

IBS-AR Newsletter

ISSUE 29 MAY 2022

President's Corner



Dear Members,

If you compare this newsletter to the previous one, you'll notice that we've moved to an electronic, web-based format. For posterity, and as some members may find it more convenient, a pdf version is also available on our website. Another important enhancement is the introduction of a new section profiling a day in the life of a practicing biometrician. In the inaugural article, Kevin Wang gives us an insight into a typical working day as a bioinformatics scientist for Illumina. Thank you to Garth Tarr, the editor of this newsletter, for initiating and implementing these changes.

Every year our region awards a couple of scholarships to Honours or coursework Masters students. In this issue, we hear from this year's recipients: Sophie Giraudo (Honours student at the University of Western Australia) and Victor Tsang (Honours student at the University of NSW). Congratulations Sophie and Victor - wishing you both all the very best for your studies.

Talking about students, a challenge for many professional societies, including our own, is how to attract and support student and early-career members. At the international level, an IBS mentoring program has been established that aims to connect early-career and experienced biometricians. I would encourage you to consider becoming involved in the mentoring program. (Note, the Statistical Society of Australia and the New Zealand Statistical Association have similar mentoring initiatives.) At the regional level, the council is considering what initiatives we can take to make IBS-AR membership more attractive, and more valuable, to student and early-career members. We'd love to hear your ideas and suggestions.

The success of our society is underpinned by the voluntary contributions of time, energy and expertise of our members. Thus, I would like to end my "corner" with a few words of recognition:

- Thanks to all members that attended our online annual general meeting (AGM) in December last year.
- Congratulations, thanks for volunteering, and welcome to the council President-elect James Curran (University of Auckland) and Biometric Bulletin correspondent Garth Tarr (University of Sydney).
- Congratulations, and thanks for serving, to our other office holders who were re-elected at the AGM in their various roles.
- Thank you to the invited speakers at our online mini-conference (Anjali Gupta, Matthew Schofield, Ruth Butler and Ellis Patrick) for making this such a successful and interesting event.
- Many thanks to our Past-President Alan Welsh for his sage and inclusive leadership, and for the many contributions he made to IBS-AR during his presidency.
- December last year IBS-AR was officially incorporated by Access Canberra thanks to the hard work and leadership of Warren Muller and Alan Welsh.
- Special thanks to Rina Hannaford for the excellent job she did as our Bulletin correspondent for the past two years.

If you are interested in opportunities to become more involved within our regional society, or at the international level, please do feel free to contact me to discuss opportunities.

Best wishes,

Vanessa Cave

Honours Scholarships

To help attract enthusiastic and talented students to career paths in biometrics, the Australasian Region offers scholarships for suitably qualified students who intend to undertake a fourth or honours year of study, or a coursework Masters, in statistics, mathematical statistics, biostatistics, bioinformatics or biometrics. We are delighted to announce the winners: *Sophie Giraudo* (Honours student at the University of Western Australia, Perth, Australia) and *Victor Tsang* (Honours student at the University of NSW, Sydney, Australia). Congratulations!

Sophie Giraudo



Sophie Giraudo is currently studying Honours in Mathematics and Statistics at The University of Western Australia. Her Honours project is using clustering techniques to detect the presence of lymph node metastasis in endometrial cancer patients. Sophie was the 2021 President of the UWA Data Science Club and is still part of the committee as an Ordinary Sub-Committee Member. Outside of university, Sophie is the Secretary of Combined Districts Concert Band and plays clarinet, saxophone, and percussion, and is also the Marketing and Communications Co-ordinator for West Coasters Netball Club where she also plays and coaches netball. In her free time, she also plays cricket, sews, paints, and does cross stitch and embroidery.

Professionally, Sophie has completed data science internships at Visagio, the UWA System Health Lab, and Woodside. Her work in these roles included mine plan scheduling using linear optimisation, reliability analysis, and using artificial intelligence to detect duplicate documents in file storage systems. After Honours Sophie plans to pursue a PhD and a career in academia, and is particularly interested in the application of statistics to health and the biosciences. She is passionate about sharing her knowledge through teaching, and advocating for women in STEM.

