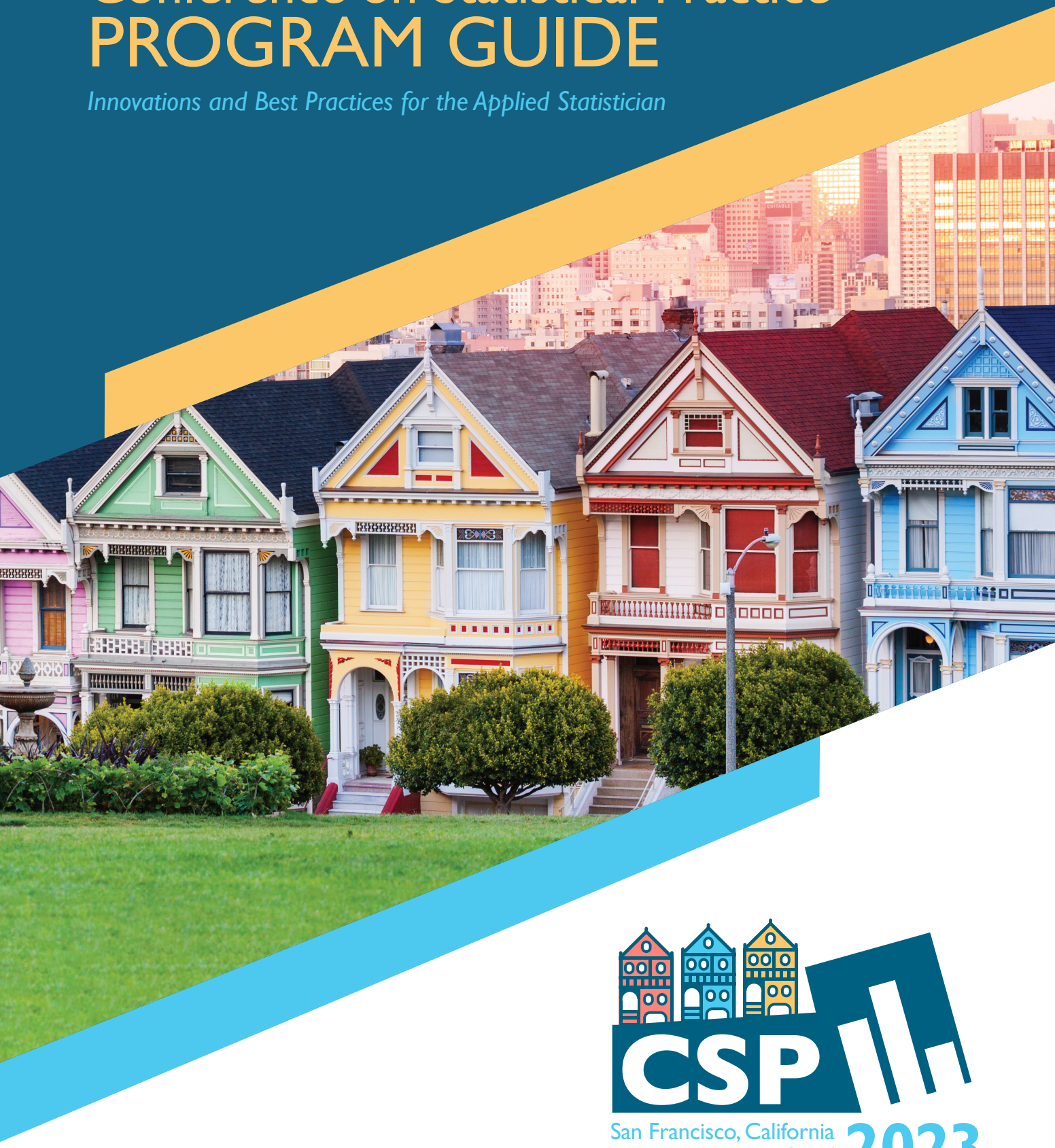
Conference on Statistical Practice
PROGRAM GUIDE

