

Keynote Speaker 1 :

Dimitris Rizopoulos d.rizopoulos@erasmusmc.nl

- **Title: Harnessing Variational Auto-Encoders for Fitting Deep Mixed-Effects Models**

Keynote Speaker 2 :

Xihong Lin xlin@hsph.harvard.edu

- **Title:**

Session 1 : Deep learning in survival analysis

Organizer: Lei Liu

- Jon Steingrimsson jon_steingrimsson@brown.edu
Title: Deep Learning with Time-to-event Outcomes
- Jane-Ling wang jlwang.ucdavis@gmail.com
Title: Deep learning for survival data
- Peter X Song pxsong@umich.edu
Title: Neural Network Machine Regression (NNMR): A Deep Learning Framework for Uncovering High-order Synergistic Effects
- Kevin He kevinhe@umich.edu
Title: Flexible Deep Learning Techniques for Survival Analysis with Data Integration

Session 2 : Causal mediation pathway analysis

Organizer: Peter Song

- Xinyuan Song xysong@sta.cuhk.edu.hk
Title: Deep Learning Approaches for Individualized Causal Mediation Analysis with Survival Outcome
- Yen-Tsung Huang ythuang@stat.sinica.edu.tw
Title: Semiparametric mediation analysis using single-index models
- Zhonghua Liu zl2509@cumc.columbia.edu

Title: Mitigating Unmeasured Confounding Bias in Large-Scale Causal Mediation Analysis Via Factor Analysis in Epigenome-Wide Studies

- Jingyuan Liu jingyuan@xmu.edu.cn

Title: Statistical Inference for Mediation Models with High Dimensional Exposures and Mediators

Session 3 : Some Advanced Statistical Learning Methods for Modern Scientific Data

Organizer: Lexin Li

- Ji Zhu jizhu@umich.edu

Title: Modeling non-uniform hypergraphs using determinantal point processes.

- Yuhua Zhu yuhua.zhu@stat.ucla.edu

Title: Structure-aware model-free algorithms for continuous-time reinforcement learning.

- Moo Kyung Chung mkchung@wisc.edu.

Title: Covariate-adjusted topological inference and learning.

- Junwei Lu junweilu@hsph.harvard.edu.

Affiliation: Ranking inference for human feedback tuning in large language models.

Session 4 : Recent developments in reinforcement learning methods for precision medicine

Organizer: Donglin Zeng

- Alex Luedtke aluedtke@uw.edu

Title: DoubleGen: Debaised Generative Modeling of Counterfactuals

- Zhengling Qi qizhengling@email.gwu.edu

Title: Unlocking the Untapped Potential of Preference Data for LLM Alignment

- Yuanjia Wang yw2016@cumc.columbia.edu

Title: Model-free dynamic treatment regimes with arbitrary number of treatments and stages

- Nilanjana Laha nilanjanaaaa.laha@gmail.com

Title: Learning Optimal Early Decision Treatment Rules with Multi-domain Intermediate Outcomes

Session 5 : Recent advances in transfer learning for biomedical applications

Organizer: Lan Luo

- Rui Duan rduan@hsph.harvard.edu

Title: Unsupervised Aggregation of Multiple Learning Algorithms

- Emily C Hector ehector@umich.edu

Title: Heterogeneity-adaptive meta-analysis

- Tian Gu tg2880@cumc.columbia.edu

Title: Hierarchical Projection for Adaptive Knowledge Transfer

- Ling Zhou zhouling@swufe.edu.cn

Title: On a synergistic learning phenomenon in nonparametric domain adaptation

Session 6 : area of causal inference

Organizer: Cheng Zheng

- Ying Zhang

Title: Joint Analysis of Multivariate Longitudinal Data and Interval-Censored Event Time Data with Application to Huntington's Disease Progression

- Ran Dai

Title: Model-free High Dimensional Mediator Selection with False Discovery Rate Control

- Mladen Kolar

Title: Confidence Sets for Causal Orderings

- Youngjoo Cho

Title: Doubly robust inference for the heterogeneous treatment effect of multiple treatments on time-to-event outcomes

Session 7 : New advances in survival analysis

Organizer: Yichuan Zhao

- Edsel Pena pena@stat.sc.edu

TBD

- Gang Li vli@g.ucla.edu

Title: Cox-SieveTL: Semiparametric Transfer Learning via Sieve Maximum Likelihood for Cox Models

