

PROGRAM
6th International Workshop on
Statistical Analysis on Multi-Outcome data
June 29July 1st, 2026, Bordeaux, FR

DAY1

June 29, 2026

8:30-9:00 Welcome

9:00-9:15 Introduction (...)

9:15-10:15 One invited KEYNOTE Speech / 50' talk + 10'discussion

Title Navigating the Crossroads of Statistics, Generative AI, and Genomic Health

Xihong Lin, Biostatistics, Harvard T.H. Chan School of Public Health

10:15-10:45 Coffee break

10:45-12:25 [4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 1: Deep learning in survival analysis

Organizer: Lei Liu lei.liu@wustl.edu

- Jon Steingrimsson jon_steingrimsson@brown.edu

Title: Deep Learning with Time-to-event Outcomes

- Xingqiu Zhao xingqiu.zhao@polyu.edu.hk

Title: Robust Estimation and Inference for Accelerated Failure Time Models via Double Machine Learning

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

Organizer: Catherine Legrand catherine.legrand@uclouvain.be

- 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) luc.boone@eortc.org

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 3: 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 Linnlin@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 4: 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 kerouï marion.keriou@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

12:25-13:30 Lunch

13:30-15:10 [4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 5: Some Advanced Statistical Learning Methods for Modern Scientific Data

Organizer: Lexin Li lexinli@berkeley.edu

- 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 6: Joint models for risk prediction according to marker variability

Organizer: Helene Jacqmin-Gadda Helene.Jacqmin-Gadda@u-bordeaux.fr

- 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 7: Recent Developments in Survival Analysis

Organizer: Gang Li vli@ucla.edu

- Ingrid Van Keilegom ingrid.vankeilegom@kuleuven.be

Title: On an extension of the Cox model for time-dependent covariates under dependent censoring with unknown association

- Donglin Zeng dzeng@umich.edu

Title: Simultaneous Confidence Bands for Time-Varying Hazard Ratios with Interval-Censored Data

- Danyu Lin lin@bios.unc.edu

Title: Checking the Cox Proportional Hazards Model with Interval-Censored Data

- Zhe Fei zhef@ucr.edu

Title: Adaptive Mixture-of-Experts Transformers for Joint Modeling of Irregular Longitudinal and Survival Data

Session 8 : Nonparametric and semiparametric modeling for the analysis of complex data

Organizer: Zhezhen Jin zj7@cumc.columbia.edu

- 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

15:10-15:40 Coffee break

15:40-17:20 [4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 9: Recent developments in reinforcement learning methods for precision medicine

Organizer: Donglin Zeng dzeng@umich.edu

- Alex Luedtke aluedtke@uw.edu

Title: DoubleGen: Debiased Generative Modeling of Counterfactuals

- Zhengling Qi gizhengling@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 nilanjanaaa.laha@gmail.com
Title: Learning Optimal Early Decision Treatment Rules with Multi-domain Intermediate Outcomes

Session 10: Distributional and Quantile Regressions for longitudinal response

Organizer: Antoine Barbieri antoine.barbieri@u-bordeaux.fr

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

Organizer: Mei Hao hao.mei@ruc.edu.cn

- Hao Zhang haozhang@arizona.edu
Title: A Performance-Based Framework for Transfer Learning Measurement and Guidance
- Kai Zhang zhangk@email.unc.edu
Title: BELIEF in Dependence
- Lexin Li lexin.lilexinli@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: High-dimensional surrogate markers in multi-outcome settings

Organizer: Boris Hejblum boris.hejblum@u-bordeaux.fr

- 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@hsp.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

17:20-19:00 Poster and Network session (10 posters)

Session: POSTERS

POSTERS

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**DAY2 -
June 30, 2026**

8:30-9:00 Welcome

9:00-10:40 [4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 13: Recent advances in transfer learning for biomedical applications

Organizer: Lan Luo ll1118@sph.rutgers.edu

- 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 14: Clustering from multivariate data

Organizer: Anais Rouanet anais.rouanet@u-bordeaux.fr

- Julien Jacques julien.jacques@univ-lyon2.fr

Title: Clustering of Multivariate Longitudinal Data of mixed type

- Julie Fendler (MRC Cambridge) julie.fendler@mrc-bsu.cam.ac.uk

Title: Consensus Monte Carlo for mixtures of categorical distributions

- Anais Rouanet anais.rouanet@u-bordeaux.fr

**Title: Non-parametric clustering of multivariate longitudinal data with variable selection:
Identifying sub-phenotypes of Alzheimer's Disease**