Innovations and Best Practices for the Applied Statistician



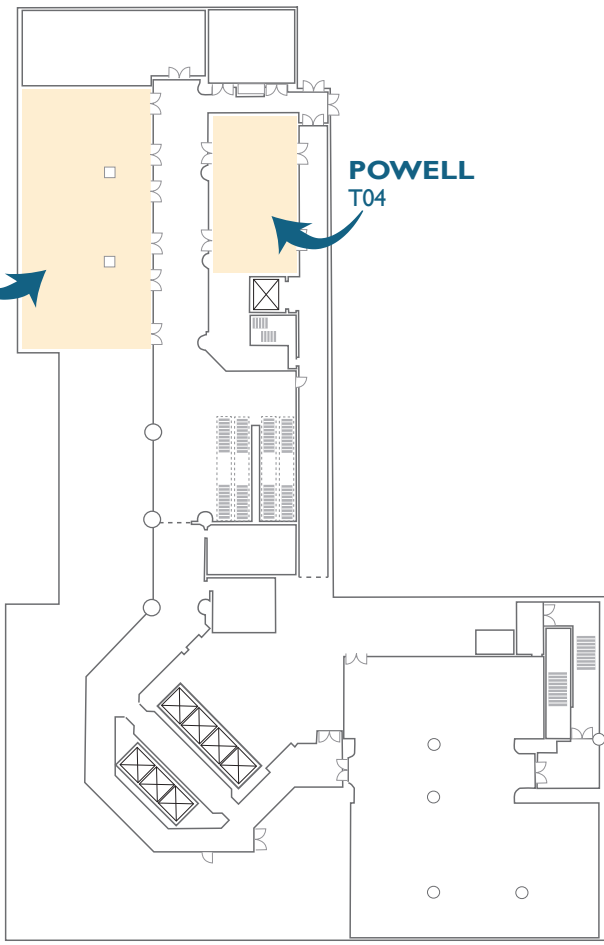
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San Francisco, California
February 2–4 2023

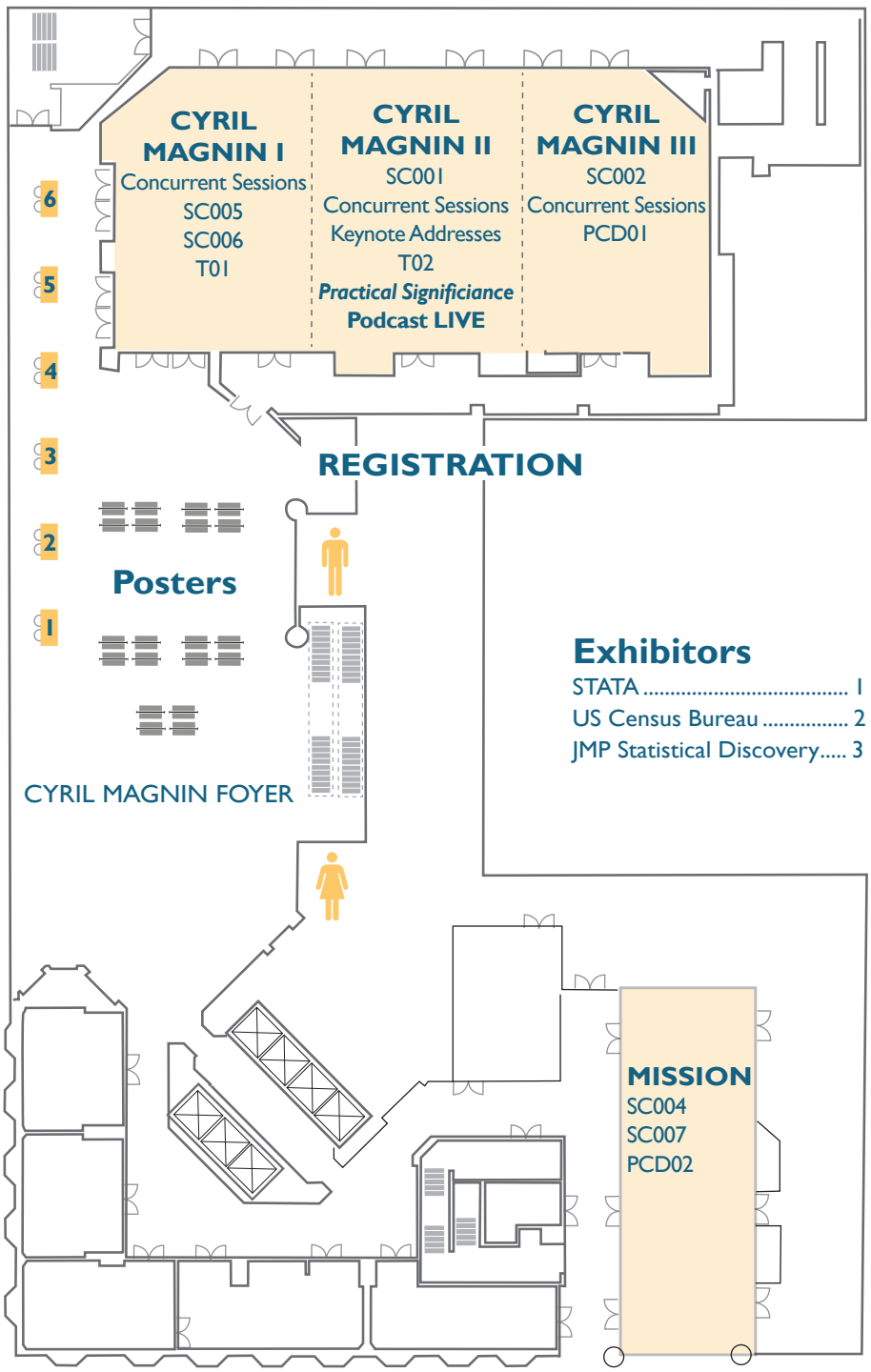
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Park 55 San Francisco-A Hilton Hotel

