# #BIBC2025 Schedule

Please note that the times are indicative and may have some small variations.

## Tuesday

| Start | Arc Cinema | Theatrette |
|---|---|---|
| 08:15 | Conference Registration | |
| 08:45 | Opening remarks and housekeeping | |
| 09:05 | **Keynote** – *Chair: Alison Kelly* | |
| | **On Finding Good Experiments** by *Cheng Soon Ong* (~09:05–09:55) | |
| 10:00 | **Session 1A** – *Chair: Garth Tarr* | **Session 1B** – *Chair: Scott Foster* |
| | **Data-Adaptive Automatic Threshold Calibration for Stability Selection** by *Martin Huang* (~10:00–10:20) | **Estimating abundance in small populations using pedigree reconstruction** by *Sarah Croft* (~10:00–10:20) |
| | **Variable Selection in a Joint Model for Huntington's Disease Data** by *Rajan Shankar* (~10:20–10:40) | **Accounting for heterogeneous detection rates when inferring eradication of an invasive species** by *Sean A. Martin* (~10:20–10:40) |
| | **StableMate: a regression framework for selecting stable predictors across heterogeneous data environments** by *Yidi Deng* (~10:40–11:00) | **Zero-inflated Tweedie distribution for abundance of rare ecological species** by *Nokuthaba Sibanda* (~10:40–11:00) |
| 11:00 | Morning Tea | |
| 11:30 | **Session 2A** – *Chair: Alan Welsh* | **Session 2B** – *Chair: James Curran* |
| | **Extending Spatial Capture-Recapture with the Hawkes Process** by *Alec B. M. van Helsdingen* (~11:30–11:50) | **Group Sampling with Imperfect Testing for Biosecurity Applications** by *Adele Jackson* (~11:30–11:50) |
| | **A Test for Detecting Multiple Clusters with Hotspot Spatial Properties** by *Kunihiko Takahashi* (~11:50–12:10) | **Koala Distribution and Abundance** by *Scott D. Foster* (~11:50–12:10) |

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| Start | Arc Cinema | Theatrette |
|---|---|---|
| | **Outlier-robust estimation of state-space models using a penalised approach** by *Garth Tarr* (~12:10–12:30) | **Speed: An R package for Spatially Efficient Experimental Designs** by *Sam Rogers* (~12:10–12:30) |
| | **Disease cluster detection via functional additive models incorporating spatial correlation** by *Michio Yamamoto* (~12:30–12:50) | **Running Human Subject Experiments via Online Crowdsourcing** by *Patrick Li* (~12:30–12:50) |
| 12:50 | Lunch | |
| 13:50 | **Invited Session: A Cluster of Modern Clustering Methods for Biometrics** – *Chair: Francis Hui* | **Session 3B** – *Chair: Ruth Butler* |
| | **Bayesian clustered ensemble prediction for multivariate time series** by *Shonosuke Sugasawa* (~13:50–14:20) | **Building Trust Without Peer Review: Establishing Reproducibility Standards in Industrial Statistical Consulting** by *Dean Marchiori* (~13:50–14:10) |
| | **The difficulties of clustering categorical or mixed data** by *Louise McMillan* (~14:20–14:50) | **Teaching Meta-Analysis for Systematic Reviewers with Mixed Statistical Training** by *Xu Ning* (~14:10–14:30) |
| | **Species archetype models for presence-only data** by *Skipton N.C. Woolley* (~14:50–15:20) | **Tales from the jungle: a personal perspective of statistical consulting since COVID** by *Alice Richardson* (~14:30–14:50) |
| | | **Better Conversations, Better Support: Strengthening Consulting through Practical Education and Community** by *Sharon G. Nielsen* (~14:50–15:10) |
| 15:20 | Afternoon Tea | |
| 15:50 | **Session 4A** – *Chair: Zhanglong Cao* | **Session 4B** – *Chair: Graham Hepworth* |
| | (CANCELLED) **Nested-factorial treatment models: types, their uses and examples** by *Chris Brien* (~15:50–16:10) | **Enhancing Fraud Detection in Banking through Random Survival Forests: Addressing Data Imbalance and Model Transparency** by *Arjun Sekhar* (~15:50–16:10) |
| | **Integrating Spatial Data and On-Farm Experimentation to Understand Wheat Variety Performance Across Western Australia** by *Sandra K. Tanz* (~16:10–16:30) | **Using point cloud data to discover genomic regions associated with dynamic height** by *Colleen H Hunt* (~16:10–16:30) |

