

2026 Biostatistics Symposium of Southern California (BSSC)

22 Jan 2026 Day 1 (Combined Session)

7:30 - 8:00A: Registration and Breakfast

8:00 - 8:15A: Welcome by Larry Shen PhD, Overall Symposium Chair

8:15A - 12:30P: Keynote Session Day 1 (Chair: Gajanan Bhat PhD)

Harpreet Singh MD, CMO, Precision for Medicine; Innovating Clinical Trial Analysis for a New Era of Therapeutics: Perspectives from a Former FDA Oncology Director
 Artem Andrianov, CEO Cytegrity; Strategic combination of unsupervised and supervised Centralized Statistical Monitoring
 Daniel Bradbury, Chairman and Co-founder, Equillum, Inc; Biotech Market Dynamics and Macro Drivers

10:30 - 10:45A: Break

Q&A and Panel Discussion: Investing in the next generation of therapies: Trends shaping the global drug development landscape
 Participants: Harpreet Singh, Artem Adrianov, Daniel Bradbury, JeHi An - Moderated by: Gajanan Bhat

12:30 - 1:30P: Lunch

1:30 - 3:00P: Parallel Tracks of Scientific Program

Track 1: Clinical and Statistics	Track 2: Data Science and Analytics	Track 3: Academic Research
Real World Evidence/Causal Inference (Chair: Julia Ma & Kitty Guo)	Panel Discussion: Executive Insights: AI/ML Transforming the Clinical Research Landscape (Chair: Adrian Hsing)	Innovative Theoretical Developments (Chair: Eric Kawaguchi)
Mark van der Laan: Super-Efficient Estimation of Average Treatment Effect based on Randomized Controlled Trial Augmented with External Controls or Observational Study	Rick Landin PhD CEO Telperian	Xiaoqian Liu: Transfer learning for survival-based clustering of predictors with an application to TP53 mutation annotation
Manoj Khanal: Augmenting Small Control Arms in Oncology Trials: A Bayesian Framework for Health Technology Assessment	Steve Rosenberg, CEO uMotif	Jeffrey Zhang: CiteSure: Retrieval-Augmented Large Language Models for faithful biomedical citation recommendation
CG Wang: Quantifying Effective Sample Size in Clinical Trials Using Real-World Data	Ming Tan PhD, Georgetown Univ. Medical Center	Eric Kawaguchi: Probability-scale residuals for interval censored data
Roman Torgovitsky: The hidden diseases of evidence generation: Diagnosing methodological failure in clinical trials and RWE		Gang Li: Joint modeling with multiple biomarkers

3:00 - 3:15P: Break

3:15 - 4:45P: Scientific Program Continues

Dose Optimization (Chairs: Ying Yuan & Bo Huang)	AI and Machine Learning Innovations in Clinical Trial Design (Chairs: Yefei Zhang, Weining Shen)	Modeling Genetic Data (Chair: Liora Mayats Alpay)
Yong Zang: Seamless optimal designs integrating proof-of-concept with dose optimization	Brian Hobbs: Applying ML to discern predictive from prognostic biomarkers and simple solutions for design	Min Zhang: Unraveling gene regulation to advance precision medicine
Ying Yuan: Backfill and optimal randomized selection design for dose optimization	Michael Kane & Arvind Rao: Integrating Transformer Models to Simplify Clinical Trial Design and Resource Efficiency	Ruowang Li: A pre-train and fine-tune framework for adaptively boosting genetic risk prediction
Yingqi Zhao, Enhancing dose optimization: leveraging BOIN and backfill strategies in Phase 1 oncology trials	Cheng Su: AI for trial design & execution – enabling adaptive, efficient, data-driven studies	Lucy Annie Dolmadjian: Statistical methods for local heritability estimation using GWAS summary statistics
Linda Sun: Oncology dose optimization under Project Optimus: How many doses and how many patients?	Shibing Deng: Advancing tumor response assessment: Integrating AI-assisted RECIST in clinical trials	Annie Qu: Covariate-elaborated robust partial information transfer with conditional spike-and-slab prior

5:00 - 6:30P: Reception

23 Jan 2026 Day 2 (Combined Session)

7:30 - 8:15A: Registration and Breakfast

8:15A - 11:00A: Keynote Session Day 2 (Chair: Gajanan Bhat PhD)

Chito Hernandez PhD, Founder StillWave, UCSD Professor of Practice; From Data Busboys to Strategic Influencers: How Biostatisticians Lead in the Age of AI

Daniel L. Gillen PhD, Chancellor's Professor and Chair of Statistics; Are Futility Bounds Futile?

