIA Technology

Shot Trajectory: Data Analysis and Ice Hockey in the Twenty-First Century

As the data available to sports analysis has blossomed in volume and complexity, the tools available to look at interesting core questions in sports have similarly grown. In particular, I have participated in the evolution of both data and tools in NHL hockey over the last two decades, as well as borne witness to similar innovations in many other sports. I will discuss work I have undertaken as an academic, professional team statistician, and industry leader; summarize the progress made by the field as a whole; and discuss the most interesting and expected evolutions to follow in the next decade.

Speakers with Lunch and Roundtable Discussions

Survey Research Methods Section

TL04: **A Day in the Life of a Survey Statistician**
Shelley Roth, Westat

P.M. Roundtables

$50

Biopharmaceutical Section

TL06: **Protocol Development, Review, and Approval Process: The Role of the Biostatistical Review**
Alexia Iasonos, Memorial Sloan-Kettering Cancer Center

TL07: **Diversity in Clinical Trials**
T. Paulette Ceesay, Merck & Co.

TL08: **Wearables and Patient-Centric Trials**
Philip He

Caucus for Women in Statistics

TL09: **Developing Statistical Methods Grant in Collaboration with Multidisciplinary Investigative Team**
MinJae Lee, University of Texas-Southwestern

Economic Outlook Lunchtime Speaker

$50, includes lunch

TL05

Michelle Alexopoulos
University of Toronto

Off the Books: Exploring Alternate Measures of Technical Change and Knowledge Diffusion

The application of text mining to digitized library collections, along with meta-data from OCLC's WorldCat Database, can be used to create alternative measures of technological innovation and diffusion. After these techniques are reviewed, we will explore how the resulting metrics can be used to map the waves of innovation over time and space, examine technological diffusion of revolutionary technologies and general-purpose technologies across major economies, highlight inter-dependencies between these different innovations, and estimate impacts of technical change on the economy. These methods can help further our understanding of technical change and its contribution to economic growth, business cycles, and productivity within and across countries over time. They are also likely to provide information about the development and diffusion of new general-purpose technologies such as AI and robotics that can help complement measures collected by our national statistical agencies.

To view roundtable descriptions, visit *www.amstat.org/meetings/jsm/2023.*

Mental Health Statistics Section

TL10: **Data Analysis Methods for Depression Screening Tool Data**
Novie Younger-Coleman, Caribbean Institute for Health Research

Section on Statistical Consulting

TL11: **Risk Reduction and the Impact of Rounding**
Jimmy Efird, Boston VA Cooperative Studies Program Coordinating Center

Section on Statistics and Data Science Education

TL12: **Allowing Smartphones in Our Classes?**
Bernhard Klingenberg, Williams College

TL13: **Lessons in Statistics from ChatGPT**
Monnie McGee, Southern Methodist University

Social Statistics Section

TL14: **Getting Involved in Data for Social Good: Experiences and Opportunities**
David Corliss, GM OnStar Insurance

Survey Research Methods Section

TL15: **Leveraging Auxiliary Data to Enhance Survey Outcomes**
Paul John Lavrakas, Independent Consultant

Wednesday August 9

A.M. Roundtables

$25

Biopharmaceutical Section

WL01: **How to Be an Impactful Statistician in an Innovation Group in the Biopharmaceutical Industry?**
Haiming Zhou, Daiichi Sankyo

Section on Statistics and Data Science Education

WL02: **The Use and Abuse of ChatGPT**
Jarad Niemi, Iowa State University

Survey Research Methods Section

WL03: **Fitting Design-Consistent Regression Trees and Random Forests for Survey Data**
Daniell Toth, Bureau of Labor Statistics

P.M. Roundtables

$50

Biopharmaceutical Section

WL05: **Statisticians in the Pharmaceutical Industry: Some Insights and Tips for Newcomers**
Colin Neate

WL06: **Project Optimus, Dose Optimization, and the New Draft FDA Guidance**
Richard McNally, Covance

Mental Health Statistics Section

WL07: **Let's Talk About Collaborations**
Wenzhu Mowrey

Speakers with Lunch and Roundtable Discussions

Health Policy Statistics Section Speaker

$50, includes lunch

WL04

Muhammad Mamdani
Institute for Clinical Evaluative Sciences

Applied Artificial Intelligence in Health Care: From Compute to Care

Artificial intelligence has transformed numerous sectors—including retail, communications, and hospitality—but health care has lagged. AI applications in health care are rapidly growing and will have profound implications for health care professionals, patients, systems, and society. Case examples of applications of AI in clinical and health care management practice and their methodological and translation challenges will be reviewed.

Section on Bayesian Statistical Science

WL08: **Bayesian Record Linkage: Basics, Challenges, and Opportunities**
Andrea Kaplan, Colorado State University

Section on Physical and Engineering Sciences

WL09: **Statistical Thinking and Digital Twins**
Laura Freeman, Virginia Tech

Section on Statistical Consulting

WL10: **Emerging Role of Digital Technology and Remote Monitoring in Patient Care: Statistical Challenges**
Deukwoo Kwon, Icahn School of Medicine at Mount Sinai

Section on Statistical Graphics

WL11: **Testing Charts for Accuracy and Interpretation**
Edward Mulrow, NORC at the University of Chicago

Section on Statistics and Data Science Education

WL12: **Teaching Statistical Literacy**
Milo Schield, University of New Mexico

Section on Statistics in Sports

WL13: **Real-Time Data and Insight Deployment for Sports Sensor Data**
Andrew Thomas, SportsMEDIA Technology

Section on Teaching of Statistics in the Health Sciences

WL14: **Identifying Real-Life Data Sets to Demonstrate Data Equity in Biostatistics Curriculum**
Rongwei Fu

Survey Research Methods Section

WL15: **Managing Re-Identification Risk for Microdata**
Aref Dajani, US Census Bureau

Registration

To participate in professional development offerings, you must register for JSM. Lower rates are given to those adding courses and workshops to their registration from May 1 to June 29. After June 29, late registration rates apply. Registration depends on seat availability and will be handled on a first-come, first-served basis.

