

Programme Overview

Sunday 21 July 2024 | Pre-Conference Courses

| | PARALLEL 1 | PARALLEL 2 | PARALLEL 3 | PARALLEL 4 | |
|-------------|---|---|--|--|--|
| 09:00-10:30 | PCC1 Causal Inference in Clinical Trials Session 1: Pre-specifying the estimand based on counterfactual outcomes | PCC2 Dynamic Predictions for Longitudinal and Time-to-Event Outcomes, with Applications in R Session 1: Introduction of the framework of joint models for longitudinal and time-to-event data | PCC3 ROC Analysis for Classification and Prediction in Practice Session 1: Fundamental concepts and metrics in the evaluation of diagnostic and predictive accuracy | PCC4 Adverse Events with Survival Time Outcome: Clinical Questions and Methods for Statistical Analysis based on Hazard Functions Session 1: Adverse events as first event, requiring a competing risk/multistate framework, with a risk benefit interpretation | |
| 10:30-11:00 | Break | Break | Break | Break | |
| 11:00-12:30 | PCC1 Causal Inference in Clinical Trials Session 2: Causal inference methods for treatment-policy estimand: Covariate adjustment | PCC2 Dynamic Predictions for Longitudinal and Time-to-Event Outcomes, with Applications in R Session 2: Joint models to estimate and evaluate dynamic risk predictions for the settings of one event and competing risks | PCC3 ROC Analysis for Classification and Prediction in Practice Session 2: Empirical and model-based estimation of an ROC curve/ Inferential procedures for a single ROC curve and its summary measures | PCC4 Adverse Events with Survival Time Outcome: Clinical Questions and Methods for Statistical Analysis based on Hazard Functions Session 2: Direct impact of the treatment in the risk of developing the adverse event, requiring a latent time variable framework, with an interpretation on causality | |
| 12:30-13:30 | Lunch break | Lunch break | Lunch break | Break | |
| 13:30-15:00 | PCC1 Causal Inference in Clinical Trials Session 3: Introduction to DAGs | PCC2 Dynamic Predictions for Longitudinal and Time-to-Event Outcomes, with Applications in R Session 3: Dynamic predictions for one longitudinal and one event outcome + JMbayes2 practical to fit joint models and estimate risk predictions (Lab1) | PCC3 ROC Analysis for Classification and Prediction in Practice Session 3: Generalised linear modelling for ROC curves, optimal prediction with combinations of biomarkers | PCC5 Statistical and Practical Aspects of the Design and Analysis of Multi-Arm Multi-Stage (MAMS) Platform Trials Session 1: Introduction to MAMS platform designs | |
| 15:00-15:30 | Break | Break | Break | Break | |
| 15:30-17:00 | PCC1 Causal Inference in Clinical Trials Session 4: Causal inference for the hypothetical estimand: Time-varying confounding | PCC2 Dynamic Predictions for Longitudinal and Time-to-Event Outcomes, with Applications in R Session 4: Dynamic predictions for multiple longitudinal outcomes and competing risks + JMbayes2 practical to fit joint models and estimate risk predictions (Lab2) | PCC3 ROC Analysis for Classification and Prediction in Practice Session 4: Multiple-class ROC analysis | PCC5 Statistical and Practical Aspects of the Design and Analysis of Multi-Arm Multi-Stage (MAMS) Platform Trials Session 2: Implementation of the statistical aspects of MAMs - Guidelines on the design and analysis of MAMs | |
| 20:00~ | STUDENTS' GATHERING | | | | |



Monday 22 July 2024 | Main Conference – Day 1

| | PLENARY | PARALLEL 1 | PARALLEL 2 | PARALLEL 3 | PARALLEL 4 |
|-------------|--|----------------------------|-----------------------------|----------------------------|----------------------------------|
| 09:00-10:30 | KEYNOTE SPEAKER | | | | |
| | Sir David Spiegelhalter | | | | |
| | Trustworthy communication of | | | | |
| | statistical evidence: What is it, | | | | |
| | and how we can get more of it | | | | |
| 10:30-11:00 | Coffee break | Coffee break | Coffee break | Coffee break | Coffee break |
| 11:00-12:30 | IS01 Causal Inference and | OCS01 Clinical Trials I | OCS02 Joint Models I | OCS03 Methods for High | OCS04 Statistical Analysis for |
| | Machine Learning | | | Dimensional Data | Complex Data Structures |
| 12:30-13:30 | Lunch break | Lunch break | Lunch break | Lunch break | Lunch break |
| 13:30-15:00 | IS02 Recent Advances in | OCS05 Clinical Trials II | OCS06 Meta-analysis | OCS07 Statistics in | OCS08 Multiple Testing / |
| | Survival Analysis with | | | Epidemiology I | Miscellaneous |
| | Complex Data Structures | | | | |
| 15:00-15:30 | Coffee break | Coffee break | Coffee break | Coffee break | Coffee break |
| 15:30-17:00 | IS03 Innovative Complex | OCS09 Joint Models II | OCS10 Survival Analysis I | OCS11 Causal Inference I | OCS12 Prediction and |
| | Adaptive Designs for | | | | Prognostic Models I |
| | Confirmatory Clinical Trials | | | | |
| | with Multiple Primary | | | | |
| | Research Questions | | | | |
| 20:00~ | WELCOME RECEPTION @ Porto Palace Hotel (outside venue) | | | | |