- Liang Li lili15@mdanderson.org

Title: Modeling the Association Between Multivariate Nonlinear Longitudinal Data and Survival Outcome: A Measurement Error Perspective

- Yichuan Zhao yichuan@gsu.edu

Title: Novel empirical likelihood method for the cumulative hazard ratio under stratified Cox models

Session 8 : Recent Developments in Survival Analysis

Organizer: Gang Li

- Ingrid Van Keilegom ingrid.vankeilegom@kuleuven.be
- Donglin Zeng dzeng@umich.edu
- Danyu Lin lin@bios.unc.edu
- Zhe Fei zhfei@ucr.edu

Session 9 : Nonparametric and semiparametric modeling for the analysis of complex data

Organizer: Zhezhen Jin

- Shanshan Ding sding@udel.edu
Title: Robust causal effect estimation in high-dimensional survival analysis using sufficient dimension reduction
- Xuewen Lu xlu@ucalgary.ca
Title: Spike-and-Slab Group Lasso for High-Dimensional Cox Proportional Hazards Models.
- Leilei Zeng lzeng@uwaterloo.ca
Title: Modeling Heterogeneous Disease Processes Using a Mixture of Multistate Hidden Markov Models
- Hua Shen hua.shen@ucalgary.ca
Title: Integrative Analysis of Multiple Data Sources Involving Misclassification and Missing Data

Session 10 : Statistical Learning for Complex Data

Organizer: Xingqiu Zhao

- Jinfeng Xu jinfenxu@cityu.edu.hk
Title: Causal inference with outcome dependent sampling and mismeasured outcome
- Qixian Zhong qxzhong@xmu.edu.cn
Title: Semiparametric Inference for Functional Survival
- Meiling Hao meilinghao@uibe.edu.cn
Title: Conditional inference for high-dimensional multi-omics survival data
- Xiangbin Hu xiang-bin.hu@connect.polyu.hk
Title: Deep Conditional Generative Learning for Optimal Individualized Treatment Rules

Session 11 : Innovative Statistical Methods for Complex Health and Biomedical Data

Organizer: Mei Hao

- Hao Zhang haozhang@arizona.edu
Title: A Performance-Based Framework for Transfer Learning Measurement and Guidance
- Annie Qu aqu2@ucsb.edu
Title: Cumulative Treatment Effect Testing under Continuous Time Reinforcement Learning
- Lexin Li lexinli@berkeley.edu
Title: Brain Encoding and Decoding: Some Examples
- Hao Mei hao.mei@ruc.edu.cn
Title: Functional Latent Space Model for Time-Varying Networks: Application to Taiwan Administrative Claims Data

Session 12 : Trustworthy AI and Statistical Innovation for Complex Health Data

Organizer: Ying Wei yw2148@cumc.columbia.edu

- Tianying Wang Tianying.Wang@colostate.edu
Title: Confounder Missingness in EHR Comparative Effectiveness: MI or PS Calibration?
- Kaizheng Wang kaizheng.wang@columbia.ca
Title: Quantifying Fidelity in AI Persona Simulations
- Nan Lin nlin@wustl.edu
Title: Trajectory Clustering via Spatial-Graph and LLM-Semantic Embeddings
- Jinbao Chen jinboche@upenn.edu
Title: A Semiparametric Method for Addressing Under-Diagnosis Using Electronic Health Record Data

Session 13 : Frontiers in Statistical Methodologies for Precision Medicine Research

Organizer: Yuanjia Wang

- Erica Moodie erica.moodie@mcgill.ca
Title: Estimating the optimal allocation of kidneys in the presence of competing risks from clustered data
- Ashken Ertefie Ashkan.Ertefaie@PennMedicine.upenn.edu
Title: A structural nested rate model for estimating the effects of time-varying exposure on recurrent event outcomes
- Yuan Chen cheny19@mskcc.org
Title: Learning Locally Interpretable Individualized Treatment Rules

- Yinjun Zhao yz3503@cumc.columbia.edu

Title: An Integrative Approach for Subtyping Mental Disorders Using Multimodal Data

Session 14 : Statistical and machine learning methods for complex biomedical data