Course Participation Certificates

The ASA provides course participation certificates upon request to those who attend the entire course (certificates are not available to computer technology workshop attendees). Certificates will be emailed after JSM.

Discount

PStat® and GStat accredited members in good standing with the ASA will receive a 20 percent discount on professional development courses and workshops.

Professional Development

Professional Development (PD) is a fundamental component of the professional life of statisticians, increasing the value of their contributions to society. It is the process of improving and broadening the knowledge, skill, and personal qualities needed to be successful in the practice of statistics.

Continuing education offerings consist of courses and computer technology workshops in statistical methodology and practice. Courses are offered in two-day, one-day, and half-day formats Saturday through Tuesday. Computer technology workshops are offered in two-hour intervals on Wednesday.

Professional skills development consists of courses, workshops, and panel discussions on topics such as effective communication, collaboration, leadership, and influence.

To view complete professional development course descriptions, visit *www.amstat.org/meetings/jsm/2023.*

Professional Development Fees

M=MEMBER

NM=NONMEMBER

S=STUDENT

(*Prices in parentheses effective after June 29*)

Continuing Education Courses

Saturday, August 5

CE_01C

(two-day course)

8:30 a.m. – 5:00 p.m.

Regression Modeling Strategies

Instructor(s): Frank Harrell

Sponsor: Biometrics Section

This course provides methods for estimating the shape of the relationship between predictors and response by augmenting the design matrix using restricted cubic splines. I will cover methods for data reduction and model validation and contrast statistical models with machine learning so students can make an informed choice of predictive tools.

FEES: M – $675 ($920)
NM – $825 ($1,120)
S – $390 ($530)

CE_02C

8:00 a.m. – 12:00 p.m.

Random Effects and Recurrent Events in Survival Analysis

Instructor(s): Milind Phadnis

This course provides an opportunity to learn about advanced modeling for data, keeping in mind the underlying assumptions of the models. Real-life examples will be covered using R/SAS software.

FEES: M - $245 ($335
NM – $320 ($430)
S – $150 ($200)

CE_03C

8:30 a.m. – 5:00 p.m.

State-of-the-Art Classification and Regression Trees and Forest

Instructor(s): Wei-Yin Loh

This course combines an overview of classification and regression trees and forests with an in-depth presentation of the GUIDE algorithm. Learning highlights include how GUIDE deals with missing values without requiring imputation, how GUIDE importance scores help with variable selection, and how post-selection inference is performed using a bootstrap calibration technique.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_04C

8:30 a.m. – 5:00 p.m.

Text Analysis for Statisticians Who Want to Become Data Scientists

Instructor(s): Karl Pazdernik, Robin Cosbey

Sponsor: Text Analysis Interest Group

This course will provide a broad overview of text analysis and natural language processing, including a significant amount of introductory material but with extensions to state-of-the-art methods. Attendees should be familiar with Python (preferably), R, or both and have a

basic understanding of statistics and/or machine learning.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_05C
8:30 a.m. – 5:00 p.m.

An Introduction to Spatial Statistics

Instructor(s): Veronica Berrocal, Yawen Guan

Sponsor: Biometrics Section

Instructors will introduce participants to the principal statistical methods used for the analysis and visualization of spatial data and modern topics in spatial statistics. Additionally, the course will feature lab sessions to provide participants with the opportunity to be involved in hands-on activities and get familiar with the major R packages that can be used for spatial statistical analyses.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_06C
8:30 a.m. – 5:00 p.m.

Clinical Evidence Generation Using Electronic Health Records Data

Instructor(s): Yong Chen, Xu Shi

Sponsor: Biometrics Section

This course will provide an introduction to the structure and content of EHR data and practical tools to investigate and analyze it.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_07C
1:00 p.m. – 5:00 p.m.

Applied Machine Learning Ideas for Time-to-Event Analyses

Instructor(s): Adin-Cristian Andrei, Hui Zhang, and Lihui Zhao

We will discuss fundamental machine learning concepts and techniques, including regularized and boosted Cox regression, survival trees/random forests, and neural networks. Attendees are expected to be familiar with basic time-to-event and linear regression concepts and R programming at an intermediate level.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

Sunday, August 6

CE_01C
(two-day course)
8:30 a.m. – 5:00 p.m.

Regression Modeling Strategies

Instructor(s): Frank Harrell

CE_08C
8:00 a.m. – 12:00 p.m.

Statistical and Machine Learning Methods for Single-Cell and Spatial Transcriptomics Data Analysis

Instructor(s): Mingyao Li, Jian Hu

Sponsor: Biometrics Section

We will review the computational and statistical

Professional Development

Professional Development Fees

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(Prices in parentheses effective after June 29)

methods available for the analysis of scRNA-seq and ST data.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

CE_09C
8:30 a.m. – 5:00 p.m.