Ying Lu PhD, Professor Stanford University, Co-Founder Dashu; Transforming Clinical Trials: Harnessing Real-World Data for Optimized Design and Analysis

10:30 - 10:45A Poster Award Ceremony

10:30 - 11:00A: Break

11:00A - 12:30P: Parallel Tracks of Scientific Program

Track 1: Clinical and Statistics	Track 2: Data Science and Analytics	Track 3: Academic Research
Adaptive Designs (Chairs: Lingyun Liu & Jessica Lim)	Technology Applications from Vendors Implementing AI Solutions (Chair: Vadim Tansyura)	Methodological Considerations in Preclinical and Clinical Studies (Chair: Arnab Chowdhury)
Satrajit Roychoudhury: Evaluating longitudinal treatment effects for Duchenne muscular dystrophy using dynamically enriched Bayesian small sample, sequential, multiple assignment randomized trial	Artem Adrianov: Operationalizing AI within RBQM. From reactive oversight to predictive prevention	Joycelyne Palmer: The evolving role (contributions) of the Biostatistician in an AI-driven drug development era
Ruitao Lin: Novel adaptive factorial designs for evaluating contributions of components for combination therapies	Matthew Purri: Leveraging AI to accelerate medical data cleaning: A comparative study	Dongyun Yang: Application of Bayesian approaches in early development clinical trials, Real-World Experience
Evelyn Zheng: Biomarker adaptive design with enrichment and SSR	Henry Liu: Technology application from vendors implementing AI solutions	Ankita Mohapatra: Data Science in biosensing: Predicting biological affinity and activity through machine learning
Andrew Yan: Masked SSR		Arnab Chowdhury & Jianying Zhang: Balancing rigor and feasibility: Sample size strategy in pre-clinical studies

12:30 - 1:30P: Lunch

1:30 - 3:00P: Scientific Program Continues

Clinical Trial/Oncology/Business related (Chairs: Li Huang)	From Complexity to Clarity: AI/ML Methods for High-Dimension Data (Chair: Rita Lopatin)	Modeling Framework and Applications in Lifescience Data (Chair: Olga Korosteliva)
Jessica Lim: TransCelerate clinical data sharing: the benefits of shared control arms from clinical trial data	Jian Kang: Split conformal prediction for uncertainty quantification in brain-computer interfaces	Salil Koner: Integrative dynamic prediction of Parkinson's disease using multivariate functional joint models
Kent Kaprowicz: Data Monitoring Committees in the age of AI: optimizing interim analyses and processes	Sam Gross: Training cancer classifiers on high dimensional data with reliable performance estimates	Zhe Fei: Novel knockoff generation and importance measures with heterogeneous data via conditional residuals and local gradients
Kevin Lee: Reimagine biometrics works with AI agents and agentic workflow	Jeff Palmer: Role of statistics in driving translational development using diverse data sources (wearables, omics, labs)	Yuzhou Chen: LLM-based multi-agent system and simplicial self-supervised learning model for regional cancer prevalence estimation
Zhenjun Ma: AI Teammates in clinical development: Integrating clinical insights with statistical innovations	Gregory Alexander: Statistical considerations for generating confirmatory evidence from high dimensional data	Suqi Liu: Representation learning to advance knowledge integration in health sciences

3:00 - 3:15P: Break

3:15 - 4:45P: Scientific Program Continues

Advanced Trial Designs (Chair: Yifei Shi)	AI/ML Innovations in Mobile Health: From Digital Biomarkers to Real-World Evidence (Chair: Adrian Hsing, Peter Zhang)	Representation and Inference in Complex Health Data: Statistical, Functional, and Deep Learning Perspectives (Chair: Jingling Zou)
Pantelis Vlachos: Simulation-based optimization of adaptive designs for the evaluation of Bayesian and frequentist analysis options for an oncology study with non-proportional hazards assumptions	Ming Tan: Agentic robust causal estimation in randomized and nonrandomized studies	Jian Chen: From clinical intent to deterministic inference: Knowledge-driven neuro-symbolic architectures
Leiwen Gao: Boosting the power of Hybrid Design when crossover occurred In historical control data	Louise Liu: Empowered by AI – People & business in the AI era	Damla Senturk: Multilevel Multivariate Functional Principal Component Analysis of Evoked and Induced Event-Related Spectral Perturbations
Junyi Zhou: Exploration of small-sample, sequential, multiple assignment randomized trial (snSMART) designs in rare disease settings	Peter Zhang: Digital medicine: Statistical and AI/ML frameworks Abilify MyCite	Rachel Lathrop: Implementing Self-Service Virtual Assistants: Leveraging AI to Achieve Organizational Efficiency and Digital Transformation
Brian Beus: Bridging biostatistics and regulatory compliance: Endpoint selection for accelerated approvals	Ran He: The Application of AI/ML in Clinical Trials – Statistical and Regulatory Challenges	Jingjing Zou: Tailoring self-supervised deep learning models for evaluating sedentary behavior interventions
	Wessam Sonbol: Integrating wearable technologies into clinical trials: Best practices for regulatory and statistical considerations	
Symposium conclusion - Thank you note from Nicole Li, Chair-Elect 2026 BSSC		