

#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: Emi Tanaka On Finding Good Experiments by Cheng Soon Ong (~09:05–09:55)	
10:00	Session 1A – Chair: Garth Tarr Data-Adaptive Automatic Threshold Calibration for Stability Selection by Martin Huang (~10:00–10:20) Variable Selection in a Joint Model for Huntington's Disease Data by Rajan Shankar (~10:20–10:40) StableMate: a regression framework for selecting stable predictors across heterogeneous data environments by Yidi Deng (~10:40–11:00)	Session 1B – Chair: Scott Foster Estimating abundance in small populations using pedigree reconstruction by Sarah Croft (~10:00–10:20) Accounting for heterogeneous detection rates when inferring eradication of an invasive species by Sean A. Martin (~10:20–10:40) 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 Extending Spatial Capture-Recapture with the Hawkes Process by Alec B. M. van Helsdingen (~11:30–11:50) A Test for Detecting Multiple Clusters with Hotspot Spatial Properties by Kunihiko Takahashi (~11:50–12:10)	Session 2B – Chair: James Curran Group Sampling with Imperfect Testing for Biosecurity Applications by Adele Jackson (~11:30–11:50) 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 Julian Taylor (~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 Bayesian clustered ensemble prediction for multivariate time series by Shonosuke Sugasawa (~13:50–14:20)	Session 3B – Chair: Ruth Butler Building Trust Without Peer Review: Establishing Reproducibility Standards in Industrial Statistical Consulting by Dean Marchiori (~13:50–14:10) Teaching Meta-Analysis for Systematic Reviewers with Mixed Statistical Training by Xu Ning (~14:10–14:30) 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 (CANCELLED) Nested-factorial treatment models: types, their uses and examples by Chris Brien (~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)	Session 4B – Chair: Graham Hepworth Enhancing Fraud Detection in Banking through Random Survival Forests: Addressing Data Imbalance and Model Transparency by Arjun Sekhar (~15:50–16:10) Using point cloud data to discover genomic regions associated with dynamic height by Colleen H Hunt (~16:10–16:30)

(continued)

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

(continued)

Start	Arc Cinema	Theatrette
-------	------------	------------

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 Scalable finite mixture of regression models for clustering species responses in ecology by Francis KC Hui (~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) (CANCELLED) Fitting Generalised Linear Mixed Models using Sequential Quadratic Programming by Peter Green (~10:30–10:50)	Session 5B – Chair: Michael Mumford Using a linear mixed model based wavelet transform to model non-smooth trends arising from designed experiments by Clayton Forknall (~09:50–10:10) Functional Data Analysis for the Australian Grains Industry by Braden J. Thorne (~10:10–10:30) 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 Optimal allocation of resources between control and surveillance for complex eradication scenarios by Mahdi Parsa (~11:20–11:50) Inferring the rate of undetected contamination using random effects modelling of biosecurity screening histories by Sumonkanti Das and Robert Clark (~11:50–12:20)	Session 6B – Chair: Linh Nghiem Estimating extinction time from the fossil record using regression inversion by David I. Warton (~11:20–11:40) The performance of Yu and Hoff's confidence intervals for treatment means in a one-way layout by Paul Kabaila (~11:40–12:00)

(continued)

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)
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 Adegbeye (~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

(continued)

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 The <i>equalto</i> covariance structure for meta-analysis using the <i>glmmTMB R package</i> by Coralie C. Williams (~15:40–16:00)	Session 10B – Chair: Arjun Sekhar 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 False Discovery Rate Controlled Robust Variable Selection under Cellwise Contamination by Xiaoya Sun (~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) A semi-supervised framework for diverse multiple hypothesis testing scenarios by Jack Freestone (~10:40–11:00)	Session 11B – Chair: David Baird Genstat Markdown: Reproducible Research with Genstat by James M. Curran (~10:00–10:20) 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) 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	