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| Start | Arc Cinema | Theatrette |
|---|---|---|
| | **Multi-environment trial analysis of count data with complex variance structures using generalised linear mixed models** by *Michael H. Mumford* (~16:30–16:50) | **Automatic debiased machine learning (autoDML) for causal inference: implementation and evaluation in real-world observational studies** by *Tong Chen* (~16:30–16:50) |

## Tuesday Poster Session

- Location: Gallery
- Time: 17:00-19:00

1. **Using atmospheric transport models to predict species incursions in northern Australia** by *Zhenhua (Iris) Hao Dr*

2. **Visualisation of multinomial multilevel time-series modelling with application to current smoking status** by *Alice Richardson*

3. **Paired Comparison with Cyclic Dominance: An Extension of the Bradley–Terry Model** by *Yuki Ohno*

4. **Cleaning Text Data with Large Language Models** by *Jiajia Li*

5. **ggincerta: An R Package for Uncertainty Visualisation with a Layered Grammar of Graphics** by *Xueqi Ma*

6. **The "Theory of Sampling" (ToS) - have statisticians missed the boat?** by *Damian Collins*

7. **Evaluating Diagnostic Performance via Bayesian $F_1$ Score Estimation without a Gold Standard** by *Jun Tamura*

8. **Evaluating Remote Monitoring in Automated Peritoneal Dialysis: A Difference-in-Differences Analysis** by *Annie Conway*

9. **Judgement Post-Stratification for Covariate Adjustment in Pairwise Comparisons in Block Designs** by *Sam Rogers*

10. **Bayesian inference for sparse Gaussian copula graphical model** by *Tomotaka Momozaki*

11. **Visualization for departures from symmetry with the power-divergence-type measure in square contingency tables** by *Wataru Urasaki*

12. **Performance of Factor Analytic Mixed Models and Plackett–Luce Models for Genotype Ranking in Multi-Environment Trials** by *Jiazhe Lin*

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| Start | Arc Cinema | Theatrette |
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## Wednesday

| Start | Arc Cinema | Theatrette |
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| 08:20 | Conference Registration | |
| 08:50 | Housekeeping | |
| 08:55 | **Keynote** – *Chair: Thomas Lumley* | |
| | **Uses of gnm for Generalized (Non)linear Modelling** by *Heather L. Turner* (~08:55–09:45) | |
| 09:50 | **Session 5A** – *Chair: David Warton* | **Session 5B** – *Chair: Sam Rogers* |
| | **Scalable finite mixture of regression models for clustering species responses in ecology** by *Francis KC Hui* (~09:50–10:10) | **Using a linear mixed model based wavelet transform to model non-smooth trends arising from designed experiments** by *Clayton Forknall* (~09:50–10:10) |
| | **Elastic Net Regularization for Vector Generalized Linear Models: A Flexible Framework for High-Dimensional Biomedical Data** by *Wenqi Zhao* (~10:10–10:30) | **Functional Data Analysis for the Australian Grains Industry** by *Braden J. Thorne* (~10:10–10:30) |
| | **Fitting Generalised Linear Mixed Models using Sequential Quadratic Programming** by *Peter Green* (~10:30–10:50) | **Bayesian Ordinal Regression for Crop Development and Disease Assessment** by *Zhanglong Cao* (~10:30–10:50) |
| 10:50 | Morning Tea | |
| 11:20 | **Invited Session: Statistics for Biosecurity Surveillance** – *Chair: Robert Clark* | **Session 6B** – *Chair: Linh Nghiem* |
| | **Optimal allocation of resources between control and surveillance for complex eradication scenarios** by *Mahdi Parsa* (~11:20–11:50) | **Estimating extinction time from the fossil record using regression inversion** by *David I. Warton* (~11:20–11:40) |
| | **Inferring the rate of undetected contamination using random effects modelling of biosecurity screening histories** by *Sumonkanti Das and Robert Clark* (~11:50–12:20) | **The performance of Yu and Hoff's confidence intervals for treatment means in a one-way layout** by *Paul Kabaila* (~11:40–12:00) |