Categorical Data Analysis

Instructor(s): Alan Agresti, Bernhard Klingenberg

We will survey the most common methods for analyzing categorical data. We emphasize interpretation rather than technical details, with examples including social surveys and randomized clinical trials. Examples show the use of R, SAS, and Stata.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_10C
8:30 a.m. – 5:00 p.m.

Bayesian Joint Models for Longitudinal and Survival Data, with Applications in R

Instructor(s): Dimitris Rizopoulos

Sponsor: Biometrics Section

This course is aimed at applied researchers and graduate students and will provide a comprehensive introduction to joint models for longitudinal and time-to-event data. We will explain when these models should be used in practice, which are the key assumptions behind them, and how they can be used to extract relevant information from data.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_11C
8:30 a.m. – 5:00 p.m.

Surrogates: Gaussian Process Modeling, Design, and Optimization for the Applied Sciences

Instructor(s): Robert Gramacy

Sponsor: Section on Physical and Engineering Sciences

This course details statistical techniques at the interface of geostatistics, machine learning, mathematical modeling via computer simulation, calibration of computer models to data from field experiments, and model-based sequential design and optimization under uncertainty.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_12C
8:30 a.m. – 5:00 p.m.

Using R for Bayesian Spatial and Spatio-Temporal Health Modeling

Instructor(s): Andrew Lawson

Sponsor: Section on Bayesian Statistical Science

This course is designed for those who want to cover mapping methods and the use of a variety of software and variants in application to small area health data. Participants will be involved in hands-on use of R, Nimble, and CARBayes in disease mapping applications.

The course is for those with some R experience but limited experience in spatial modeling in health applications.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_13C
1:00 p.m. – 5:00 p.m.

Understanding and Tackling Measurement Error: A Review of Modern Practical Methods

Instructor(s): Pamela Shaw, Paul Gustafson

Sponsor: Biometrics Section

This course will introduce the issues raised by measurement error and the implementation of practical analysis approaches to mitigate its effects. We will begin with a discussion of the effects of measurement error in regression analyses, then move to techniques for mitigating those effects via statistical analysis and study design. Analytical methods to be discussed include regression calibration, simulation extrapolation, likelihood-based methods, and Bayesian methods.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

Monday, August 7

CE_14C
8:00 a.m. – 12:00 p.m.

Hands-On Graph Machine Learning

Instructor(s): Eric Bridgeford, Jaewon Chung

We will present a hands-on monograph on analysis of graph-valued data leveraging and extending best practices of data science for tabular data. We will learn techniques that produce structured representations of graphs in Euclidean space and demonstrate how classical inference techniques can be adapted to these graph representations to learn about the underlying system and inform downstream decision-making across many potential domains.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

CE_15C
8:00 a.m. – 12:00 p.m.

Causal Inference in Randomized Controlled Trials

Instructor(s): Tianmeng Lyu, Mouna Akacha, Robin Dunn, Shanti Gomatam, Kaspar Rufibach

Sponsor: Biopharmaceutical Section

This course introduces the basic concepts of causal inference and specific topics most relevant to randomized controlled trials. Specific topics include estimation of causal effects, principal stratum estimands, and conditional and marginal treatment effects. The course assumes basic familiarity with statistical inference. Prior knowledge of causal inference is not required.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

Professional Development Fees

M=MEMBER
NM=NONMEMBER
S=STUDENT

(*Prices in parentheses effective after June 29*)

Professional Development

Professional Development Fees

M=MEMBER

NM=NONMEMBER

S=STUDENT

(*Prices in parentheses effective after June 29*)

CE_16C

8:30 a.m. – 5:00 p.m.

Practical Considerations for Bayesian and Frequentist Adaptive Clinical Trials

Instructor(s): Yuan Ji, Frank Bretz, Bjoern Bornkamp

Sponsor: Section on Bayesian Statistical Science

This course introduces various adaptive methods for phase I to phase III clinical trials using frequentist and Bayesian methods. Accordingly, we introduce different types of adaptive designs and illustrate practical considerations with case studies.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_17C

8:30 a.m. – 5:00 p.m.

Targeted Learning in the tlverse: Techniques and Tools for Causal Machine Learning

Instructor(s): Nima Hejazi, Mark Van Der Laan, Alan Hubbard, Ivana Malenica, Rachael Phillips

Sponsor: Biometrics Section

We provide a comprehensive introduction to targeted learning and its accompanying free and open source software ecosystem, the tlverse (*https://github.com/tlverse*). It will be of interest to statisticians and data scientists who wish to apply cutting-edge statistical and causal inference approaches to rigorously formalize and answer substantive scientific questions. Advanced knowledge of mathematical statistics may be useful but is not necessary. Familiarity with the R programming language is essential.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_18C

8:30 a.m. – 5:00 p.m.

A Practical Introduction to the Analysis of Incomplete Data

Instructor(s): Ofer Harel

Sponsor: Biometrics Section

We will introduce incomplete data vocabulary, ad-hoc techniques, and principled procedures to deal with incomplete data. We will emphasize practical implementation of the proposed strategies and the advantages and disadvantages of different missing data methodologies. Required: knowledge of standard statistical models such as the multivariate-normal, multiple linear regression, contingency tables, and basic maximum likelihood for common distributions.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_19C
8:30 a.m. – 5:00 p.m.