Organizer: Qi Long, University of Pennsylvania

- Hongzhe Li (University of Pennsylvania)

Title: A Robust Local Frechet Regression Using Unbalanced Neural Optimal Transport with Applications to Dynamic Single-cell Genomics Data

- Sandra Safo (University of Minnesota)

Title: iDeepViewLearn+: Interpretable AI for Robust and Fair Multimodal Data Integration

- Ali Shojaie (University of Washington)

Title: GLM Inference with AI-Generated Synthetic Data Using Misspecified Linear Regression

- Lili Zhao (Northwestern University)

Title: Distributed Kaplan-Meier Curves

Session 15 : TO be defined

Organizer: Yong Chen

- Xiaowu Dai
- Yumou Qiu
- Jingmei Qiu
- Yong Chen

Session 16 : New Estimation and Inference Methods for Analyzing Composite Survival Outcomes

Organizer: Ying Ding YINGDING@pitt.edu

- Chen Hu huc@jhu.edu

Title: On statistical inference of multiple competing risks in oncology clinical trials

- Yu Cheng yucheng@pitt.edu

Title: Win odds for Sequential Multiple Assignment Randomized Trials

- Chung-Chou H. Chang changj@pitt.edu

Title: A Bayesian Multi-Arm Multi-Stage Adaptive Framework for Composite Endpoints in Critical Care Trials

- Douglas Landsittel dplansit@buffalo.edu

Title: Prognostic models for long-term survival with multi-endpoint data - examples from the Consortium for Radiological Images Studies of Polycystic Kidney Disease

Session 17 : Trustworthy analysis of healthcare and medical data

Organizer: Fang Liu

- Chuang Hong chuan.hong@duke.edu

Title: An Agentic AI System for Multi-Framework Communication Coding

- Yajuan Si yajuan@umich.edu

Title: Towards Differentially Private Finite Population Estimation: An Approach Based on Survey Weight Regularization

- Hongyuan Cao hcao@fsu.edu

Title: Kernel meets sieve: transformed hazards models with sparse longitudinal covariates

- Xinghua Mindy Shi mindyshi@temple.edu

Title: Mathematical Foundations of Generative AI for Human Genetics and Epigenetics

Session 18 : Machine Learning and Survival Analysis

Organizer: Jiaoguo Sun

- Yu Gu yugu@hku.hk

Title: Semiparametric Functional Multi-State Models: Estimation and Testing with Application to Alzheimer's Disease

- Yuanyuan Lin ylin@sta.cuhk.edu.hk

Title: A Data-Augmented Contrastive Learning Approach to Nonparametric Density Estimation

- Li Liu lliu.math@whu.edu.cn

Title: Automatic structure identification and variable selection for additive accelerated failure time model with ultra high dimensional covariates

- Wen Su w.su@cityu.edu.hk

Title: Semiparametric Causal Inference for Right-Censored Outcomes with Many Weak Invalid Instruments

Session 19 : Innovative Statistical Methods for Longitudinal and Survival Analysis in Medical Studies

Organizer: Yanqing Sun

- Lang Wu lang@stat.ubc.ca

Title: Joint models in longitudinal studies for efficient and robust inferences

- Ronghui (Lily) Xu rxu@health.ucsd.edu

Title: Learning Treatment Effects under Covariate Dependent Left Truncation and Right Censoring

- Wenqing He whe@stats.uwo.ca

Title: Boosting methods for interval censored data with regression and classification

- Yanqing Sun yasun@charlotte.edu

Title: Estimation and Inference of Semiparametric Temporal Intensity Models for Recurrent Events with Application to a Malaria Vaccine Trial

Session 20 : Advanced Analytical Methods in Multi-outcome Data

Organizer: Lei Liu

- Yun Li Yun.Li@Pennmedicine.upenn.edu

Title: Confounder Missingness in EHR Comparative Effectiveness: MI or PS Calibration?

- Grace Y. Yi gyi5@uwo.ca

Title: Function-on-Scalar Regression with Ultra high-Dimensional Error-Prone Covariates

- Douglas Schaubel douglas.schaubel@pennmedical.upenn.edu

Title: Time-varying frailty model for analyzing recurrent/terminal event data

- Yi Li yili@umich.edu

Title: Inference for Deep Neural Network Estimators

Session 21 : Joint models for risk prediction according to marker variability

Organizer: Helene Jacqmin-Gadda

- Jessica Barrett jessica.barrett@mrc-bsu.cam.ac.uk

Title: Flexible Bayesian semi-parametric approaches for modelling within-individual variability in joint models

- Leonie Courcoul leonie.courcoul@u-bordeaux.fr

Title: Joint models with heteroscedastic residual variance: an application to the impact of blood pressure variability on competing health events.