Level 3



Level 4



Exhibitors

STATA 1
US Census Bureau 2
JMP Statistical Discovery..... 3

KEY

- Elevators
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Conference Schedule

THURSDAY, FEBRUARY 2

7:00 a.m. – 6:30 p.m.	Registration
8:00 a.m. – 5:30 p.m.	Full-Day Courses
8:00 a.m. – 12:00 p.m.	Morning Half-Day Courses
1:30 p.m. – 5:30 p.m.	Afternoon Half-Day Courses
5:30 p.m. – 7:00 p.m.	Poster Session 1 and Opening Mixer

FRIDAY, FEBRUARY 3

7:30 a.m. – 4:30 p.m.	Registration
7:30 a.m. – 8:45 a.m.	Poster Session 2 and Continental Breakfast
9:00 a.m. – 10:00 a.m.	Opening Keynote Address
10:00 a.m. – 10:15 a.m.	Refreshment Break
10:15 a.m. – 11:45 a.m.	Concurrent Sessions
11:50 p.m. – 1:20 p.m.	Concurrent Sessions
1:20 p.m. – 2:30 p.m.	Lunch (on own)
2:30 p.m. – 4:00 p.m.	Concurrent Sessions
4:00 p.m. – 4:15 p.m.	Refreshment Break
4:15 p.m. – 5:45 p.m.	Concurrent Sessions

SATURDAY, FEBRUARY 4

7:30 a.m. – 2:30 p.m.	Registration
8:00 a.m. – 9:15 a.m.	Poster Session 3 and Continental Breakfast
9:15 a.m. – 10:45 a.m.	Concurrent Sessions
10:45 a.m. – 11:00 a.m.	Refreshment Break
11:00 a.m. – 1:00 p.m.	Tutorials
11:00 a.m. – 1:00 p.m.	Practical Computing Demonstrations*
1:00 p.m. – 2:15 p.m.	Lunch (on own)
2:15 p.m. – 3:15 p.m.	*Practical Significance* Podcast Live
3:15 p.m. – 3:30 p.m.	Refreshment Break
3:30 p.m. – 4:30 p.m.	Closing Keynote Address

Denotes a ticketed event that requires an additional fee

* Denotes a free event you must register for

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Opening Keynote Address

Friday, February 3 • 9:00 a.m. – 10:00 a.m. • Cyril Magnin II



"Our Impact in the Evolving Data Landscape"

Dionne Price, *US Food and Drug Administration*

Data sources and the volume of data available for driving discovery and informing decisions have substantially increased over time. This increase has resulted in an evolving data landscape ripe for the expertise of statisticians and data scientists. Statisticians and data scientists must play a key role to ensure the appropriate use of data and soundness of conclusions reached from analyses of the data. In this talk, we will explore the landscape, identifying challenges and opportunities and highlighting our contributions and impact.



Dionne Price is the ASA president and deputy director of the Office of Biostatistics in the Office of Translational Sciences, Center for Drug Evaluation and Research, FDA. In this role, she provides leadership to statisticians involved in the development and application of methodology used in the regulation of drug products. She currently leads cross-cutting, collaborative efforts across FDA to advance and facilitate the use of innovative trial designs in pharmaceutical drug development.

Her research interests are focused on the design and analyses of clinical trials, and Price has co-authored papers in such journals as *Statistics in Medicine, Clinical Trials,* and *Statistics in Biopharmaceutical Research.* She also has a passion for mentoring and teaching, having taught courses for the FDA, Trinity University, and Georgetown University.

