## **President's Corner**

Continued from p. I

Royal Statistical Society), Helen MacGillivray (president of the International Statistical Institute), Susan Ellenberg, Jessica Utts and Susan Murphy (President of the Institute of Mathematical Statistics).



Don't get me wrong, I am not saying it should always be this way! What we ideally strive for is diversity. But given history, it is indeed quite a special moment, showing just how far we have come, particularly as we look back to the founding

days of our various societies, when with rare exception, all the leaders were male. I am pretty sure this all-female cast has never happened before, so it really was quite a powerful sensation to be standing up there and feeling this sense of female empowerment. Let's hope it is not too long before we start to see other aspects of diversity emerging among our societies' leadership. Looking back over the history of past presidents of the IBS, there has been excellent gender diversity in the past 30 years or so (exactly 7 of the I4 Presidents since 1990 have been female!). However, ethnic and regional diversity has been low, with all presidents coming from either North America, Europe or Australia and only one (C.R. Rao) being other of an ethnicity other than white, European descended. Let's hope we start to see that changing in the next few years too.

I've mentioned in previous President's Corner writeups about how ISI and IBS have arrangement whereby we organize a special invited session at their WSC while they organize one at our IBC. I was delighted to attend our IBS organized session here at WSC. Two Australasian Region members, Dr Alison Kelly from the Qld Alliance for Agriculture and Food Innovation at University of Queensland, Brisbane and Dr Ross Darnell from CSIRO Brisbane, had put together a fabulous session under the theme of "Food for our Future". Dr Jane Hutton, British Irish Region, and our IBS Liason to the ISI had been the one who originally suggested a session on this general theme. It seemed a particularly fitting theme, given the origins of our discipline of Biometry in agricultural science applications, tarting with the work of R.A. Fisher in the 1920s. This session focused on advances in statistical technologies over the past decade, aimed at securing a reliable and sustainable source of food production for the future. Yohannes Fekadu, Research Biometrician, Ethiopian Institute of Agriculture. Addis Ababa, Ethiopia; Elisabetta Carfagna, Professor of Statistics, University of Bologna, Bologna, Italy; Petra Kuhnert, Research Statistician, Data61, CSIRO, Brisbane, Australia and Linda Young from the US Department of Agriculture served as Discussant. The topics spanned all scales of agricultural applications from the plant to production in the paddock to environmental policy. The first talk presented statistical technologies for genetic solutions to increase productivity that have built on the early work of Fisher as a quantitative geneticist. These technologies are currently being applied to modernise plant breeding programs in Ethiopia, through the biometry team at the Ethiopian Institute of Agricultural Research. The second talk described geospatial survey methodology, and how this is used monitor the impact of agriculture on the environment as food production practices intensify to meet demands of future generations. This work is conducted from the University of Bologna, where Professor Carfagna has worked extensively with FAO, World Bank and Agricultural ministries across Africa and Asia. The final talk focused on challenges and limitations to food production and making management decisions in the face of uncertainty. Dr Petra Kuhnert presented a statistical toolbox of quantitative methods for modelling the impact of pests and disease on crops. She presented the intriguing notion of a model emulator which involves the use of statistical strategies to approximate a complex, computationally intensive process-based model. With her many years of experience in agricultural statistics and as Founding Editor of the Journal of Agricultural Biological and Environmental Statistics (JABES), Professor Linda Young was a thoughtful and insightful discussant. The other aspect of our ISI/IBS partnership is the WSC/IBC partnership where IBS contributes to two of our young members from Low- or Middle-Income Countries to attend WSC and ISI does the same for our IBC. Here's a picture of me with one of our IBS Ambassadors to WSC, Serifat Folorunso from the Nigerian Region.