Introduction to Data Privacy and Data Synthesis Techniques

Instructor(s): Madeline Pickens, Aaron Williams, Claire Bowen

Sponsor: Section on Statistical Computing

We will provide an overview of current data privacy methodology, focusing on the generation of synthetic data. Through examinations of case studies and hands-on exercises, you will learn to apply data privacy techniques and evaluate the resulting disclosure risk and data utility. You should have basic R programming experience.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_20C
8:30 a.m. – 5:00 p.m.

An Introduction to Interactive Dashboard Programming Using R-Shiny

Instructor(s): Robert Ashmead

Sponsor: Section on Statistics in Epidemiology

This course is designed to introduce participants to the basic structure of R-Shiny dashboards with hands-on examples. In addition, we will discuss options for how to deploy R-Shiny applications, as well as advanced topics and tools that may be useful in designing dashboards. The course will be hands-on, so participants should bring a laptop with them with a recent version of R (> R 4.0) installed.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_21C
1:00 p.m. – 5:00 p.m.

Effectively Operationalizing Race and Structural Racism in Health Equity Research

Instructor(s): Melody Goodman, Loni Tabb, Emma Benn, John Jackson

Sponsor: Biometrics Section

We will provide a comprehensive overview of the historical underpinnings of structural racism and social construction of race in the United States in addition to interactively exploring advanced statistical approaches to measurement and modeling of race and structural racism in population health research.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

CE_22C
1:00 p.m. – 5:00 p.m.

Interface Between Regulation and Statistics in Drug Development

Instructor(s): Birol Emir, Michael Gaffney

Sponsor: Section on Statistical Consulting

This course is aimed at statisticians who are relatively new to the pharmaceutical industry and wish to broaden their knowledge of

Professional Development Fees

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NM=NONMEMBER
S=STUDENT

(*Prices in parentheses effective after June 29*)

Professional Development

Professional Development Fees

M=MEMBER

NM=NONMEMBER

S=STUDENT

(*Prices in parentheses effective after June 29*)

the interplay between statistics and regulatory science in drug development.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

Tuesday, August 8

CE_23C
8:00 a.m. – 12:00 p.m.

Methods to Evaluate Surrogate Markers

Instructor(s): Layla Parast, Tianxi Cai

Sponsor: Biometrics Section

We will introduce robust measures to assess the value of a potential surrogate marker; discuss the estimation procedure, inference, advantages over previously proposed model-dependent approaches, and use of these measures to identify valid surrogate markers in settings with both censored and noncensored primary outcomes; go over methods to evaluate multiple surrogate markers; and briefly cover using a surrogate marker to test for a treatment effect in a future study and testing for heterogeneity in the utility of a surrogate marker.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

CE_24C
8:30 a.m. – 5:00 p.m.

Orchestrating Biomarker Discovery and Pathway Enrichment Using Multi-Omics Integration and Data Science

Instructor(s): Ali Rahnavard, Himel Mallick

Sponsor: Biometrics Section

We will present a high-level introduction to computational multi-omics, highlighting the state-of-the-art in the field and outstanding challenges geared toward downstream analysis methods. The workshop will include introducing typical multi-omics studies' biological goals and the statistical methods currently available to achieve them. Interspersed with lecture content, attendees will work through multi-omics analysis tutorials.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_25C
8:30 a.m. – 5:00 p.m.

Programming for Data Science

Instructor(s): Hui Lin, Alex Shum

Sponsor: Section on Statistics in Marketing

We will discuss how data science has changed in the past 10 years and how working in the industry differs from academia. We will also explain the data science interview process and go over the engineering aspects. The course will be in SQL and Python.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_26C
8:30 a.m. – 5:00 p.m.

Statistical and Algorithmic Foundations of Reinforcement Learning

Instructor(s): Yuxin Chen, Yuejie Chi, Yuting Wei

We aim to present a coherent framework that covers important statistical and algorithmic developments in modern reinforcement learning (RL), highlighting the connections between new ideas and classical statistics. Employing Markov decision processes as the central mathematical framework, we will introduce the model-based, value-based, and policy-based approaches. Prerequisites: basic probability and basic linear algebra.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_27C
8:30 a.m. – 5:00 p.m.

Informative Prior Elicitation Using Historical Data, Expert Opinion, and Other Sources

Instructor(s): Joseph Ibrahim, Ethan Alt

This short course is designed to give biostatisticians and data scientists a comprehensive overview of informative prior elicitation from historical data, expert opinion, and other data sources. We focus on Bayesian design and analysis, and examples will be presented for applications such as clinical trials, observational studies, and environmental. The methods we present will be demonstrated with Stan, SAS, and the R packages hdbayes and BayesPPD.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

CE_28C
1:00 p.m. – 5:00 p.m.

Everyday Reproducibility: Simple Flexible Tools for Making Analyses More Accessible and Reproducible

Instructor(s): Gregory Hunt, Johann Gagnon-Bartsch

This course exposes participants to a conceptual discussion of reproducibility and its role in statistics and data analysis, as well as provides a concrete survey of pragmatic tools and practices that can be easily adopted by practitioners to help enhance the reproducibility, shareablility, and accessibility of analyses they create. Participants must have basic familiarity with a computing language/ environment.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

Professional Development Fees

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S=STUDENT

(*Prices in parentheses effective after June 29*)

Professional Development

Professional Development Fees

M=MEMBER

NM=NONMEMBER

S=STUDENT

(Prices in parentheses effective after June 29)

Professional Skills Development

Saturday, August 5

CE_33P

(Part one of a two-day course)

1:00 p.m. – 5:00 p.m.