Closing Keynote Address

Saturday, February 4 • 3:30 p.m. – 4:30 p.m. • Cyril Magnin II



"Does the Truth Matter? The Role of Statistics in Human Rights Advocacy"

Megan Price, *Human Rights Data Analysis Group*

This question will frame a presentation of case studies from the Human Rights Data Analysis Group, a Bay Area nonprofit that uses data science to analyze patterns of violence. Examples will include collaborations with US-based organizations investigating police misconduct and partnerships with international truth commissions and war crimes prosecutors. HRDAG projects will be used to illustrate challenges of real-world data—including incomplete and unrepresentative samples—and adversarial political and/or legal climates.

The potential harm that can be done when inappropriately analyzing and interpreting incomplete and imperfect data will be highlighted, including questions such as, "How can we develop approaches to help us identify the cases in which analytical tools can do the most good and avoid or mitigate the most harm?" We propose starting with two simple questions: What is the cost of being wrong? Who bears that cost?

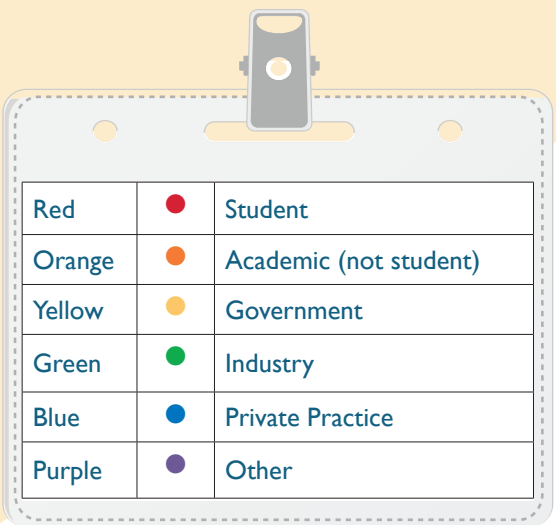


Megan Price, as the executive director of the Human Rights Data Analysis Group, drives the organization's overarching strategy, leads scientific projects, and presents the group's work to diverse audiences. As a scientist, she analyzes documents from the National Police Archive in Guatemala and contributes analyses submitted as evidence in court cases. She also collaborates with the Office of the United Nations High Commissioner of Human Rights and Amnesty International on analyses of conflict-related deaths in Syria.

Price is a member of the technical advisory board for the Office of the Prosecutor at the International Criminal Court and a research fellow at the Carnegie Mellon University Center for Human Rights Science. She is also the human rights editor for the *Statistical Journal of the International Association for Official Statistics* and on the editorial board of *Significance* magazine. In 2022, Price was named a fellow of the American Statistical Association.

Thursday, February 2

Need help locating something like the gender-neutral restroom or nursing mother's room? Please stop by our registration desk. Registration will be open by 7:30 a.m. every day of the conference. Also let us know if you need accessibility or allergy accommodations. While you are at the registration desk, feel free to pick up your pronoun and identifier stickers for your badge.



Red	●	Student
Orange	●	Academic (not student)
Yellow	●	Government
Green	●	Industry
Blue	●	Private Practice
Purple	●	Other

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Short Courses

Short courses are ticketed events that require an additional fee

THURSDAY, FEBRUARY 2

FULL-DAY

8:00 a.m. – 5:30 p.m.

CYRIL MAGNIN II
SC001: Advanced Programming in R
William Lamberti, The George Mason University

CYRIL MAGNIN III
SC002: DEPICT: A Framework for Ethical Reasoning in Statistics and Data Science
Mario Davidson, Vanderbilt University Medical Center, and Jennifer Van Mullekom, Virginia Tech

MARKET STREET
SC003: Hands-On Python Programming for Predictive Analytics and Machine Learning
Mei Najim, The University of Chicago

MORNING HALF-DAY

8:00 a.m. – 12:00 p.m.

MISSION
SC004: Version Control and Git for Data Analytics
Bogdan Rau, AltaMed Health Services

CYRIL MAGNIN I
SC005: An Introduction to Second-Generation *P*-Values and Their Use in Statistical Practice
Jeffrey Blume, University of Virginia School of Data Science, and Megan Murray, Vanderbilt University

AFTERNOON HALF-DAY

1:30 p.m. – 5:30 p.m.

CYRIL MAGNIN I
SC006: Navigating Tough Conversations in Statistical Collaboration
Emily Griffith, North Carolina State University; Julia Sharp, Colorado State University; and Zachary Weller, Pacific Northwest National Laboratory

MISSION
SC007: Introduction to the Federal Statistical System: Challenges and Opportunities
Brian Harris-Kojetin, National Academy of Sciences

Poster Session 1 & Opening Mixer

THURSDAY, FEBRUARY 2, 5:30 p.m. – 7:00 p.m.