Tuesday 23 July 2024 | Main Conference – Day 2

| | PLENARY | PARALLEL 1 | PARALLEL 2 | PARALLEL 3 | PARALLEL 4 |
|-------------|--|---|---|--------------------------------------|-----------------------------|
| 09:00-10:30 | IS04 Optimal Individualised Treatment Rules | OCS13 Longitudinal Data Analysis I | OCS14 Artificial Intelligence and Machine Learning | OCS15 Integrative Data Analysis | OCS16 Diagnostics |
| 10:30-11:00 | Coffee break | Coffee break | Coffee break | Coffee break | Coffee break |
| 11:00-12:30 | IS05 Machine Learning Algorithms for Survival Analysis | OCS17 Causal Inference II | OCS18 Using Statistics to Improve Clinical Trials | OCS19 Imperfect Data | OCS20 Clinical Trials III |
| 12:30-13:30 | Lunch break | Lunch break | Lunch break | Lunch break | Lunch break |
| 13:30~ | FREE AFTERNOON CONFERENCE EXCURSIONS | | | | |



Wednesday 24 July 2024 | Main Conference – Day 3

| | PLENARY | PARALLEL 1 | PARALLEL 2 | PARALLEL 3 | PARALLEL 4 |
|-------------|---|---|--|----------------------------|--|
| 09:00-10:30 | IS06 Bayesian Methods in Clinical Development | OCS21 Joint Models III | OCS22 Clinical Trials IV | OCS23 Competing Risks I | OCS24 Survival Analysis II |
| 10:30-11:00 | Coffee break | Coffee break | Coffee break | Coffee break | Coffee break |
| 11:00-12:00 | PRESIDENT'S SPEAKER Prof. Chris Holmes Biostatistics in the Al Era | | | | |
| 12:00-13:30 | ISCB Annual General Meeting | | | | |
| 13:30-14:00 | Lunch break | Lunch break | Lunch break | Lunch break | Lunch break |
| 14:00-15:30 | IS07 Regulators' View of Randomised and Non- Randomised Evidence in Drug Development | OCS25 Longitudinal Data Analysis II | OCS26 Prediction and Prognostic Models II | OCS27 Competing Risks II | OCS28 Electronic Health Data |
| 15:30-16:00 | Coffee break | Coffee break | Coffee break | Coffee break | Coffee break |
| 16:00-17:30 | IS08 Combining Real-World Data and Randomised Clinical Trials | OCS29 Prediction and Prognostic Models III | OCS30 Survival Analysis III | OCS31 Clinical Trials V | OCS32 Statistics in Epidemiology II |
| 20:00~ | CONFERENCE DINNER | | | | |

Thursday 25 July 2024 | Mini-Symposia & Early Career Biostatisticians' Day

| _ | PARALLEL 1 | PARALLEL 2 | PARALLEL 3 | | |
|-------------|---|--|--|--|--|
| 09:00-10:30 | MS1: Beyond Conventional RCTs: Exploring Design Options | MS2: STRengthening Analytical Thinking for | EARLY CAREER BIOSTATISTICIANS' DAY (Part I) | | |
| | and Modelling in Drug Development (Part I) | Observational Studies (STRATOS Initiative) – Recent | Organised by the ISCB ECB SC | | |
| | In collaboration with the ISCB SiRA SC | Progress and Foci for the Future (Part I) | | | |
| | | In collaboration with the STRATOS Steering Group | | | |
| 10:30-11:00 | Coffee break | Coffee break | Coffee break | | |
| 11:00-12:30 | MS1: Beyond Conventional RCTs: Exploring Design Options | MS2: STRengthening Analytical Thinking for | EARLY CAREER BIOSTATISTICIANS' DAY (Part II) | | |
| | and Modelling in Drug Development (Part II) | Observational Studies (STRATOS Initiative) – Recent | Organised by the ISCB ECB SC | | |
| | In collaboration with the ISCB SiRA SC | Progress and Foci for the Future (Part II) | | | |
| | | In collaboration with the STRATOS Steering Group | | | |