Preparing Statisticians and Data Scientists for Leadership: Influencing People and Projects

Instructor(s): Gary Sullivan

This interactive course provides a foundational understanding of leadership and guidance on how statisticians and data scientists can improve and demonstrate leadership to deliver value to their organizations. The course will focus primarily on communication, trust, and business acumen.

FEES: M – $390 ($530)
NM – $520 ($700)
S – $235 ($320)

Sunday, August 6

CE_34P

8:00 a.m. – 12:00 p.m.

Skills and Tools for Communicating Your Research to a Broader Audience

Instructor(s): Sadie Witkowski

This course will help statisticians learn the basics of communicating their research by focusing on scientific storytelling and research in the media.

FEES: M – $245 ($335)
NM – $320 ($430)
S – $150 ($200)

CE_33P

(Part two of a two-day course)

1:00 p.m. – 5:00 p.m.

Preparing Statisticians and Data Scientists for Leadership: Influencing People and Projects

Instructor(s): Gary Sullivan

Computer Technology Workshops

Wednesday, August 9

CE_29T

8:00 a.m. – 9:45 a.m.

Applying Multivariate Modeling to Experimental Data Sets for Product Development

Instructor(s): Marlene Cardin, Monica Salib

Sponsor: ProSensus

This workshop will be a combination of lecture slides and a FormuSense software tutorial using a functional polymers data set. Ahead of the CTW, all registrants will be provided instructions for downloading a 30-day trial of FormuSense and the tutorial data set. Using their own computer, attendees may choose to

perform the tutorial steps during the CTW, or they may treat the tutorial as a demonstration.

FEES: $60 ($75)

CE_30T
10:00 a.m. – 11:45 a.m.

Handling Missing Data Using Multiple Imputation in Stata

Instructor(s): Brooke Johnson, Meghan Cain

Sponsor: StataCorp

This workshop will provide a conceptual and practical introduction to performing multiple imputation in Stata. We will include several demonstrations with real data sets, including an investigation of missing-data patterns, multiple imputation, analysis, and data management of multiply imputed data sets. No prior knowledge of Stata nor of multiple imputation is required, but basic familiarity with missing-data concepts will prove useful.

FEES: $60 ($75)

CE_31T
1:00 p.m. – 2:45 p.m.

Meta-Analysis Using Stata

Instructor(s): Brooke Johnson, Gabriela Ortiz

Sponsor: StataCorp

This workshop will cover the use of Stata to perform meta-analysis. Stata's meta command offers full support for meta-analysis, from computing various effect sizes and producing basic meta-analytic summary and forest plots to accounting for between-study heterogeneity and potential publication bias. No prior knowledge of Stata is required, but basic familiarity with meta-analysis will prove useful.

FEES: $60 ($75)

CE_32T
3:00 p.m. – 4:45 p.m.

Survival Analysis of Interval-Censored Event-Time Data in Stata

Instructor(s): Xiao Yang

Sponsor: StataCorp

This workshop covers the use of Stata to perform survival analysis of interval-censored event-time data. We will talk about how to fit models for interval-censored data in Stata, interpret results, plot the survivor function, graphically evaluate goodness of fit, and check the PH assumption. Special attention will be given to time-varying covariates.

FEES: $60 ($75)

To view complete professional development course descriptions, visit *www.amstat.org/meetings/jsm/2023.*

Career Service

The JSM Career Service is a full-service interviewing facility for employers and career-seekers. This is not a career fair; it is a recruiting and interviewing center. Hundreds of recruiters and job candidates look to the JSM Career Service each year to connect and explore opportunities.

Career Service candidate registration includes the following:

- Online Employer Search, including hundreds of job postings from top statistical employers
- Online Career Service Message Center, which allows you to contact employers of interest in advance, onsite, and even after JSM concludes
- Possibility for scheduled interviews onsite

Want to participate?

Add Career Service when you register for JSM.

ASA Student Member $50

Student Nonmember $75

ASA Member.....$100

Nonmember.....$150

How to Participate in the Career Service as a Candidate

The JSM Career Service gets your profile and résumé in front of top statistical employers from industry, government, and academia. Once you are in our system, proactively search the positions and contact the employers of interest to you through our online messaging service. Employers will arrange interviews with you directly. All interviews are by appointment only.

To participate, add on the Career Service when you register for JSM.

