

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

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

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Start	Arc Cinema	Theatrette
	<b>Integrating Spatial Data and On-Farm Experimentation to Understand Wheat Variety Performance Across Western Australia</b> by Sandra K. Tanz (~16:10–16:30)	<b>Using point cloud data to discover genomic regions associated with dynamic height</b> by Colleen H Hunt (~16:10–16:30)
	<b>Multi-environment trial analysis of count data with complex variance structures using generalised linear mixed models</b> by Michael H. Mumford (~16:30–16:50)	<b>Automatic debiased machine learning (autoDML) for causal inference: implementation and evaluation in real-world observational studies</b> 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

**Wednesday**

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

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

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Start	Arc Cinema	Theatrette
13:40	<b>Invited Session: Methods and Practice in Agricultural Analytics – Chair: Emi Tanaka</b>	<b>Session 9B – Chair: Sam Mason</b>
	<b>Evaluating the impact of trait measurement error on genetic analysis of computer vision-based phenotypes</b> by Gota Morota (~13:40–14:10)	<b>Do Mice Matter? The Impact of Mice on a New Zealand Ecosanctuary</b> by Vanessa Cave (~13:40–14:00)
	<b>Predication of Daily Weight Gain with Cattle Behaviour and Daily Activity Using Triaxial Accelerometer Data</b> by Shuwen Hu (~14:10–14:40)	<b>Modelling Species Diversity from Citizen-Science Bird Counts</b> by Graham Hepworth (~14:00–14:20)
	<b>Fishing for Heritability in the Gill Microbiome: Why Statisticians Should get out into the field</b> by Elle Saber (~14:40–15:10)	<b>Continental-Scale Bayesian Analysis of Acacia Flowering Phenology: A Novel Framework Integrating Phylogenetic Signal and Circular Statistics</b> by Owen Forbes (~14:20–14:40)
15:10	Afternoon Tea	<b>Spatio-Temporal Species Distribution Modelling</b> by Sam Mason (~14:40–15:00)
15:40	<b>Session 10A – Chair: Julian Taylor</b>	<b>Session 10B – Chair: Oyelola Adegbeye</b>
	<b>The equalto covariance structure for meta-analysis using the glmmTMB R package</b> by Coralie C. Williams (~15:40–16:00)	<b>Risk of Guillain-Barré Syndrome after COVID-19 vaccination and SARS-CoV-2 infection: A multinational self-controlled case series study</b> by Han Lu (~15:40–16:00)
	<b>A Proportional Random Effect Block Bootstrap for Highly Unbalanced Clustered Data</b> by Zhi Yang Tho (~16:00–16:20)	<b>Childhood Risk and Resilience Factors for Pasifika Youth Respiratory Health: Accounting for Attrition and Missingness</b> by Siwei Zhai (~16:00–16:20)
	<b>Extending diagnostic validity meta-analysis to several diagnostic guidelines</b> by Alain C. Vandal (~16:20–16:40)	<b>A missing data detective story – how I navigated through a perfect storm of drop-out's, COVID and informative missingness.</b> 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	<b>Keynote – Chair: Louise McMillan</b>  <b>Saddlepoint approximations for likelihoods by Jesse Goodman</b> (~09:05–09:55)	
10:00	<b>Session 11A – Chair: Yidi Deng</b>  <b>False Discovery Rate Controlled Robust Variable Selection under Cellwise Contamination by Xiaoya Sun</b> (~10:00–10:20)  <b>A covariate-adaptive test for replicability across multiple studies with false discovery rate control by Dennis Leung</b> (~10:20–10:40)   <b>A semi-supervised framework for diverse multiple hypothesis testing scenarios by Jack Freestone</b> (~10:40–11:00)	<b>Session 11B – Chair: David Baird</b>  <b>Genstat Markdown: Reproducible Research with Genstat by James M. Curran</b> (~10:00–10:20)  <b>The 4S method for the longitudinal analysis of multidimensional questionnaires: application to Parkinson's disease progression from patient perception by Tiphaine Saulnier</b> (~10:20–10:40)  <b>heritable An R package for heritability calculations for plant breeding trials by Fonti Kar</b> (~10:40–11:00)
11:00	Morning Tea	
11:30	<b>Keynote – Chair: James Curran</b>  <b>Optimizing Research Impact Through Interdisciplinary and Collaborative Research by Charmaine B. Dean</b> (~11:30–12:20)	
12:20	Closing Ceremony	
12:40	Lunch	