Victor Tsang



Hi, I'm Victor! I'm studying Data Science at the University of New South Wales and I'm in my honours year. My honours project is around estimating extinction times using fossil data, with a particular focus on applying stochastic approximation techniques to come up with faster and better estimates. I'm under the excellent supervision and guidance of Dr. David Warton, and every week I'm reading and learning something new!

I've always had a mixed-bag of interests, and have always taken up any and all opportunities to try new and challenging things to see where I end up. Truth be told, I decided to major in Quantitative Data Science because I wasn't very good at first year maths and thought I should get better — a goal that is still a work in progress! During the degree, I did a few internships (mostly in the finance/product space) and wanted to learn something outside of those fields, get a taste of research, and continue developing my stats skills. That's how I ended up adding on an optional honours year in ecological stats!

Outside of uni and work, I play volleyball, tinker with computers, and try to spend as much time with friends and family as I can. My life at home mostly revolves around our family dog Benji (his instagram handle is @benjiibeans), who is a lovely and terrifically smart Cocker Spaniel-Poodle.

As for life after honours, it's looking pretty researchy and statsy - I love the rigor and widespread applicability of statistics, but it also adds an element of decision-paralysis for people like me. I do think a Master's/PhD will be on my radar some time in the future, although my top priority right now is to survive honours!

Conference Updates

International Biometric Conference 2022

The IBC 2022 will go ahead as an in-person conference in Riga, Latvia, 10-15 July. The early bird registration concludes on 16 April.

Joint IBS-AR/SEEM Regional Conference 2023

The Joint IBS-AR/SEEM Regional Conference was to be held at the end of 2021, however given the global uncertainties around COVID-19 it was postponed for two years to November 27th to 1st December 2023 at the Copthorne Hotel and Resort, Bay of Islands, Waitangi, New Zealand. It will be a joint conference with the Statistics in Ecology and Environmental Monitoring (SEEM) meeting. Please make a note of this in your diaries!

Annual General Meeting and mini conference 2021

The IBS-AR annual general meeting was held in December with 30 members joining via Zoom. Following the AGM we took the opportunity to have a online mini conference, with a diverse selection of interesting invited talks:

- Anjali Gupta Variation in hyperspectral imaging data for inks
- Matthew Schofield Estimating abundance with capture-recapture: the importance of model, estimator, and prior choice
- Ruth Butler Archaeologist, Detective, Counsellor... The many roles of a Biometrical Consultant
- Ellis Patrick Extracting meaningful information about disease from stateof-the-art cell imaging assays

Francis Hui Awarded Christopher Heyde Medal

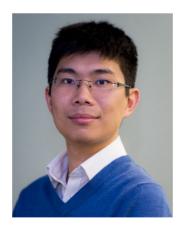


IBS-AR member Dr Francis Hui was recently awarded the Christopher Heyde Medal by the Australian Academy of Science. The Christopher Heyde Medal recognises outstanding research in the mathematical sciences by researchers up to 10 years post PhD and honours the contributions to mathematics by the late Professor Christopher Charles Heyde AM, DSc, Hon DSc(Syd), FAA, FASSA. Professor Heyde was the Foundation Dean of the School of Mathematical Sciences at the Australian National University, and Professor Emeritus of Statistics at Columbia University, New York.

Francis joins a stellar list of highly distinguished recipients, including IBS-AR member Prof David Warton who was the recipient in 2014. Statisticians and probability theorists are only eligible to apply every fourth year - so keep 2026 in mind for nominating future colleagues!

- ANU press release
- Australian Academy of Science video

A day in the life of a biometrician: Kevin Wang (Illumina)



This is a new series where we hear from a practicing biometrician (broadly defined) and find out a bit about their background and the kind of work they do.

Tell us a bit about your background.

I completed a Bachelor of Science (Advanced Mathematics) and a PhD in Statistics, both at the University of Sydney. My PhD research developed novel statistical methods for gene expression data and specifically in predictive modelling and variable selection. Outside of methodological work, I also worked with collaborators to apply statistical analytics for various diseases in clinical settings. I took up a statistician role with CSL Behring in 2020 where I provided statistical support for the manufacturing operations of their plasma derivative products.