Past employers include the following:















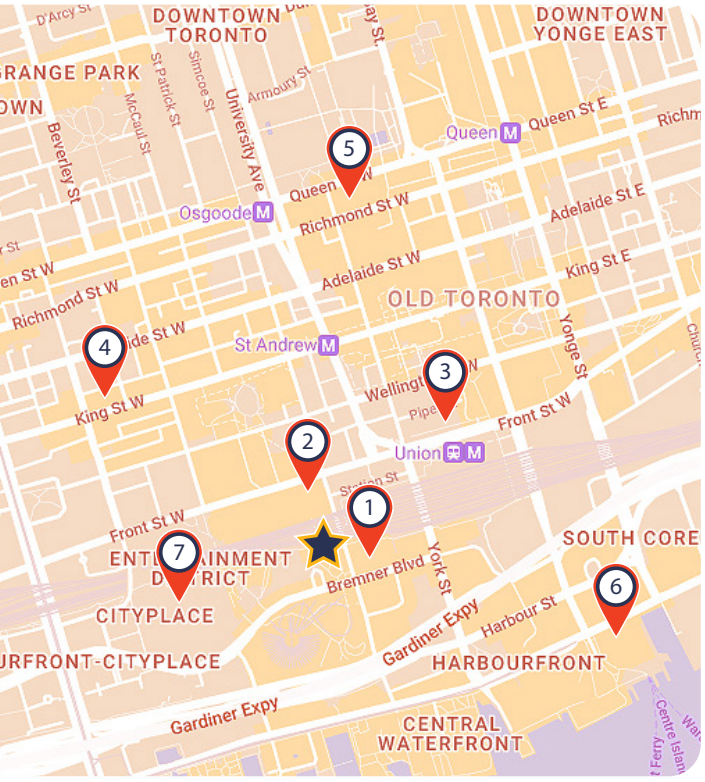
Interested in Recruiting at JSM?

Join the organizations hiring in Toronto.

Check out the Recruit tab at *www.amstat.org/jsmsponsors.*

Where Will You Stay?

Official Hotels & Economy Housing



Metro Toronto Convention Centre (venue)
255 Front St. W

1. **Delta Hotel Toronto (HQ)**
   75 Lower Simcoe St.

2. **InterContinental Toronto Centre (HQ)**
   225 Front St. W.

3. **Fairmont Royal York**
   100 Front St. W.

4. **Hyatt Regency Toronto**
   370 King St. W.

5. **Sheraton Centre Toronto Hotel**
   123 Queen St. W.

6. **The Westin Harbour Castle, Toronto**
   1 Harbour Square

7. **Toronto Marriott City Centre Hotel**
   One Blue Jays Way

JSM Housing Bureau

Connections Housing/JSM Housing
3834 Silvestri Lane
Las Vegas, NV 89120
Phone: (702) 268-9145
Fax: (725) 218-1546
jsm@connectionshousing.com

Housing

For conference and housing details, go to *ww2.amstat.org/meetings/jsm/2023/housing.cfm.*

Economy Housing

Don't need all the extras? If you just need a bed and don't mind sharing a room, there are a few hostels nearby. There is no group block for these options. Please research and reserve on your own.

Samesun Toronto
280 Augusta Ave.
Toronto, ON M5T 2L9
(416) 929-4777
toronto@samesun.com

The Only Backpacker's Inn*
972 Danforth Ave.
Toronto, Canada

* This inn is not within walking distance of the convention center but is a two-minute walk to Donlands subway station (located on the edge of Toronto's Greektown).

What If I Need Extra Help or Child Care?

Accessibility and Inclusion

The American Statistical Association strives to foster accessible spaces during the Joint Statistical Meetings. Here's what's already part of our conference planning process:

- Keynote and plenary sessions will have live captioning.
- Speakers will use microphones for all sessions.
- The ASA will work with individuals who request accommodations (while registering) based on their session selections.
- All conference facilities are accessible to wheelchair and scooter users.
- Elevators are marked, and staff will be able to help you identify elevators to navigate to your next session or meeting.
- Our hotel team works with attendees who need hotel accommodation.
- Attendees will have access to a nursing/lactation room.
- There will be gender-neutral restrooms.
- JSM provides a quiet reflection space for those in need of a place to pray or take a rest from conference activity.

If you have additional needs, note it on the registration form or reach out to the meetings department staff at *meetings@amstat.org.*

Child Care

We have partnered with leading child care provider KiddieCorp to provide care within the Metro Toronto Convention Centre.

Rate: $15/hour
Reservation Deadline: July 5

Space is limited, so reserve your child's space today at *https://form.jotform.com/KiddieCorp/jsmkids*. Reservations will be taken after the July 5 deadline on a space-available basis only and at an increased rate.

Snacks and beverages are included; meals are to be provided by parents. KiddieCorp establishes all policies, and all questions should be directed to KiddieCorp. Contact them by phone at (858) 455-1718 or send them an email at *info@kiddiecorp.com.*

Ready to Join Us at JSM?

Three Ways to Register

1. ONLINE

www.amstat.org/jsmregistration

2. MAIL

JSM Registration
732 North Washington St.
Alexandria, VA 22314-1943

3. FAX

(703) 997-7299

Please fax both sides of the form.

Payment

Payment must accompany registration. We are unable to accept purchase orders. Pay by credit card or make your check or money order payable to the American Statistical Association in US funds drawn on a US bank. The ASA Federal ID is 53-0204661.

	Conference Registrant	Guest
JSM Quick Guide & Conference Bag	✓	
Technical Sessions	✓	
Exhibit Hall	✓	✓
Sunday Opening Mixer	✓	✓
Tuesday Night Dance Party	✓	✓
Online Access to Recorded Session Content	✓	
JSM Proceedings *(available online in early 2024)*	✓	

Current accredited members (PStat® or GStat) receive a 20% discount on professional development courses and workshops. Your discount will be reflected on the checkout screen.

