

VOLUME 2025 - ISSUE 4

RESEARCH REVIEW



TOP PUBLICATION

Journal of the American Statistical
Association

THE RSFAS FAMILY

Goodbye Donna & welcome Kerri
and Bao

SENSORY PLANT

Lamb's Ear

Welcome to the Issue 4 of Research Review for 2025!

In this issue we farewell our beloved Donna, welcome new members to RSFAS family and celebrate our many publication and grant successes!

But first, read about this quarter's sensory plant: Lamb's Ear (Stachys byzantina)

A super hardy, low-maintenance, mat-forming perennial known for its soft, fuzzy, silver-green leaves. It thrives in full sun, requires well-drained soil, is highly drought-tolerant, and grows 15-30cm tall, making it ideal for ground cover, borders, and rock gardens.

Lamb's ear (Stachys byzantina) is an essential, non-toxic, and highly tactile plant often used in sensory gardens, especially those designed for people who are visually impaired.

Its thick, velvety, leaves naturally invite touch and gentle exploration. The plant's silver-green colour stands out against darker foliage, creating visual contrast even for people with low vision.

In late spring and summer, it grows tall stems with small purple-pink flowers that attract bees and butterflies.

Beyond its sensory qualities, lamb's ear is hardiness and drought-tolerance make it super easy for beginners or children to grow (it grows like a weed in our garden).

Plant Care

- **Light:** Lamb's ear grows best in full sun, though it can tolerate light shade.
- **Soil:** Prefers well-draining soil. It dislikes wet or muddy areas, which may cause the leaves to rot.

- **Space:** Plants should be spaced 30-45 cm apart so they can spread into soft, cushiony clusters.
- **Every 2-3 years,** you can divide the plant into smaller clumps and replant them around your sensory garden
- **Water regularly** for the first few weeks while the plant is establishing. Once mature, avoid overwatering—this can cause rot or mildew.
- **Cleaning and Pruning:** Gently remove brown or wilted leaves to keep the plant healthy and tidy. In summer, trim off tall flower stalks if they become floppy or if you prefer a softer, leaf-only look.

Give this plant a go in your garden – I've never met a child (or adult) who doesn't love this easy growing plant.

Happy reading!



LAMB'S EAR

THE RSFAS FAMILY

Sadly, we say goodbye Donna as she heads off into retirement. Donna has had an extraordinary career—10 wonderful years with RSFAS and 30+ years of dedicated service to the Australian National University. Donna's warmth, professionalism, and steady guidance have left a lasting mark on colleagues, students, and the broader community. Her institutional knowledge, generous spirit, and quiet commitment to excellence have strengthened everything she has touched. Beyond her achievements, it is her kindness and collegiality that we will miss most.

Donna, thank you for your decades of service and friendship. RSFAS and ANU are better because of you. We wish you every happiness in your well-earned retirement!



Meet Kerri Argall

Kerri is the new School Manager for RSFAS and is currently working alongside Donna before Donna retires at the end of February. Kerri has been working in HR at ANU for 11 years, spending nine of those at CBE, and is excited to bring her experience and energy to the School. She is passionate about creating positive employee experiences and being part of a workplace where people feel supported and able to thrive. She's really looking forward to working with all the RSFAS staff and contributing to the School's ongoing success. Outside of work, Kerri enjoys watching AFL, going camping, and spending time with her busy household — two teenage kids, her husband, and their two dogs.

Meet Bao Anh Vu

Bao recently began her position as a postdoctoral fellow at the Australian National University, working at the intersection of statistics and environmental science. She is collaborating with Dr Francis Hui on model-based clustering approaches for defining bioregions and improving the monitoring and management of coral species in the Great Barrier Reef. Bao previously completed her PhD in Applied Statistics at the University of Wollongong, where she developed Bayesian statistical methods for calibrating mathematical models of Antarctic ice flow, with the aim of improving future sea level rise projections.





GRANT SUCCESS

money, money, money

Janice Scealy

Rio Tinto Centre For Future Materials Phase 2 of the Copper Grand Challenge

Title: GEM-Cu: Geodynamic Environments for Mineralisation of Cu (Copper).

This is a transdisciplinary international collaboration which is part of the ANU Rio Tinto Centre For Future Materials. The project aims to build a revolutionary digital model that looks deep inside our planet and far back in time to understand how copper deposits form. Traditional exploration methods focus on surface clues geological mapping, geochemical sampling, and geophysical surveys.