- Jianxin Pan, China jianxinpan@uic.edu.cn

Title: Measuring Biomarker Variability for Survival Data

- Michael Elliott mrelliot@umich.edu

Title: Joint Modeling of Multiple Longitudinal Biomarkers and Survival Outcomes via Threshold Regression: Variability as a Predictor

Session 22 : The use of functional data analysis in multivariate settings

Organizer: Corentin Segalas

- Sheng Luo TBD
- Sophie Dabo-Niang Sonja Greven sophie.dabo@univ-lille.fr
- Luo Xiao lxiao5@ncsu.edu
- Andrew Simpkin andrew.simpkin@universityofgalway.ie

Session 23 : High-dimensional surrogate markers in multi-outcome settings

Organizer: Boris Hejblum

- Layla Parast parast@austin.utexas.edu

Title: Resilience Measures for the Surrogate Paradox

- Florian Stijven (PhD de Geert à KU Leuven) florian.stijven@kuleuven.be

Title: Meta-Analytic Evaluation of Complex Surrogate Endpoints based on the Surrogate Index

- Tianxi Cai tcai@hsph.harvard.edu

Title: Stable Multi-Surrogate Transformation for Robust and Generalizable Surrogacy

- Peter Gilbert peterg@uw.edu

Title: Surrogate endpoint evaluation for outcomes with high-dimensional features, with application to vaccines

Session 24 : Machine or deep learning for multiple longitudinal and survival data

Organizer: Virginie Rondeau

- Manel RAKEZ rakez.manel@outlook.fr

Title: Joint models and deep learning neural networks for the longitudinal analysis of mammography images in screen-detected breast cancer risk prediction

- Agathe Guilloux agathe.guilloux@inria.fr

Title: Deep Learning for Longitudinal and Survival Data: Toward Realistic Synthetic Patient Generation

- Clemens Schaechter clemens.schaechter@uniklinik-freiburg.de

Title: Mccorrelating disease progression and treatment switches in rare disease trials by integrating statistical modeling and synthetic experts

- Cécile Proust-Lima cecile.proust-lima@u-bordeaux.fr

Title: Neural controlled differential equations enhanced linear mixed model

Session 25 : Distributional and Quantile Regressions for longitudinal response

Organizer: Antoine Barbieri

- Angelo Alcaraz angelo.alcaraz@ens-paris-saclay.fr

Title: On asymmetric Laplace regression models: application to trophic diversity

- Lei Liu lei.liu@wustl.edu

Title: Efficient Estimation in Quantile Mixed Models via Smooth Check-Loss Approximation

- Mouna Abed mouna.abed@u-bordeaux.fr

Title: A joint model based on distributional regression to study the link between blood pressure and the risk of cerebral vasospasm.

- Gillian Z. Heller gillian.heller@sydney.edu.au

Title: Analysis approaches for composite outcomes in clinical trials

Session 26 : Causal inference in presence of truncation by death

Organizer: Cecile Proust-Lima cecile.proust-lima@u-bordeaux.fr

- Daniel Nevo (Israel) danielnevo@gmail.com

Title: Causal effects on non-terminal event time with application to antibiotic usage and future resistance

- Linda Valeri (NYC) lv2424@cumc.columbia.edu

Title: A path-specific effect approach to mediation analysis with time-varying mediators and time-to-event outcomes accounting for competing risks

- Maria Josefsson maria.josefsson@umu.se

Title: Flexible Bayesian Causal Inference for Longitudinal Health Data with Attrition and Mortality

- Stijn Vansteelandt. stijn.vansteelandt@ugent.be

Title: Evaluating Treatment Effects in Longitudinal Trials with Truncation by Death: An Assumption-Lean Approach

Session 27 : Clustering from multivariate data

Organizer: Anais Rouanet

- Julien Jacques

Title: Clustering of Multivariate Longitudinal Data of mixed type

- Julie Fendler (MRC Cambridge)