One thing I've been very impressed by here at WSC and with ISI in general is their effort to reach out to students and early career researchers. Dr Han-Ming (Hank) Wu from the Department of Statistics at the National Taipei University did a fabulous job organizing a young statistician's workshop, which I attended on the Sunday before the WSC started. It was a great opportunity for networking and for talking about the challenges and opportunities in forging a success-

ful career in statistics. I was honored to give a short keynote address at the workshop, talking about some of my own experience and giving a few "tips" for success! Here's a picture:



Sitting at the WSC closing ceremony was touching experience, watching and listening as various awards were given out. I was excited to see Lizalise Mngcele called to the stage to receive a student award. You might recall that he was the young statistician I met when I attended the meetings of the South African Statistical Association last December. So clearly, I wasn't the only one to be impressed by Lizalise! I met another young award winner, Ms. Edvira Malliedje Fokam. She received her masters degree in economic statistics from

the National Institute of Applied Statistics and Economics in Cote d'Ivoire and now works for the Ministry of Economics in Cameroon.



Lizalise and I after the closing ceremony



Edvira showing her prize

The meeting closed with the traditional passing of the baton from the current ISI President, Helen MacGillivray to A. John Bailer who will now serve as President until 2021.

Getting back to more day-to-day IBS business, I was delighted by the recent IBS election for treasurer/ secretary. Professor Vicente Nuñez Anton from the University of the Basque Country was elected and will start his term on January 1st, 2020. While officially he doesn't need to do anything until then, he has already started to join our weekly officer calls and has been actively engaging and helping with various tasks. As I told Vicente, in a semi-joking way,



nobody really tells you how much work it is to be an IBS officer until after you are elected! The election was close, since we of course had the fabulous Jim Todd from the Tanzanian Region running as well. Jim will continue to stay active for now running the Journal Club. I am grateful to him for his willingness to run for office and for all he does for our Society. Sincere thanks to our immediate past president, Elizabeth Thompson, for her behind the scenes efforts to identify two outstanding candidates to run for the office.

Speaking of the hard work that many people devote to our Society, I am really grateful to our new Biometric Bulletin Editor, Professor Ajit Sahai, for all his efforts to make the Bulletin interesting and useful to our members. I particularly like his innovation of putting out some provocative comments in his "From the Editor" piece and

inviting readers to respond. In reading his last set of comments, Basic Theme - II, I believe he is talking about some very foundational issues around uncertainty, especially when it comes to very rare events with high impact. History is full of periods of time where life settles into seemingly stable and predictable patterns. It is human nature to do an implicit empirical analysis and thereby expect that the stable, predictable trends will stay that way (in other words become a bit complacent!). But history is also full of occasions where unexpected events cause a shift in what's normal or expected, eventually, perhaps settling into a new pattern of stability and predictability that will also last for a time before something else comes along to shake things up. Think, for example, of the industrial revolution and the cascade of changes that followed. Or think of some of the devastating terrorist attacks and other acts of violence that we've witnessed in the past decades. These all change of our expectation of what's normal and expected. Of course, these events never happen completely out of the blue, and looking back, it is generally possible to see hints or trends that might have alerted the astute observer to the impending change. Think climate change for example. Our challenge as statisticians is to help interpret and find patterns in the data all around us so that we can be better equipped for decision making into an uncertain future. One of my current projects involves working with the Office of the Chief Scientist and Engineer for NSW, the state within which I live in Australia. Policy makers are routinely faced with the challenge of making decisions about resource usage and allocation in a world subject to many uncertainties and where there are typically many opposing viewpoints about what's important. Statistics can be a very useful tool in helping to understand and quantify the various sources of uncertainty and also can help decision makers move forward in often complex settings. David Spiegelhalter, Chair of the Winton Centre for Risk and Evidence Communication at Cambridge University, is a major thought leader in the field of risk and uncertainty. I've been reading some of his scientific papers (e.g. his 2011 Science called Visualizing Uncertainty About the Future) as well as his more expository writings (for example a recent article in the Guardian Newspaper where he talks about the risk of getting hit on the head by a meteorite!). Communication is a central theme of David's work and indeed that of the Winton Centre in general.

Speaking of communication, I'd like to wrap up my President's Corner this time with a quick pointer to an article in The Conversation, written by one of my former postdoctoral fellows, Dr Craig Anderson, now a Lecturer in Statistics at University of Glasgow. In addition to his day job of teaching and research, Craig enjoys writing about fun topics that help introduce and explain statistical thinking for a non-technical audience. His recent article is one of the best I've seen on the top of "coincidence" and how to think about it. He also

does a really great job of explaining some fairly subtle statistical issues in an intuitive way that smart non-specialists should be able to easily understand. Here's a screen of Craig's post on Twitter, pointing to the article which you can find here. Luv ya work Craig!