Amount \$1.1 million USD (2026-2028)

Emi Tanaka

Project Partner for UK Research and Innovation - Bioinformatics and Biological Resources Fund (24BBR)

Title: "HiPerBreedSim: High performance breeding simulations with complex genomes & phenotypes" with Roslin Institute at the University of Edinburgh

The HiPerBreedSim project will enhance the agrigenetic simulation ecosystem. This will supercharge theoretical and applied studies in selective breeding and the adoption of their results in practice.

Amount £1,306,690.59

Congratulations Janice and Emi!

AWARDS

Janice Scealy was awarded the 2025 ANU College of Business and Economics Research Award For Excellence in Research Engagement & Social Impact.

This is a college level award covering the disciplines of Accounting, Actuarial studies, Economics, Finance, Management and Statistics. She received this award for demonstrating exceptional distinction in research impact through engagement with industry or government.



Anna von Reibnitz and Jananie William received the Fran Hayes Award Special Commendation (as the runner-up for the main award) for their paper:

Curtis, S., William, J., von Reibnitz, A., Glennie, M. and Pekarek, A. 2025. "Bridging disclosure and action: The role of intermediaries in gender pay gap regulation", Journal of Industrial Relations, 10.1177/00221856251337198.

The award recognises "a major contribution to research on equity in the study of industrial relations"



Sumon Das, Kassel Hingee, and Emi Tanaka were Highly Commended for the 2024 Vice Chancellor's Award for Programs that Enhance Learning as part of the Statistical Support Network



Research Awards from the Biometrics in the Bush Capital

- Maggie Xueqi Ma (PhD student in Statistics): People's Choice Poster Prize at the Biometrics in the Bush Capital
- Jenny Jiazhe Liu (Honours Student in Statistics): Honourable Mention for the Student Poster Prize
- Nelson Chua (PhD student in Statistics): Won the Best Student Speaker Prize at the Biometrics in the Bush Capital.
- Piumi Perera (PhD student in Statistics): Honourable Mention for the Best Student Speaker Prize



Congratulations Janice, Anna, Jananie, Sumon, Kassel, Emi, Maggie, Jenny, Nelson, and Piumi!



BIOMETRICS IN THE BUSH CAPITAL

Emi Tanaka, Alan Welsh, Fonti Kar, Yidi Deng, Patrick Weihao Li, and Quan Vu: organised, as part of the Local Organising Committee, the Biometrics in the Bush Capital Conference, Nov 24-28

As part of the conference, Francis Hui, Robert Clark, Emi Tanaka each organised an invited session at the Biometrics in the Bush Capital titled "A Cluster of Modern Clustering Methods for Biometrics", "Statistics for Biosecurity Surveillance", "Methods and Practice in Agricultural Analytics", respectively.

Presentations at the conference from RSFAS include:

- Zhining Wang (PhD student in Statistics): "Simultaneous Inference for Latent Variable Predictions in Factor Analytic Models"
- Zhi Yang Tho: "A Proportional Random Effect Block Bootstrap for Highly Unbalanced Clustered Data"
- Piumi Perera (PhD student in Statistics): "A circular hidden Markov model for directional time series data"
- Nelson Chua (PhD student in Statistics): "A Set of Precise Asymptotics for Gaussian Variational Approximation in Generalised Linear Mixed Models"

- Francis Hui: "Scalable finite mixture of regression models for clustering species responses in ecology"
- Fonti Kar: "heritable: An R package for heritability calculations for plant breeding trials"
- Yidi Deng: "StableMate: a regression framework for selecting stable predictors across heterogeneous data environments"
- Patrick Weihao Li: "Running Human Subject Experiments via Online Crowdsourcing"
- Sumon Das: "Inferring the rate of undetected contamination using random effects modelling of biosecurity screening histories"
- Quan Vu: "Integrated Species Distribution Models: A Single-Index Approach"

For more information, please visit the conference [website](#).

Well done to all!



EXTERNAL ENGAGEMENT

presentations, media mentions and more

Emi Tanaka

- Now the Chief Editor of the R Journal
- Elected as a council member of the International Biometrics Society Australasian Region
- Invited to be a Member of the Scientific Committee for the 41st International Workshop on Statistical Modelling
- External presentations
 - Growing success with statistics in plant breeding” at the Forum “Math for Industry”, Incheon, Korea
 - “Analytics for the Australian Grains Industry” at the Lab of Biometry and Bioinformatics, University of Tokyo, Tokyo, Japan
 - “Leveraging large language models in a composable system to design and simulate experiments” at the Advances in Data Science Mini Symposium, Kyushu, Japan
 - “Introduction to design tools and analysis” at the AAGI x Wageningen Workshop, Queensland, Australia
 - “Toward a unified system for crop analytics” at the AAGI Symposium, Queensland, Australia
 - “Leveraging large language models in a composable system to design and simulate plant experiments” at the EUCARPIA Biometrics in Plant Breeding, Edinburgh, UK