Title: Consensus Monte Carlo for mixtures of categorical distributions

- Alexandra Young (UCL, software Sustaln)

Session 28 : Early or intercurrent events in (long-term outcome) clinical trials

Organizer: Catherine legrand

- Philippe Lambert (Uliège, UClouvain) p.lambert@uliege.be

Title: Joint Modeling of Longitudinal Health-Related Quality of Life Data in the Presence of Competing Dropout Risks

- Georgios Kazantzidis georgios.kazantzidis@roche.com

Title: A Joint Multi-State Model for Causal Mediation Analysis adjusting for treatment switching in Oncology

- Luc Boone (EORTC) bori

Title: Estimation of inverse probability of censoring weights using shared parameter joint models for longitudinal and survival outcomes.

- Tomasz Burzykowski tomasz.burzykowski@iddi.com

Title: Early-outcome-based interim analyses in randomized clinical trials with long-term clinical endpoints

Session 29 : advanced uses of joint modeling techniques with application in longitudinal and time-to-event data

Organizer: Dimitris Rizopoulos

- Jeremy Taylor jmgt@umich.edu

Title: Dynamic Predictions and Predictimands for Salvage Therapy in Recurrent Prostate Cancer Using Joint Models

- Esra Kurum esra.kurum@ucr.edu

Title: Scalable Time-Dynamic Joint Models for Multilevel Health Data

- Christos Thomadakis cthomadak@aueb.gr

Title: Shared parameter modeling of longitudinal data allowing for possibly informative visiting process and terminal event

- Eleanor Pullenayegum eleanor.pullenayegum@sickkids.ca

Title: Addressing measurement times that are not at random in longitudinal data through joint modelling of outcomes and latent disease processes

Session 30 : Software for the Analysis of Multi-Outcome Models (INLAjoint, JMBayes2, gmvjoint, frailtypack ...)

Organizer: Denis Rustand denis@rustand.fr

- Elias Krinsky elias.krainski@kaust.edu.sa

Title: graphpcor: Models for correlation matrices based on graphs.

- Pedro Afonso p.mirandaafonso@erasmusmc.nl

- Virginie Rondeau Virginie.Rondeau@inserm.fr

Title: Assessing surrogacy from joint modeling and mediation analysis when surrogates are either censored event times or longitudinal biomarker: cancer application

- Janet Vannierkerk janet.vannierkerk@kaust.edu.sa

Title: INLAjoint and beyond: INLA for multi-outcome modeling.

Session 31 : Joint analysis of time-to-event or longitudinal markers in the presence of mortality as a competing risk

Organizer: Sebastien HANEUSE shaneuse@hsph.harvard.edu

- Eleni-Rosalina Andrinopoulou

Title: Challenges and Opportunities in Joint Modelling of Multiple Longitudinal and Survival Outcomes

- Daniels, Michael J., mdaniels@stat.ufl.edu

Title: A Bayesian Nonparametric Approach for Semi-Competing Risks with Application to Cardiovascular Health

- Sebastien Haneuse shaneuse@hsph.harvard.edu

Title: A novel framework for Joint prediction of longitudinal markers and death

- Sangita Kulathinal sangita.kulathinal@helsinki.fi

Title: Nonparametric estimation of the joint and conditional survival functions of the time to an event of interest and associated integrated covariate processes

Session 32 : Joint models with Bayesian inference

Organizer: Sangita Kulathinal (Finland)

sangita.kulathinal@helsinki.fi

- Etienne Sebag etienne.sebag@helsinki.fi

Title: Bayesian estimating Transition Rates in Two-State Non-Homogeneous Markov Jump Processes with Intermittent Observations: An Honest Time Data Augmentation Approach

- Marion keroui marion.keroui@mrc-bsu.cam.ac.uk

Title: A Bayesian partition model for multivariate functional data: discovering biological pathways by modelling the time course of gene expression level

Trinh Dong Huu trinh.dong-huu-khanh@u-bordeaux.fr

Title: Double inverse probability weighting for modeling sparsely measured longitudinal markers in presence of left and right truncation by death

Satrajit Roychoudhury satrajit.roychoudhury@pfizer.com

Title: Robust dynamic borrowing designs for randomized basket trials: a case study from the ultra-rare invasive mold infections