

Regional Newsletter, June 2016



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JANETTE MCQUILLAN & ROLAND LANGROCK

Welcome to the June 2016 issue of the newsletter of the British and Irish Region of the IBS. This issue includes a report on the recently held 30 years anniversary meeting of DerSimonian and Laird's methodology in meta-analysis, a report on the bursaries awarded to young biometricians to attend the IBS 2016, announcements of upcoming meetings and the regular offerings from our regional officers. Do make a note of our forthcoming events in your diary, and we'd love to hear from you if you have items you'd like to share with the society in future newsletters. To get in touch, just send a message to roland.langrock@uni-bielefeld.de.

President's corner

JOHN MATTHEWS

In my last President's corner, I recalled the meeting to celebrate the 40th anniversary of Cox's famous paper 1972 paper "Regression models and life-tables" and a very memorable aspect of the day was that Sir David Cox participated in the meeting. In April the Region repeated this approach when it held a meeting to celebrate the 30th anniversary of the publication in Controlled Clinical Trials of one of the key papers in biostatistics, "Meta-analysis in clinical trials" by DerSimonian and Laird, which introduced random effects methods into the field and which has been cited over 18,000 times. The Region was very fortunate indeed that both Rebecca DerSimonian and Nan Laird travelled across continents to be present and they turned what was an excellent and well-attended meeting into a very special occasion. Meetings of this kind are a natural way of both celebrating a landmark paper and learning about the subsequent developments in the field. It is clearly a winning formula — the only problem being that with Sir David and Rebecca & Nan having been able to attend the first two such meetings we have set the bar very high!



30 years anniversary meeting of DerSimonian and Laird's methodology

In a few weeks all the work of the organisers and preparations of the participants will come together when the 28th biennial International Biometric Conference is held in Victoria BC, Canada. I hope that as many as possible of you will be able to go and take part in what promises to be a very good conference and a great opportunity to meet colleagues from around the world. Of course, travelling around the world is not cheap and this year the Region, with the generous support of the Fisher Memorial Trust, has provided bursaries to help three of our young biometricians to attend. The Region was also pleased to contribute to the International Society's fund which helps colleagues from developing countries attend IBC.

As I write the future relationship between the UK part of the Region and the EU remains undecided. While we can all do what we can to make sure that the correct decision is reached on this wider stage, there should be no doubting the Region's commitment to colleagues throughout Europe. There will be no better expression of this than the forthcoming Channel Network Conference which will be held at the University of Hasselt at Diepenbeek, Belgium, from 24-26 April 2017. The scientific committee of the conference is made up of two members of each of the Belgian, Dutch and French Regions and, from the BIR, Dan Jackson and Tom Nye. This time it is the turn of the BIR to chair the committee and I am delighted that Daniel Farewell from Cardiff University has agreed to take on this role. We will keep you posted about details for the CNC — it will be an excellent conference, whatever the UK decides!



This is my fourth President's Corner and — as my term of office is two years — it will be my last offering. As with so many good things, my time in office has passed so quickly that it is hard to believe that it was two years ago when I chaired Simon Thompson's President's address. Even more alarming is the prospect that I will soon have to deliver my own address. This will be as part of a meeting on Design of Experiments in Medicine, to be held with the AGM on 23 November at Birkbeck College, London — details to follow very soon. It has been an enormous privilege to serve as President of a Region with such a distinguished history and an active present. It aims to run as frugally as possible and a consequence of this approach is that the Region has no paid secretariat, so all the members of the Region benefit from the enthusiasm and dedication of the volunteers who make up the Officers and Committee members. And so it is a pleasure for me to take this opportunity to thank all my colleagues on the Committee, and especially our Honorary Secretary, Sue Welham and Honorary Treasurer, Mark Brewer, for the huge amount of work they do on our behalf.

Bursaries awarded to young biometricians to attend IBC

LISA MCCRINK

We are pleased to announce that the IBS British and Irish region jointly with the Fisher Memorial Trust have again awarded some of our top young biometricians bursaries to attend the upcoming XXVIIIth International Biometric Conference which will be held in Victoria, Canada from 10-15th July 2016.