EXTERNAL ENGAGEMENT

Geoff Warren

- External presentations
 - Australian Government Actuary Seminar Series, December 2025 – retirement defaults
 - CEPAR Colloquium on Pensions and Retirement Research, November 2025 – retirement choice architecture panel
 - IBR Engage 2025, November 2025 – Behavioural influences in retirement
 - Conexus Fiduciary Investors Symposium, October 2025 – challenges for super industry; investing in decumulation panel
 - Investment Magazine Roundtable, October 2025 – systemic risk in super)
 - SuperGuide webinar, October 2025 – Investing for retirement
- Media coverage
 - Australian Financial Review opinion article, “Super performance test should measure what matters most to members”, 17 November 2025 (with David Bell)
 - Retirement Magazine, “What ‘defaults’ mean for the retirement policy agenda”, 19/11/25 (with David Bell)
 - Articles where research covered or quoted extensively – Australian Financial Review, The Australian, Financial Standard, Investment Magazine (2 articles), Professional Planner, LAPF Investments (UK)

Geoff Warren (cont.)

- One-on-one meetings with policymakers and regulators:
 - Treasury – two meetings on YFYS performance test
 - APRA – on performance testing of retirement products
 - RBA – on liquidity issues in super industry





EXTERNAL ENGAGEMENT

Francis Hui made the following external presentations

- Invited Talk on "Advances in model-based clustering in community ecology" -- Symposium on Advances in Data Science: Bridging Statistics and AI in Health, Agriculture, Climate, and Ecology, Kyushu University, Japan 2 Sep 2025
- Francis Hui: "Scalable Finite Mixture of Regression Models for Community Ecology" at the Advances in Data Science Mini Symposium, Kyushu, Japan

Janice Scealy made the following external presentations

- November 11, 2025, Invited seminar, School of Mathematics and Statistics, University of Melbourne. Talk title: Going nuclear with statistics.
- October 28, 2025, Invited seminar, School of Mathematics, Nanjing University, China. Talk title: Going nuclear with statistics.

Phong Ngo made the following external presentations

- "Interest rates, debt and domestic violence" (paper joint with Lin Hu and Kun Li) at the Australian Gender Economics Workshop, February 2026
- Discussed "The impact of mental health on labour market outcomes: New evidence from genetic markers" by Nicolau Martin Bassols, John P. de New, Sonja C. de New, Danusha Jayawardana, and Clement C. Wong at the Australian Gender Economics Workshop, February 2026

Bruce Grundy made the following external presentations

- "Constructing Financing and Operating Risk Measures from Textual Risk Disclosures" (paper joint with Stefan Petry) at the 2025 Monash Winter Finance Conference
- "Constructing Financing and Operating Risk Measures from Textual Risk Disclosures" (paper joint with Stefan Petry) at the October Finance Seminar series at Swinburn University of Technology.
- Discussion of "Charitable Capital Allocation: Evidence from Private Foundations" by Zhongjin Lu and Steven G. Malliaris at the 2026 Finance Down Under Conference.

Nhan Le made the following external presentations

- "Regulating the Ranks: How Employment Protection Legislation Shapes CEO Compensation Worldwide" at the International Finance conference at University of Nagasaki, Japan.
- "Unlocking Mobility: Broker Protocol and Market Competition in Financial Advisory Industry" at the seminar of University of Nagasaki, Japan.
- "Workforce Mobility and Corporate Misconduct: The Governance Effects of Noncompete Agreements" (presented by coauthors) at the Conference on Empirical Legal Studies (CELS) at Georgetown University and AFBC conference at the UNSW

Andy Wood was invited to the conference Geometry and Statistics at the Center of Mathematical Sciences and Applications, Harvard University in November 2025, and gave a talk entitled Empirical likelihood on stratified spaces

HDR NEWS

““Being a graduate student is like becoming all of the Seven Dwarves. In the beginning you’re Dopey and Bashful. In the middle, you are usually sick (Sneezy), tired (Sleepy), and irritable (Grumpy). But at the end, they call you Doc, and then you’re Happy.” - Ronald T. Azuma

We welcome new student and congratulate those who have recently submitted and completed!

- New students
 - Jiajun Qi (Actuarial),
 - Tao (Jack) Shan (Finance)
- Submissions
 - Yaodong Zhang (Finance)
- Completions:
 - Sapphasak Chatchawan (Finance) - Three Essays on the Financial Advisory Industry: Diversification, Competition, and Misconduct
 - Yonghe Lu (Statistics) - High-Dimensional Inference under Dynamics and Complexity: Applications in Biology and Finance

Finally, Sapphasak Chatchawan (Finance) has won a placement as Assistant professor of finance at Thammasat Business School, Bangkok, Thailand





PUBLICATIONS

“Rejection doesn't mean you aren't good enough. It means the other person failed to notice what you have to offer.” - Mark Twain

Another great quarter of publication success for the school!