Cancelations/ Substitutions/ Refunds

The abstract submission fee/registration deposit is nonrefundable. For registration and add-on items: Cancelations received by 5:00 p.m. ET on June 29, 2023, will incur a cancelation fee of 20%. Cancelations received by 5:00 p.m. ET on July 15, 2023, will incur a cancelation fee of 40%. Cancelations received after 5:00 p.m. ET on July 15, 2023, will not be refunded.

All cancelations and substitutions must be emailed to *jsm@amstat.org* or faxed to (703) 997-7299.

Make sure to read the **Code of Conduct** at *www.amstat.org/meetings/code-of-conduct.*

ASA Emergency Contact for Travel Orders

Send travel orders to Kathleen Santoro at *meetings@amstat.org*.

Code of Conduct

As a professional society, the American Statistical Association is committed to providing an atmosphere that encourages the free expression and exchange of ideas. Consistent with this commitment, it is the policy of the ASA that all participants in ASA activities will enjoy a welcoming environment free from unlawful discrimination, harassment, and retaliation. All participants in ASA activities also agree to comply with all rules and conditions of the activities, which are subject to change without notice.

Please read the complete code of conduct at *www.amstat.org/meetings/code-of-conduct* before attending.

Disclaimer and Waiver

The American Statistical Association intends to take photographs and video of this event for use in ASA news and promotional material in print, electronic, and other media, including the ASA website. By participating in this event, you grant the ASA the right to use any image, photograph, voice, or likeness, without limitation, in its promotional materials and publicity efforts without compensation. All media become the property of the ASA. Media may be displayed, distributed, or used by the ASA for any purpose.

JSM2023 TORONTO REGISTRATION FORM

Ontario, Canada • August 5–10

Register by fax: (703) 997-7299 or mail: 732 N. Washington St., Alexandria, VA 22314-1943. Registrations are not accepted by telephone or email.

First/Given Name Middle Initial Last/Family Name Badge Name *(if different than First Name)*

Membership(s): *(check all that apply)* ❑ ASA ❑ CAS ❑ CWS ❑ ENAR ❑ ICSA ❑ IISA ❑ IMS ❑ ISBA ❑ ISI ❑ KISS ❑ RSS ❑ SSA ❑ SSC ❑ WNAR

Organization Registrant's ASA ID# (if known)

Address

City State/Province ZIP/Postal Code Country (Non-US)

Phone Email

Emergency Contact *In case of emergency, list the **name** and **phone number** of the person we should contact (remains confidential).*

CHECK ALL THAT APPLY

❑ I am a participant (speaker/panelist/discussant/chair/organizer/poster presenter).

❑ I am a first-time JSM attendee.

❑ I have a disability that requires special services (attach a statement of your needs). *We cannot guarantee an accommodation that is not made during early registration or regular registration.*

❑ Exclude my information from contact lists managed by the ASA for use by outside entities, including offers for onsite receptions, activities, and giveaways.

❑ Exclude my name from the conference attendee roster that will appear on the conference website.

MEETING REGISTRATION FEES

All fees are in US dollars (mark the appropriate box).

	Early May 1–31	Regular June 1–29	Late after June 29
Member ♦	❑ $495	❑ $550	❑ $605
New ASA Member ♦♦	❑ $625	❑ $680	❑ $735
Nonmember	❑ $745	❑ $830	❑ $915
Student Member ♦	❑ $135	❑ $135	❑ $135
K–12 Teacher	❑ $85	❑ $85	❑ $85
Senior Member ♦	❑ $220	❑ $220	❑ $220
Developing Country Resident ♦♦♦	❑ $85	❑ $85	❑ $85
One-Day (onsite only)			❑ $415

♦ *Must have an active membership in one of the sponsoring societies and indicate it on your registration where asked*

♦♦ *Includes discounted first-year ASA dues; not available to renewing or recently lapsed members*

♦♦♦ Must reside in one of the countries listed at *https://bit.ly/3mFKfTi*

SOCIAL EVENTS

FOR FIRST-TIME ATTENDEES only:

❑ YES! I will attend the JSM First-Time Attendee Orientation on Sunday, August 6, at 12:30 p.m.

FOR STUDENT MEMBER registrants only:

❑ YES! I will attend the Student Mixer on Monday, August 7, at 6:00 p.m.

TOTAL REGISTRATION FEE

MEETING REGISTRATION FEE $_____

Discount Code _____

If you submitted an abstract and paid the mandatory, nonrefundable submission fee, enter the nontransferable discount code found on your submission confirmation email here.

ADD-ONS

TOTAL Roundtable/Speaker Cost $_____

TOTAL Career Service Cost $_____

TOTAL Professional Development Cost $_____

TOTAL Guest Cost $_____

TOTAL REGISTRATION $_____

PAYMENT INFORMATION

(NOTE: We are unable to accept purchase orders as payment.)

❑ **Check or money order enclosed payable to American Statistical Association (US funds on a US Bank)**

Credit Card:

❑ **Amex** ❑ **Discover** ❑ **MasterCard** ❑ **VISA**

Card Number

Expiration Date Security Code

Name of Cardholder

Cardholder's Signature

ASA EMERGENCY CONTACT FOR TRAVEL ORDERS: Kathleen Santoro at *meetings@amstat.org*. Phone (703) 684-1221 • Fax (703) 997-7299
American Statistical Association, 732 N. Washington St., Alexandria, VA 22314-1943.

See *ww2.amstat.org/jsmregistration* for cancelation policy.