CYRIL MAGNIN FOYER

001: Establishing Non-Conformance Size Distributions Bounding a Population of Products in the Context of Infrequent Defects, Batch Effects, and Censoring
Robert Lawton, Boeing

002: Tidy Simulation and Power Analyses
Brandon LeBeau, University of Iowa

003: Conducting and Analyzing a Randomized Experiment in 5 Minutes or Less with Classroom Stats
Adam Childers

004: SPECification DOCument (SPECDOC): Automating Text for Data Description, Statistical Methods, and Analysis Results for Medical Communications
Changming Xia, Regeneron

005: Clustering Analysis to Group Hospitals for Influenza Hospitalization Surveillance
Alissa O'Halloran, CDC

006: A Novel Adaptation of Naive Bayes Methods for Improving Semiconductor Fab Yield
Kevin Dayaratna, The Heritage Foundation

007: Piecewise Linear Mixed Modeling to Evaluate the Required Length of Helmet Therapy for Effective Treatment Outcome in Infants with Deformational Plagiocephaly
Shokoufeh Khalatbari, University of Michigan, and Matheos Yosef, University of Michigan

008: Ignoring Variability Results in Misleading Allocation of Environmental Contamination
Melanie Edwards, Integral Consulting

009: Modeling Time-to-Event Data When Some Subjects Are Immune to the Event
Yingwei Peng, Queen's University

010: Creating Modular, Artificial Intelligence Human Capital Scaffolding for the Department of Defense
Laura Kahn

011: A Systematic Review of Application of SSR in Clinical Trials
Hirotaka Mano, Kyowa Kirin Co.

012: Generalization of Two Well-Known Indices in the Choice of the Number of Clusters Within an Agglomerative Hierarchical Clustering
Fabien Llobell, Addirisoft, XLSTAT

013: Real-Time Stress Testing Assessment in Financial Industry
Arsen Hovasapyan, Plat LLC

014: BOIN12: Bayesian Optimal Interval Phase I/II Trial Design for Utility-Based Dose Optimization
Ruitao Lin, University of Texas MD Anderson Cancer Center

015: Split Stacked Bar Plot for Binary Outcomes
Weiming Du, Regeneron

016: Knowledge and Prescription Changes in Prescribers After Opioid-Related Education
Kayleigh Adamson, University of Pittsburgh

017: Opioid Monitoring with an Example in an Alabama Rural County
Yuhui Yao, The University of Alabama

018: An Introduction to Automated Data Integrity Checks
Michael Colalillo, YBR Analytics, and Sebastien Sourdif, YBR Analytics

019: Pragmatic Solutions for Longitudinal Cluster Randomized Trials
Jijia Wang, UT Southwestern Medical Center

020: Analysis of Patient-Reported Outcomes with Skewed Distribution Using Beta Regression
Yuxuan Jin, Cleveland Clinic



Evaluations

Share your feedback! Session evaluations are accessible from the **online program** at *ww2.amstat.org/csp program*.

Award Winners



Lester R. Curtin Award
Yuxuan (Daisy) Jin



Lingzi Lu Memorial Award
Lydia Suzanne Gibson



John J. Bartko Award
Michael Palazzolo

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Poster Session 2 & Continental Breakfast

FRIDAY, FEBRUARY 3, 7:30 a.m. – 8:45 a.m.

CYRIL MAGNIN FOYER

001: Automation of Personalized Reports: Effective Communication Through Data Visualization
Cody Leporini

002: Pneumonia Detection via Convolutional Neural Networks (CNNs) Based on X-Ray Images
Jingying Zeng

003: CW_ICA: An Efficient Dimensionality Selection Method for Independent Component Analysis
Yuyan Yi

004: A Dynamic Bayesian Network Model for Predicting the Resilience of Seagrass Ecosystem to Future Heatwave Events of Varying Duration, Frequency, and Re-Occurrence
Paula Hatum

005: Validating Causal Inference Methods
Harsh Parikh, Duke University

006: Confidence Modeling for Flight Mode Predictions
Nedret Billor, Auburn University, and Mohammad Maydanchi, Auburn University

007: Evaluation of Missing Data Imputation Techniques in Univariate Time Series Data Forecasting with ARIMA
Nicholas Niako, The University of Texas Rio Grande Valley, and Kristina Vatcheva, The University of Texas Rio Grande Valley

008: Development of Digital Interactive Dashboard for Hospital Antibiotics Stewardship Using Python
Saikou Jwla, The University of Texas Rio Grande Valley, and Kristina Vatcheva, The University of Texas Rio Grande Valley