Congratulations to Jo Drienko, Chao Gao, Gaurav Khemka, William Lim, Kassel Hingee, Janice Sealy, Andy Wood, Nahn Le, Raymond (Wai-Man) Liu, Francis Hui, Jacie Liu, Emi Tanaka, Patrick Weihao Li, Kelly (Xin) Liu, Terry Zhang, Yaodong Zhang, Piumi Perera, and Allen Welsh on their recent publication success, full details follow.

A special mention to Kassel Janice and Andy for their Journal of American Statistical Association publication!





PUBLICATIONS

Drienko, J., Gao, C., & Liu, Y. (2026). A Skew is a Skill: Portfolio Skewness of Mutual Fund Holdings. *Journal of Empirical Finance* 85, 101687.

Escobar, M., Khemka, G. & Lim, W. (2026). The Power of Human Capital in Lifecycles. Insights from a Flexible Framework. Forthcoming in the *Scandinavian Actuarial Journal*.

Hingee, K., Scealy, J. & Wood, A. (2026). Nonparametric Bootstrap Inference for the Eigenvalues of Geophysical Tensors. Forthcoming in the *Journal of the American Statistical Association*.

James, C., Le, N., & Nguyen, D. (2026). The Sensitivity of Bank Performance to Local Housing Prices: Evidence from Diversified and Local Banks. Forthcoming in the *Journal of Banking Finance and Accounting*

Keck W.L., Deng, E., Liu, W.-M., Kanekar, R., Lomivotrov, & V., Sharma S. (2026). Effect of Low-Dose Propofol infusion with Sevoflurane Versus Propofol-Only Total Intravenous Anesthesia on Postoperative nausea and vomiting in High-risk Patients: A Single-blind Randomized Controlled Clinical Trial. Forthcoming in *BMC Anesthesiology*

Korhonen, P., Hui, F.K.C., Niku, J., Taskinen, S., & van der Veen, B. (2025). gllvm 2.0: Fast Fitting of Advanced Ordination Methods and Joint Species Distribution Models. *PeerJ* <<https://peerj.com/articles/20338/>>

Li, J.; & Liu, J.J. (2026). Assessing Ethereum's Diversification Role with Bitcoin and Major Equity Index – A Bayesian Mixture Copula Approach. *Computational Economics* <https://doi.org/10.1007/s10614-025-11302-7>.





PUBLICATIONS

Li, J, Cheng, F., Liu, J. J., & Tanaka, E., (2025) Analysis of Life Expectancies with Manifold Learning and Neural Networks. *Genus* 81, 8

Li, W., Cook, D., Tanaka, E., VanderPlas, S., & Ackermann, K., (2026). Automated Residual Plot Assessment With the R Package *autovi* and the Shiny Application *autovi.web*. *Australian and New Zealand Journal of Statistics* 68, e70027



Liu, X., Zhang, T. & Zhang, Y. (2026). A Hidden Cost of ETF Investing: Retail Demand Shocks and Limits to Arbitrage. Forthcoming in the *Journal of Banking and Finance*

Perera, A.A.P.N.M., Hui, F.K.C., Huston, C., & Welsh, A.H. (2025). A Circular Hidden Markov Model for Directional Time Series Data. *Japanese Journal of Statistics and Data Science*. <<https://doi.org/10.1007/s42081-025-00315-z>>

Sugasawa, S., Hui, F.K.C., & Welsh, A.H. (2025). Robust linear mixed models using hierarchical gamma-divergence. *Journal of Computational and Graphical Statistics*. <<https://doi.org/10.1080/10618600.2025.2565235>>

Shahid, M., Franco, N., Liu, W.-M., Khoo, & S. Jones, A. (2026) Advances Towards Gender Equity in Surgery: An Australian Cross-Sectional Analysis. Forthcoming in *ANZ Journal of Surgery*

Tanaka, E. (2025) Examining the Interface Design of Tidyverse. *Australian and New Zealand Journal of Statistics* 68, E770031

Woon, L. S.-C., Allison, S., Bastiampillai, T., Kisely, S., Liu, W.-M., & Looi, J. C. L. (2026) Growing Chasms: Australian psychiatrist workforce distribution across Local Government Areas by socioeconomic status. Forthcoming in *ANZ Journal of Psychiatry*