## **Spanish Region (REsp)**

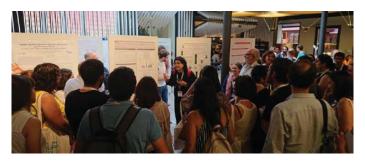
http://www.biometricsociety.net/

The XVIIth Spanish Biometric Conference and the VIIth Ibero-American Biometric Meeting was held in the beautiful city of València between the 19th and 21st of June 2019. This edition of the conference, attended by 137 researchers, was hosted by Universitat de València.

The Local Organizing Committee was led by the President, Anabel Forte, in collaboration with representatives of: all public universities of the Comunitat Valenciana (Universitat de València, Universitat Jaume I, Universitat Politècnica de València, Universitat d'Alacant, Universias Miguel Hernández); the Counseling of Universal Healthcare and Public Health of Generalitat Valenciana and representative members of the Argentinean, Central-American and Caribbean, Chilean and Equatorial regions of the International Biometrical Society.



A special mention is deserved by the Scientific Committee, led by Carmen Armero, given the high scientific quality of the conference. In particular, the Scientific Program included an introductory course (by Virgilio Gómez-Rúbio from the University of Castilla La-Mancha); three plenary sessions (Klaus Langohr from Universitat Politècnica de Catalunya, Adrian Bowman from University of Glasgow and Michela Cameletti from University of Bergamo); and three invited sessions. The first one was the Young Statistician Showcase, which was funded by the International Biometric Society, allowing five young researches, previously selected by the Scientific Committee among 13 candidates, to present their work. There was also an EMR -Portuguese-Spanish Session, an Ibero-American Session and a session organized by the Spanish epidemiology society with five speakers each. The rest of the speakers (up to 59) participated at the 19 parallel thematic sessions (Multivariate Analysis, Statistical Methods in Medical Research, Mixed Effects Models, Clinical Trials, Bayesian Statistics, Spatio-Temporal Models, etc.). Finally, a total of 31 posters were presented and discussed in a very interesting session. It worth mentioning that two of the sessions were devoted to honor two relevant members of the Biometric Society. In particular, the Ibero-American Session, which honored (the sadly passed away) Jonnhy Demey and the session for Agricultural data analysis which served as a tribute to Emilio Carbonell who also was named Honorary member of the Spanish Biometrical Society during the assembly that took place on the afternoon of the 20th.



A nice social program was also planned. From the welcome reception on the evening of the 18th of June at the Botanic Gardens to the Gala Dinner on Thursday the 20th in the Submarine restaurant inside the Oceanographic facilities. A very interesting guided visit to the city was also performed on Wednesday the 19th. In this visit the attendees could learn about the great mix of styles that can be found in the architecture of València showing the mix of cultures that it represents.



## Western North American Region (WNAR)

http://wnar.org/

The 2019 Annual Meeting of the WNAR/IMS was hosted by Oregon Health Science University from June 23-26 with over 280 participants.

Three short courses were offered: "Teaching Statistics and Data Science with R/RStudio" by Nicholas Horton (Amherst College) and Kelly McConville (Reed College), "Mediation Analysis and Software with Applications to Explore Health Disparities" by Qingzhao Yu and Bin Li (Louisiana State University Health Sciences Center), and "A Gradual introduction to Shiny" by Ted Laderas and Jessica Minnier (Oregon Health and Science University).

In addition to our yearly partnership with IMS, this year we also partnered with the Japanese Region (JR) of IBS to promote international collaborations. There were 29 invited sessions (24 WNAR, 3 IMS, 2 JR), two invited panels, eight student paper sessions, and five contributed sessions. We also had 20 posters during our Poster Session. Professor Bin Yu (University of California Berkeley) gave the Presidential Invited Address "Three Principles of Data Science: Predictability, Computability, and Stability."



Figure 1. Conference Participants enjoying the WNAR mixer on Sunday night