009: A General Meta Machine Learning Model for Constructing a Binary Classifier Using Small Training Data Set
Junying Wang, Stony Brook University, and David Wu, Stony Brook University

010: An Overview of Statistical Approaches and Operational Challenges Related to Non-Concurrent Controls in Platform Trials
Megan McCabe, University of Iowa

011: A Workflow for Stable Interaction Detection in High-Dimensional Data
Mara Stadler, Helmholtz Center Munich

012: Quantifying Polarization in Newspaper Media
David Edwards, Virginia Tech

013: Optimal Full Matching with Restrictions to Limit Large Variation in Matched Sets: Case Study on COVID-19 Mask Mandates
Simon Nguyen

014: Prioritizing Network Properties of T-Cell Receptor Repertoire: A Novel Approach to Select Network Signatures from TCR Repertoire Data
Shilpika Banerjee

015: Drivers of Flood-Induced Relocation Among Coastal Urban Residents: Insight from the US East Coast
Steven Barnett, Virginia Tech

016: A Bayesian Approach Toward Balanced Probability Calibration and Boldness
Adeline Guthrie, Virginia Tech

017: Examining the Adaptive Immune Response to SARS-CoV-2 by Network Analysis and Machine Learning Techniques
Brian Neal, University of California, Irvine

018: Automating Data Cleaning, Merging, Processing, and Visualization in Real Time
Christopher Grubb, Virginia Tech

019: Writing About Alternatives to Classical Hypothesis Testing Outside of the Statistical Literature: Bayesian Model Selection and Biomechanics
Christopher Franck, Virginia Tech

020: Visualization at Your Fingertips: A Suite of Applications
Julia Thompson, Columbia University

Friday, February 3

CONCURRENT SESSIONS



DIONNE PRICE | OPENING KEYNOTE ADDRESS • 9:00 a.m.-10:00 a.m. • CYRIL MAGNIN II

ROOM		CYRIL MAGNIN I	CYRIL MAGNIN II
	10:15 a.m. – 11:45 a.m.	Theme 1: Career, Professional, and Leadership Development	Theme 2: Study Design and Data Management
		CS01: Federal Collaboration	**CS02: Flora & Fauna: Data Management for the Biological World**
		a) Examination of 'Dark Citations' of Federal Information and Their Contribution to Research (*Travis Hoppe*) b) A Report from Capitol Hill (*Steve Pierson*)	a) Statistics in Plant Phenotyping: Study Design and Data Management (*Jennifer Clarke*) b) Data Management and Sharing at the World's Largest Marine Mammal Hospital (*Marianna Aguirre & Lisabet Hortensius*)
	11:50 a.m. – 1:20 p.m.	**CS05: Fundamentals of Leadership**	**CS06: Web and Text Sampling**
		a) The Data Mine: Industry-University Partnerships in Data Science (*Margaret Betz & Mark Ward*) b) Trust: The Backbone of Leadership (*Alun Bedding*)	a) National Web Survey of Korean Americans Using Respondent-Driven Sampling (*Sunghee Lee*) b) Extracting Text from PDFs in R: Initial Findings from a Split-Plot Design (*Billie Anderson*)
	2:30 p.m. – 4:00 p.m.	**CS09: Ethics Panel**	**CS10: Cutting-Edge Oncology Research Design**
		a) Leveraging the ASA Ethical Guidelines for and by Practicing Statisticians (*Harold Gomes, Jeri Mulrow, Matthew Rotelli, Stephanie Shipp, & Rochelle Tractenberg*)	a) A Semi-Competing Risks Framework to Incorporate Dose Reductions into Oncology Dose-Finding with Implementation in STAN and R (*Jesse Helman*) b) Designing Cancer Immunotherapy with Heterogeneous Delayed Treatment Effect Using Bayesian Adaptive Promising Zone (*Depeng Jiang*)
	4:15 p.m. – 5:45 p.m.	**CS13: Growing the Future**	**CS14: Quality Machine Learning**
		a) Tips and Tools for Professional Development of Isolated Collaborative Statisticians (*Margaret Stedman*) b) From Zero to Hero: A Case Study in Developing Tomorrow's Talent (*Brandon Jansonius & John Taylor*)	a) Designing Against Bias: Identifying and Mitigating Bias in Machine Learning and AI (*David Corliss*) b) Quality Control of Data Sets Using a Forward Search Procedure (*William Fairweather*)

