#BIBC2025 Schedule

Please note that the times are approximate and may not be guaranteed to run on time.

Tuesday

Start	Arc Cinema	Theatrette
08:15	Conference Registration	
08:45	Opening remarks and housekeeping	
09:05	**Keynote** – *Chair: Chris Brien*	
	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)

(continued)

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*
	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)

(continued)

Start	Arc Cinema	Theatrette
	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)
	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*

Wednesday

Start	Arc Cinema	Theatrette
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)
	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)

(continued)

Start	Arc Cinema	Theatrette
12:50	Lunch	
13:00	Social Activities	
18:30	Young (at heart) Biometrician Social Event	

Start	Arc Cinema	Theatrette
12:50	Lunch	

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

(continued)

Start	Arc Cinema	Theatrette
13:40	**Invited Session: Methods and Practice in Agricultural Analytics** – *Chair: Emi Tanaka*	**Session 9B** – *Chair: Sam Mason*
	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	