- Albert Paul albertp@mail.nih.gov

• **TBD**

Session 15: The use of functional data analysis in multivariate settings

Organizer: Corentin Segalas corentin.segalas@u-bordeaux.fr

- Luo Xiao lxiao5@ncsu.edu

**Title: Functional joint model for longitudinal and survival data with a functional covariate
with application to a longitudinal study of objective physical activity**

- Andrew Simpkin andrew.simpkin@universityofgalway.ie

Title: Estimation and Application of Derivative Multivariate Functional Principal Component Analysis

- Corentin Segalas corentin.segalas@u-bordeaux.fr
- Title: Random Survival Forest for the prediction of survival outcomes from time-varying outcomes using functional principal component analysis**
- Sophie Dabo sophie.dabo@univ-lille.fr ?

Session 16: New advances in survival analysis

Organizer: Yichuan Zhao yichuan@gsu.edu

- Edsel Pena pena@stat.sc.edu

Title: Prediction Machines Based on Concordance Correlation

- Gang Li vli@g.ucla.edu

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

- Liang Lilli15@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

10:40-11:10

Coffee break

11:10-12:50

[4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 17: Statistical Learning for Complex Data

Organizer: Xingqiu Zhao xingqiu.zhao@polyu.edu.hk

- 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 18: Software for the Analysis of Multi-Outcome Models (INLAjoint, JMbayes2, gmvjoint, frailtypack ...)

Organizer: Denis Rustand denis.rustand@u-bordeaux.fr

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

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

- 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 van Niekerk janet.vanniekerk@kaust.edu.sa

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

- Pedro Afonso p.mirandaafonso@erasmusmc.nl

**Title: The JMbayses2 R package for joint models of longitudinal and time-to-event data:
From flexible fitting to dynamic prediction and validation**

Session 19: Advanced Analytical Methods in Multi-outcome Data

Organizer: Lei Liu

lei.liu@wustl.edu

- 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 20: Frontiers in Statistical Methodologies for Precision Medicine Research

Organizer: Yuanjia Wang

yw2016@cumc.columbia.edu

- 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

13:00-14:00 lunch

14:00-15:40 [4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 21: Statistical and machine learning methods for complex biomedical data

Organizer: Qi Long,

qlong@pennmedicine.upenn.edu

- 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 22: 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

- Maria Josefsson maria.josefsson@umu.se

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

- 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

- Stijn Vansteelandt stijn.vansteelandt@ugent.be

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

Session 23: Innovative Statistical Methods for Longitudinal and Survival Analysis in Medical Studies

Organizer: Yanqing Sun

yasun@charlotte.edu

- 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 24: 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 yuchenq@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

15:40-16:10**Coffee break****16:10-17:50****[4 Parallel invited SESSIONS] 20' talk + 5'discussion**

Session 25: Machine Learning and Survival Analysis

Organizer: Jiaoguo Sun sunj@missouri.edu

- 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 liliu.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 26: Area of causal inference

Organizer: Cheng Zheng cheng.zheng@unmc.edu

- 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 27: 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 28: Trustworthy analysis of healthcare and medical data

Organizer: Fang Liu Fang.Liu.131@nd.edu

- 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

19:45-23:00 Dinner / "Le Tchanqué" / Buffet / N=170 ?

**DAY 3 -
July 1st, 2026**

8:30-9:00 Welcome

9:00-10:40 [4 Parallel invited SESSIONS] 20' talk + 5'discussion

Session 29: Machine or deep learning for multiple longitudinal and survival data
Organizer: Virginie Rondeau Virginie.rondeau@inserm.fr

- 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: Modeling 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 30: Causal mediation pathway analysis

Organizer: Peter Song pxsong@umich.edu

- 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 31: Advanced uses of joint modeling techniques with application in longitudinal and time-to-event data

Organizer: Dimitris Rizopoulos d.rizopoulos@erasmusmc.nl

- 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 cthomasdak@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 32: TBD

Organizer: Yong Chen

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

10:40-11:10

Coffee break

11:10-12:10

One invited KEYNOTE Speech / 50' talk + 10'discussion

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

Dimitris Rizopoulos, Erasmus University Medical Center

d.rizopoulos@erasmusmc.nl

12:10-12:30

Closing remarks