What a typical day/week look like for you?

I am currently a bioinformatics scientist at Illumina. I work on projects on the R&D side, making improvements to our existing systems or developing new genomics products. My working week starts out with me setting out achievable goals of the week and breaking those down to daily tasks. I tend to have the freedom to choose the hours I do my actual research and development work, as I can have meetings with colleagues in different time zones.

What tools do you use?

In terms of programming, I mostly use R and Python given how flexible they are thanks to the large user communities. The statistical methods I get to use tend to be methods that are well-tested in the literature/practical settings and easily explainable to the regulators/clinicians/patients.

What do you wish you knew earlier in your career?

More often than not, the physical/commercial reality of a project can override whatever statistical method you have originally planned. While this can be intellectually less satisfying, solving a practical problem under all of its constraints can still be a creative and rewarding process. I learnt this when I performed a sample size calculation once but later found out how much time/money the proposed number would cost. After some refinements, we still managed to achieve the expected outcome within the timeframe.

In Case You Missed It

News and updates from around the International Biometrics Society community.

Check out the recently launched IBS Mentoring Program. This unique online networking and career development opportunity helps you to find, connect with and share experiences with others. Anyone can be a Mentor and/or Mentee, no matter where you are in your career or where in the world you are!

The new IBS President Jose Pinheiro talks about the 75th anniversary of the IBS and looks back fondly on memories of Sir David Cox in the most recent issue of the Biometric Bulletin.

The most recent Software Corner was a really interesting article titled Deep learning with Keras in R and contributed by Dr Stephanie Clark from the School of Mathematics and Physical Sciences, University of Technology, Sydney.

See the IBS Meetings Calendar for details of upcoming events.

If you have any updates to share through the IBS-AR Newsletter or in the Biometric Bulletin please get in touch (correspondence@biometricsociety.org.au).

Recent Papers

The International Biometrics Society publishes two journals, Biometrics and, jointly with the American Statistical Association, the Journal of Agricultural, Biological, and Environmental Statistics.

There were no papers recently published by our members in these journals.

If your paper has been inadvertently omitted from this list or you have a paper to be included in future newsletters, please email the bulletin correspondent (correspondence@biometricsociety.org.au) so that it can be included in the next edition.

Membership Update

Welcome to our new members:

- Raiha Browning
- Jennie Carson

- Lucy Conran
- Sophie Giraudo
- Beatrix Jones
- Godrick Oketch
- Daniel Pesu
- Alice Pollard
- Matthew Prescott
- Victor Tsang
- · Vincent Vinh-Hung
- Sherry Zhang

Active member numbers as of 26 April 2022:

• Life member: 3

• Regular member: 125

Senior retiree: 15Student member: 24Supporting member: 4

Grand total: 171

Australasian Regional Council

The current Australasian Regional Council

- President Vanessa Cave (VSNi)
- President elect James Curran (The University of Auckland)
- Secretary David Baird (VSN NZ)
- **Treasurer** Ian Renner (University of Newcastle)
- **Membership secretary** Sam Rogers (University of Adelaide)
- Social media officer Emi Tanaka (Monash University)
- Public officer Warren Müller (CSIRO)
- Bulletin correspondent Garth Tarr (The University of Sydney)
- Website manager Hans Hockey (Biometrics Matters)
- **IBS executive board** Chris Triggs (The University of Auckland)

IBS Representative Council members

- Ross Darnell (CSIRO)
- Samuel Muller (Macquarie University)
- Kevin Murray (University of Western Australia)

Membership Portal

The membership portal is where you can update your personal details and manage membership renewal payments. You can even arrange to direct debit membership payments which require no reminders or manual input. To activate direct debit membership, simply log in to your member page and change your membership type to "Regular/Senior Retiree (Automatic Renewal)".

You can also now pay for membership up to three membership years in advance. For extended membership payments or any other membership queries, please contact the membership officer via membership@biometricsociety.org.au

Your membership renewal date is 1 Mar 2023.

IBS-AR Homepage

IBS-AR Member Code of Conduct







If you would like to share news or events relevant to the IBS community through either the regional newsletter or the Biometrics Bulletin please contact correspondence@biometricsociety.org.au