	MARKET STREET	CYRIL MAGNIN III
	Theme 3: Implementation and Analysis	Theme 4: Effective Communication
	CS03: Untangling Complexities	**CS04: Reaping What You SOW**
	a) Evaluating and Presenting Complex Interactions in Clinical Research (*Andrea Bellavia*) b) Adjusting for Informative Observation Times and Non-Randomized Exposures via Weighting Methods in Longitudinal Data Analysis (*Grace Tompkins*)	Reaping What You SOW: Guidelines and Strategies for Writing Scopes of Work for Statistical Consulting (*Emily Griffith, Camille Hochheimer, Ryan Peterson, Julia Sharp, & Emily Slade*)
	CS07: Statisticians Solving Real-World Business Dilemmas	**CS08: Powering Your Writing**
	a) Network Optimization for Real-World Problems: Vehicle Routing Problem in Supply Chain (*Carlos Pinheiro*) b) Modeling Downstream Financial Impact with Attribution Modeling (*Kayden Maughan*)	a) Getting Your Grant Funded: Effectively Communicating Through the Statistical Analyses and Power Sections of a Proposal (*Hayley Belli*) b) Evidence-Based Methods for Writing Statistical Analysis Section in Medical Research (*Alok Dwivedi*)
	CS11: Moving Toward Precision Medicine	**CS12: Communication Hygiene**
	a) Performance of Statistical and Machine Learning Risk Prediction Models in Clinical Settings: Examples of Modeling Breast Cancer Surveillance Outcomes (*Yu-Ru Su*) b) Precision Medicine with Imprecise Measurements: Exploring Measurement Error in Personalized Decision-Making (*Michael Wallace*)	a) Increasing Data Literacy 10 Minutes at a Time: The Power of Plain Language (*Andrea Ness*) b) Death by Emails & Spreadsheets: Leveraging Technology to Enhance Communication (*Michael Colalillo & Amanda Truesdale*)
	CS15: Lessons in Causal and Bayesian Inference	**CS16: Communicating Beyond the Statistics**
	a) Analyzing Survey Data of Veterans' Non-Disclosure of Suicidal Thoughts Using Causal Inference (*Meike Niederhausen*) b) Misuse of Bayesian Inference in Applied Research: Current Status and Constructive Feedback (*Jorge Tendeiro*)	a) So, Should My Cows Drink the Water? (*Jennifer Van Mullekom*) b) Are You a Statistical Leopard? Developing Effective Communication Skills When You Are the Only Statistician in Your Company (*Douglas Milikien*)



Poster Session 3 & Continental Breakfast

SATURDAY, FEBRUARY 4, 8:00 a.m. – 9:15 a.m.

CYRIL MAGNIN FOYER

001: Using Bootstrapping and Smoothing Splines to Generate Nonparametric Regressions and Empirical 95% Confidence Intervals
Vince Marshall, University of Michigan

002: Software for Discrete Time Survival Analysis
Adam King, California State Polytechnic University, Pomona

003: Introducing an R Package (PsHarmonize) to Facilitate Large-Scale Data Harmonization
John Stephen, Northwestern University Medical School

004: Using Machine Learning Approaches to Evaluate High-Dimensional Data and Optimize Post-Stratification Used in the Estimation of Fisheries Catch
Jason Gasper, NOAA Fisheries

005: Efficient Simulation Studies with Design of Experiments
Caroll Co, DLH

006: Outcome Misclassification for Preterm Birth Analysis
Xiaping Zheng, Emory University

007: Advanced Sample Size Calculation for Clinical Trials Enriched with High-Risk Patients
Yuxuan Jin, Cleveland Clinic

008: Introduction to Exploratory Data Analysis of Graphs
Emilia Grzesiak, Lawrence Livermore National Laboratory

009: Reducing Costs, Burden, and Risk of Human Error in Large-Scale Survey Data Collection and Scope of Work Reporting Using Automation
Robin Donatello, California State University, Chico

010: Causal Mediation Programs in R, Mplus, SAS, SPSS, and Stata
Heather Smyth, Colorado School of Public Health Center for Innovative Design and Analysis, CU-Anschutz

011: Competing Risks Regression with Repeated Measures for Time-to-Event Analyses
Melica Nikahd

CONCURRENT SESSIONS

ROOM		CYRIL MAGNIN I		CYRIL MAGNIN II	
	9:15 a.m. – 10:45 a.m.	Theme 1: Career, Professional, and Leadership Development		Theme 2: Study Design and Data Management	
		CS17: Collaborative Research		**CS18: Advances in Power Estimation**	
		a) CUBE: A Collaborative Undergraduate Biostatistics Experience to Bring Diversity and Awareness to the Field of Collaborative Biostatistics (*Monica Ahrens, Alexandra Hanlon, & Alicia Lozano*) b) Strangers in a Strange Land: Lessons from an Academic-Business Collaboration (*Ian Crandell*)		a) Estimating Power, Minimum Detectable Effect Size, and Sample Size When Adjusting for Multiple Outcomes Using the PUMP R Package (*Luke Miratrix*) b) Decision-Making in Drug Development via Inference on Power (*Geoffrey Johnson*)	

