

#BIBC2025 Schedule

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	
10:00	Session 1A – Chair: Garth Tarr Data-Adaptive Automatic Threshold Calibration for Stability Selection by Martin Huang Variable Selection in a Joint Model for Huntington's Disease Data by Rajan Shankar StableMate: a regression framework for selecting stable predictors across heterogeneous data environments by Yidi Deng	Session 1B – Chair: Scott Foster Estimating abundance in small populations using pedigree reconstruction by Sarah Croft Accounting for heterogeneous detection rates when inferring eradication of an invasive species by Sean A. Martin Zero-inflated Tweedie distribution for abundance of rare ecological species by Nokuthaba Sibanda
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 A Test for Detecting Multiple Clusters with Hotspot Spatial Properties by Kunihiko Takahashi Outlier-robust estimation of state-space models using a penalised approach by Garth Tarr	Session 2B – Chair: James Curran Group Sampling with Imperfect Testing for Biosecurity Applications by Adele Jackson Koala Distribution and Abundance by Scott D. Foster Speed: An R package for Spatially Efficient Experimental Designs by Sam Rogers

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Start	Arc Cinema	Theatrette
	Disease cluster detection via functional additive models incorporating spatial correlation by Michio Yamamoto	Running Human Subject Experiments via Online Crowdsourcing by Patrick Li
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 The difficulties of clustering categorical or mixed data by Louise McMillan Species archetype models for presence-only data by Skipton N.C. Woolley and Scott Woolley	Session 3B – Chair: Ruth Butler Building Trust Without Peer Review: Establishing Reproducibility Standards in Industrial Statistical Consulting by Dean Marchiori Teaching Meta-Analysis for Systematic Reviewers with Mixed Statistical Training by Xu Ning Tales from the jungle: a personal perspective of statistical consulting since COVID by Alice Richardson Better Conversations, Better Support: Strengthening Consulting through Practical Education and Community by Sharon G. Nielsen
15:20	Afternoon Tea	
15:50	Session 4A – Chair: Zhanglong Cao Nested-factorial treatment models: types, their uses and examples by Chris Brien Integrating Spatial Data and On-Farm Experimentation to Understand Wheat Variety Performance Across Western Australia by Sandra K. Tanz Multi-environment trial analysis of count data with complex variance structures using generalised linear mixed models by Michael H. Mumford	Session 4B – Chair: Graham Hepworth Enhancing Fraud Detection in Banking through Random Survival Forests: Addressing Data Imbalance and Model Transparency by Arjun Sekhar Using point cloud data to discover genomic regions associated with dynamic height by Colleen H Hunt Automatic debiased machine learning (autoDML) for causal inference: implementation and evaluation in real-world observational studies by Tong Chen

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 BradleyTerry 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 PlackettLuce Models for Genotype Ranking in Multi-Environment Trials** by *Jiazhe Lin*

Wednesday

Start	Arc Cinema	Theatrette
08:30	Conference Registration	
08:50	Housekeeping	
08:55	Keynote – Chair: Thomas Lumley Uses of gnm for Generalized (Non)linear Modelling by <i>Heather L. Turner</i>	
09:50	Session 5A – Chair: David Warton Scalable finite mixture of regression models for clustering species responses in ecology by <i>Francis KC Hui</i>	Session 5B – Chair: Sam Rogers Using a linear mixed model based wavelet transform to model non-smooth trends arising from designed experiments by <i>Clayton Forknall</i>

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Start	Arc Cinema	Theatrette
	Elastic Net Regularization for Vector Generalized Linear Models: A Flexible Framework for High-Dimensional Biomedical Data by <i>Wenqi Zhao</i>	Functional Data Analysis for the Australian Grains Industry by <i>Braden J. Thorne</i>
10:50	Fitting Generalised Linear Mixed Models using Sequential Quadratic Programming by <i>Peter Green</i>	Bayesian Ordinal Regression for Crop Development and Disease Assessment by <i>Zhanglong Cao</i>
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 <i>Mahdi Parsa</i>	Estimating extinction time from the fossil record using regression inversion by <i>David I. Warton</i>
	Inferring the rate of undetected contamination using random effects modelling of biosecurity screening histories by <i>Sumonkanti Das and Robert Clark</i>	The performance of Yu and Hoff's confidence intervals for treatment means in a one-way layout by <i>Paul Kabaila</i>
	Optimal sampling in border biosecurity: Application to skip-lot sampling by <i>Raphael Trouve</i>	Rate-optimal sparse gamma scale mixture detection by <i>Michael Stewart</i>
12:50	Lunch	Extension of the corrected score estimator in a Poisson regression model with a measurement error by <i>Kentarou Wada</i>
13:00	Social Activities	
18:30	Young (at heart) Biometrician Social Event	

Thursday

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

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Start	Arc Cinema	Theatrette
13:40	Invited Session: Methods and Practice in Agricultural Analytics – Chair: Emi Tanaka Evaluating the impact of trait measurement error on genetic analysis of computer vision-based phenotypes by Gota Morota Predication of Daily Weight Gain with Cattle Behaviour and Daily Activity Using Triaxial Accelerometer Data by Shuwen Hu and Antonio Hu Fishing for Heritability in the Gill Microbiome: Why Statisticians Should get out into the field by Elle Saber	Session 9B – Chair: Sam Mason Do Mice Matter? The Impact of Mice on a New Zealand Ecosanctuary by Vanessa Cave Modelling Species Diversity from Citizen-Science Bird Counts by Graham Hepworth
15:10	Afternoon Tea	
15:40	Session 10A – Chair: Julian Taylor The *equalto* covariance structure for meta-analysis using the ‘glmmTMB’ R package by Coralie C. Williams Simulation-based Inference about Variance Components by Farwa Saleem A Proportional Random Effect Block Bootstrap for Highly Unbalanced Clustered Data by Zhi Yang Tho	Session 10B – Chair: Oyelola Adegboye Extending diagnostic validity meta-analysis to several diagnostic guidelines by Alain C. Vandal Risk of Guillain-Barré Syndrome after COVID-19 vaccination and SARS-CoV-2 infection: A multinational self-controlled case series study by Han Lu Childhood Risk and Resilience Factors for Pasifika Youth Respiratory Health: Accounting for Attrition and Missingness by Siwei Zhai A missing data detective story how I navigated through a perfect storm of drop-outs, COVID and informative missingness. by Eve Slavich

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Start Arc Cinema

Theatrette

18:30 Conference Dinner

Friday

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