PROFESSIONAL DEVELOPMENT
Prices are for May 1–June 29/After June 29

ROUNDTABLES AND SPEAKERS WITH LUNCH

CONTINUING EDUCATION COURSES

	Member	Nonmember	Student
SATURDAY, AUGUST 5			
CE_01C	❑ $675/920	❑ $825/1,120	❑ $390/530
CE_02C	❑ $245/335	❑ $320/430	❑ $150/200
CE_03C	❑ $390/530	❑ $520/700	❑ $235/320
CE_04C	❑ $390/530	❑ $520/700	❑ $235/320
CE_05C	❑ $390/530	❑ $520/700	❑ $235/320
CE_06C	❑ $390/530	❑ $520/700	❑ $235/320
CE_07C	❑ $245/335	❑ $320/430	❑ $150/200
SUNDAY, AUGUST 6			
CE_08C	❑ $245/335	❑ $320/430	❑ $150/200
CE_09C	❑ $390/530	❑ $520/700	❑ $235/320
CE_10C	❑ $390/530	❑ $520/700	❑ $235/320
CE_11C	❑ $390/530	❑ $520/700	❑ $235/320
CE_12C	❑ $390/530	❑ $520/700	❑ $235/320
CE_13C	❑ $245/335	❑ $320/430	❑ $150/200
MONDAY, AUGUST 7			
CE_14C	❑ $245/335	❑ $320/430	❑ $150/200
CE_15C	❑ $245/335	❑ $320/430	❑ $150/200
CE_16C	❑ $390/530	❑ $520/700	❑ $235/320
CE_17C	❑ $390/530	❑ $520/700	❑ $235/320
CE_18C	❑ $390/530	❑ $520/700	❑ $235/320
CE_19C	❑ $390/530	❑ $520/700	❑ $235/320
CE_20C	❑ $390/530	❑ $520/700	❑ $235/320
CE_21C	❑ $245/335	❑ $320/430	❑ $150/200
CE_22C	❑ $245/335	❑ $320/430	❑ $150/200
TUESDAY, AUGUST 8			
CE_23C	❑ $245/335	❑ $320/430	❑ $150/200
CE_24C	❑ $390/530	❑ $520/700	❑ $150/200
CE_25C	❑ $390/530	❑ $520/700	❑ $235/320
CE_26C	❑ $390/530	❑ $520/700	❑ $235/320
CE_27C	❑ $390/530	❑ $520/700	❑ $235/320
CE_28C	❑ $245/335	❑ $320/430	❑ $150/200

COMPUTER TECHNOLOGY WORKSHOPS $60 / $75 EACH

WEDNESDAY, AUGUST 9

❑ CE_29T ❑ CE_30T ❑ CE_31T ❑ CE_32T

PROFESSIONAL SKILLS DEVELOPMENT OFFERINGS

	Member	Nonmember	Student
SATURDAY, AUGUST 5			
CE_33P	❑ $390/530	❑ $520/700	❑ $235/320
SUNDAY, AUGUST 6			
CE_34P	❑ $245/335	❑ $320/430	❑ $150/200

ACCREDITATION DISCOUNT

Accredited members of the ASA (PStat® or GStat) enjoy a 20% discount on Professional Development offerings.

❑ I am PStat® or GStat accredited by the ASA.

PROFESSIONAL DEVELOPMENT SUBTOTAL $_____

20% accreditation discount $_____

TOTAL PROFESSIONAL DEVELOPMENT COST $_____

A.M. ROUNDTABLES

$25 each; includes continental breakfast. Indicate your first and second choices by marking 1 and 2.

MONDAY AUGUST 7	TUESDAY AUGUST 8	WEDNESDAY AUGUST 9
ML01____	TL01____	WL01____
ML02____	TL02____	WL02____
ML03____	TL03____	WL03____
	TL04____	

P.M. ROUNDTABLES

$50 each; includes meal. Indicate your first and second choices by marking 1 and 2.

SUNDAY AUGUST 6	MONDAY AUGUST 7	TUESDAY AUGUST 8	WEDNESDAY AUGUST 9
SL01___	ML04___	TL05____	WL04____
	ML05___	TL06____	WL05____
	ML06___	TL07____	WL06____
	ML07___	TL08____	WL07____
	ML08___	TL09____	WL08____
	ML09___	TL10____	WL09____
	ML10___	TL11____	WL10____
	ML11___	TL12____	WL11____
	ML12___	TL13____	WL12____
	ML13___	TL14____	WL13____
	ML14___	TL15____	WL14____
			WL15____

MEAL CHOICE: ❑ Regular ❑ Vegetarian

TOTAL ROUNDTABLES/ SPEAKER COST $_____

CAREER SERVICE

Applicant Options—Includes online access to job postings.

	ASA Member	Nonmember
Student	❑ $50	❑ $75
Nonstudent	❑ $100	❑ $150

TOTAL CAREER SERVICE COST $_____

GUEST BADGES $80 per guest.

Enter names below. Fee includes Sunday Opening Mixer, Tuesday Night Dance Party, and entrance into exhibit hall. Session attendance is not included.

_____
Guest Name

_____
Guest Name

_____
Guest Name

TOTAL GUEST COST $_____

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The Caucus for Women in Statistics

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*Institute of Mathematical Statistics

International Society for Bayesian Analysis

International Statistical Institute

Korean International Statistical Society

Royal Statistical Society

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May 31

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June 30

Regular registration deadline

August 5–10

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