012: Using Programming to Comb Through Complex Folder Structures and Understand File Characteristics
Brandon Jansonius, YBR Analytics, and Sebastien Sourdif, YBR Analytics

013: Statistical Methods to Handle Competing Risk Events in Survival Analysis
Xiaoyue Zhang, Stony Brook University

014: Proportion of Pre-Symptomatic Transmission Events Associated with COVID-19
Eunha Shim

015: In It to Win It: A Primer on the Win Ratio
Madison Hyer

016: Psborrow: An R Package for Complex, Innovative Trial Designs Using Bayesian Dynamic Borrowing
Matthew Secrest

017: Development and Implementation of an Electronic Health Record (eHR)–Driven Predictive Algorithm and Data Pipeline to Identify and Outreach High-Risk Patients
Stephanie Grim

018: Quantile Regressions Address Mean Model Limitations: A Primer on Quantile Regressions with an Application to Assess Later-Life Memory Levels
Jillian Hebert

019: Using Webinars to Promote Skills and Create Community Support Among Collaborative and Consulting Statisticians
Terrie Vasilopoulos, University of Florida College of Medicine

020: Near-Surface Wind Measurements: Visualization, Analysis, and Prediction
Ziv Klausner, Israel Institute for Biological Research

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	MARKET STREET		CYRIL MAGNIN III
	Theme 3: Implementation and Analysis		Theme 4: Effective Communication
	CS19: Advancing Knowledge of SARS-CoV-2		**CS20: Collaborative Communication**
	a) Adjusting COVID-19 Seroprevalence Survey Results to Account for Test Sensitivity and Specificity (*Mark Meyer*) b) Adjusting Incidence Estimates with Laboratory Test Performances: A Pragmatic MLE-Based Approach Motivated by a Longitudinal Study for SARS-CoV-2 Incidence (*Yingjie Weng*)		a) The Content of Statistics and Data Science Collaborations: The Q1-Q2-Q3 Framework (*Ilana Trumble & Eric Vance*) b) Together We Can Do Great Things: Mentoring Clinical Collaborators in Research (*Renee Moore*)

Saturday, February 4



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Saturday, February 4 • 2:15 p.m. – 3:15 p.m.

CYRIL MAGNIN II

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Tutorials

SATURDAY, FEBRUARY 4, 11:00 a.m. – 1:00 p.m.

T01: Modeling Strategies for Analyzing Complex Longitudinal Data
CYRIL MAGNIN I
Instructor(s): *Wei Pan, Duke University, and Xianming Tan, The University of North Carolina at Chapel Hill*

T02: How to Make Outstanding Statistical Presentations
CYRIL MAGNIN II
Instructor(s): *Wayne Nelson, Wayne Nelson Statistical Consulting*

T03: Fundamentals of Applied Causal Inference with a View Toward Data Science
MARKET
Instructor(s): *Shaina Alexandria, Northwestern University Feinberg School of Medicine; Lucia Petito, Northwestern University Feinberg School of Medicine; and Adin-Cristian Andrei, Northwestern University*

T04: The Full Picture: Innovative Software Tools for Data Insight Generation
POWELL
Instructor(s): *Erya Huang, Bayer HealthCare*

Practical Computing Demos*

SATURDAY, FEBRUARY 4, 11:00 a.m. – 1:00 p.m.

PCD01: Tools for Efficient Survey Development
CYRIL MAGNIN III
Instructor(s): *Laura Castro-Schilo, JMP*

PCD02: Creating Customized Tables with Stata
MISSION
Instructor(s): *Meghan Cain, StataCorp*



MEGAN PRICE | CLOSING KEYNOTE ADDRESS • 3:30 p.m. – 4:30 p.m. • CYRIL MAGNIN II

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CSP

New Orleans, Louisiana
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Ritz Carlton, New Orleans

IMPORTANT DATES

Short Course and Tutorial Abstract Submission:
April 5 – May 15, 2023

Concurrent Session Abstract Submission:
May 17 – June 22, 2023

Practical Computing Demo Proposal Submission:
May 17 – August 21, 2023

Poster Abstract Submission:
July 6 – August 21, 2023

Early Registration:
October 5, 2023 – January 30, 2024

Regular Registration:
January 31 – February 29, 2024

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