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| Start | Arc Cinema | Theatrette |
|---|---|---|
| | **Optimal sampling in border biosecurity: Application to skip-lot sampling** by *Raphael Trouve* (~12:20–12:50) | **Rate-optimal sparse gamma scale mixture detection** by *Michael Stewart* (~12:00–12:20) |
| | | **Extension of the corrected score estimator in a Poisson regression model with a measurement error** by *Kentarou Wada*  (~12:20–12:40) |
| 12:50 | Lunch | |
| 13:00 | Social Activities | |
| 18:30 | Young (at heart) Biometrician Social Event | |

## Thursday

| Start | Arc Cinema | Theatrette |
|---|---|---|
| 08:20 | Conference Registration | |
| 08:50 | Housekeeping | |
| 08:55 | **Keynote** – *Chair: Beatrix Jones* | |
| | **Modularizing Biometric Models Facilitates Multistage Computing** by *Mevin B. Hooten* (~08:55–09:45) | |
| 09:50 | **Session 7A** – *Chair: Vanessa Cave* | **Session 7B** – *Chair: Alice Richardson* |
| | **Visualize your fitted non-linear dimension reduction model in the high-dimensional data space** by *P. G. Jayani Lakshika* (~09:50–10:10) | **Reporting Odds Ratios under Fluctuating Reporting Rates in Spontaneous Reporting Systems** by *Tatsuhiko Anzai* (~09:50–10:10) |
| | **The geometry of diet: using projections to quantify the similarity between sets of dietary patterns** by *Beatrix Jones* (~10:10–10:30) | **Handling Missingness in Prevalence Estimates from National Surveys** by *Oyelola Adegboye* (~10:10–10:30) |
| | **Multivariate meta-analysis methods for high-dimensional data** by *Alysha M. De Livera* (~10:30–10:50) | **Pooled testing with penalized regression models** by *Christopher Bilder* (~10:30–10:50) |
| 10:50 | Morning Tea | |
| 11:20 | **Session 8A** – *Chair: Matthew Schofield* | **Session 8B** – *Chair: Chris Triggs* |
| | **Integrated Species Distribution Models: A Single-Index Approach** by *Quan Vu* (~11:20–11:40) | **Crossvalidation for predictive models in complex survey data** by *Thomas Lumley* (~11:20–11:40) |
| | **Simultaneous Inference for Latent Variable Predictions in Factor Analytic Models** by *Zhining Wang* (~11:40–12:00) | **A Set of Precise Asymptotics for Gaussian Variational Approximation in Generalised Linear Mixed Models** by *Nelson J. Y. Chua* (~11:40–12:00) |
| | **Model-based assessment of functional and phylogenetic diversity** by *Shaoqian Huang* (~12:00–12:20) | **An allometric differential equation model quantifies energy trade-offs between growth and reproduction under temperature variation** by *Hideyasu Shimadzu* (~12:00–12:20) |
| | **Fitting integrated species distribution models using mgcv** by *Elliot Dovers* (~12:20–12:40) | **A circular hidden Markov model for directional time series data** by *A.A.P.N.M. Perera* (~12:20–12:40) |
| 12:40 | Lunch | |
| 12:50 | | AGM |
| 13:40 | **Invited Session: Methods and Practice in Agricultural Analytics** – *Chair: Emi Tanaka* | **Session 9B** – *Chair: Sam Mason* |

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| Start | Arc Cinema | Theatrette |
|---|---|---|
| | **Evaluating the impact of trait measurement error on genetic analysis of computer vision-based phenotypes** by *Gota Morota* (~13:40–14:10) | **Do Mice Matter? The Impact of Mice on a New Zealand Ecosanctuary** by *Vanessa Cave* (~13:40–14:00) |
| | **Predication of Daily Weight Gain with Cattle Behaviour and Daily Activity Using Triaxial Accelerometer Data** by *Shuwen Hu* (~14:10–14:40) | **Modelling Species Diversity from Citizen-Science Bird Counts** by *Graham Hepworth* (~14:00–14:20) |
| | **Fishing for Heritability in the Gill Microbiome: Why Statisticians Should get out into the field** by *Elle Saber* (~14:40–15:10) | **Continental-Scale Bayesian Analysis of Acacia Flowering Phenology: A Novel Framework Integrating Phylogenetic Signal and Circular Statistics** by *Owen Forbes* (~14:20–14:40) |
| | | **Spatio-Temporal Species Distribution Modelling** by *Sam Mason* (~14:40–15:00) |
| 15:10 | Afternoon Tea | |
| 15:40 | **Session 10A** – *Chair: Julian Taylor* | **Session 10B** – *Chair: Oyelola Adegboye* |
| | **The *equalto* covariance structure for meta-analysis using the `glmmTMB` R package** by *Coralie C. Williams* (~15:40–16:00) | **Risk of Guillain-Barré Syndrome after COVID-19 vaccination and SARS-CoV-2 infection: A multinational self-controlled case series study** by *Han Lu* (~15:40–16:00) |
| | **A Proportional Random Effect Block Bootstrap for Highly Unbalanced Clustered Data** by *Zhi Yang Tho* (~16:00–16:20) | **Childhood Risk and Resilience Factors for Pasifika Youth Respiratory Health: Accounting for Attrition and Missingness** by *Siwei Zhai* (~16:00–16:20) |
| | **Extending diagnostic validity meta-analysis to several diagnostic guidelines** by *Alain C. Vandal* (~16:20–16:40) | **A missing data detective story – how I navigated through a perfect storm of drop-out's, COVID and informative missingness.** by *Eve Slavich* (~16:20–16:40) |
| 18:30 | Conference Dinner | |

## Friday

| Start | Arc Cinema | Theatrette |
|-------|------------|------------|
| 08:30 | Conference Registration | |
| 09:00 | Housekeeping | |
| 09:05 | **Keynote** – *Chair: Louise McMillan* | |
| | **Saddlepoint approximations for likelihoods** by *Jesse Goodman* (~09:05–09:55) | |
| 10:00 | **Session 11A** – *Chair: Yidi Deng* | **Session 11B** – *Chair: David Baird* |
| | **False Discovery Rate Controlled Robust Variable Selection under Cellwise Contamination** by *Xiaoya Sun* (~10:00–10:20) | **Genstat Markdown: Reproducible Research with Genstat** by *James M. Curran* (~10:00–10:20) |
| | **A covariate-adaptive test for replicability across multiple studies with false discovery rate control** by *Dennis Leung* (~10:20–10:40) | **The 4S method for the longitudinal analysis of multidimensional questionnaires: application to Parkinson's disease progression from patient perception** by *Tiphaine Saulnier* (~10:20–10:40) |
| | **A semi-supervised framework for diverse multiple hypothesis testing scenarios** by *Jack Freestone* (~10:40–11:00) | `heritable` **An R package for heritability calculations for plant breeding trials** by *Fonti Kar* (~10:40–11:00) |
| 11:00 | Morning Tea | |
| 11:30 | **Keynote** – *Chair: James Curran* | |
| | **Optimizing Research Impact Through Interdisciplinary and Collaborative Research** by *Charmaine B. Dean* (~11:30–12:20) | |
| 12:20 | Closing Ceremony | |
| 12:40 | Lunch | |