These bursaries were awarded after a competitive application process with submissions judged both on the quality of the science and whether the subject represents a good use of biometrics, tackling an applied problem appropriately. Taking also into account the benefit to the candidate, three awards of up to £700 were given to this year's successful applicants: Ratchaneewan Kumphakarm (University of Kent), Ming Zhou (University of Kent) and Olympia Papachristofi (Leeds Institute of Clinical Trials Research). Each young biometrician will be giving an oral presentation at this year's conference focusing respectively on methods to improve the Chao estimator of species richness, new hidden Markov approaches for reptile and amphibian data and the use of routine hospital records in the design of trials of complex surgical interventions.



Ratchaneewan Kumphakarm, Olympia Papachristofi and Ming Zhou, recipients of the BIR-IBS bursaries to attend IBC 2016

Our three successful applicants will each write short reports on their experiences at the IBC which will appear on the region's website after the conference. The reports from previous bursary award winners who attended IBC 2014 can be found at <http://bir.biometricsociety.org/news/news-02-09-2014-9-43>. A special thank you is due to Andrew Mead from Rothamsted Research who assisted in the judging of the awards on behalf of the Fisher Memorial Trust.

30-year anniversary meeting of DerSimonian & Laird

DAN JACKSON

On Wednesday 13th April, a celebration was held to mark the 30th anniversary since the publication of the landmark paper "Meta-analysis in clinical trials" by DerSimonian & Laird (1986, *Controlled Clinical Trials* 7, 177-188). The paper is one of the most highly cited research publications. This paper introduces the now standard random-effects model for meta-analysis, a variety of estimation methods and successfully applies these to a variety of real datasets.

The celebration brought together statistical scientists from across the world and included talks by Dr Julian Higgins (University of Bristol), Dr Kerry Dawn (University of Liverpool), Dr Richard Riley (Keele University) and Dr Theo Stijnen (Leiden University Medical Centre). It was a fantastic event for all involved, and was attended by both Nan Laird and Rebecca DerSimonian. Julian Higgins introduced the paper and described the history relating to it. He described the paper as "A beautifully written paper with a wealth of extremely sensible discussion of meta-analysis" but also emphasised that it was "not without its detractors!". Kerry discussed the impact of the paper on groups like the Cochrane Collaboration and also described the exciting future for Cochrane. Richard described random-effects meta-analysis in the modern era and, through an amusing analogy with Homer Simp-



son trying to jog, posed the question “Are we running before we can walk?”. Theo discussed more sophisticated methodology involving generalized linear mixed models for random effects meta-analysis but also said that “There is still a place for D&L methodology, since it works well in larger meta-analyses and for any choice of effect measure”. Finally Nan Laird led a short discussion about “How heterogeneity can be a good thing” and gave an amusing example of a sign from New Cuyama, where the population (562), Ft above sea level (2150) and “Established” (1951) were added to give 4663. This was a highly heterogeneous dataset if ever there was one!



Nan Laird's New Cuyama example

Secretary's Corner

SUE WELHAM

We've got a full program for the autumn, with a meeting on ecological topics set for 10th October and our Presidential Address with the AGM in November. We would have liked to have circulated details of these meetings earlier but we are having difficulty in making advance room bookings at our usual university hosts. Nowadays teaching requirements (rightly) take precedence so external room bookings can only be made at later dates, which makes planning and booking speakers harder. If you would like to host a meeting, or know of alternative good venues which are reasonably priced and easy to reach, please let us know.

The Fisher Memorial Trust (FMT) was set up to promote interest in the life and work of Sir Ronald Fisher, and to maintain his scientific legacy by encouraging discussion of the scientific fields in which he was active. The FMT are co-sponsors of our travel bursaries to the IBC and of the Young Biometrician Award in alternate years. They also hold an annual lecture, which this year

will be given by Nancy Reid (University of Toronto) in London on 27th October as part of a conference on Big Data, organised jointly with the Royal Statistical Society and the London Mathematical Society. Further details will be posted on the FMT website (<http://www.senns.demon.co.uk/FisherWeb.html>).

Finally, we need to elect two new committee members at the AGM. Requirements include enthusiasm for promoting the IBS and organising scientific meetings, attendance at two committee meetings per year (usually in London but phone participation possible), and otherwise helping to run the region. If you would like to help but would prefer a less formal role, you might like to consider becoming one of our regional champions who promote membership of the IBS and advertise our meetings locally. If you might be interested in either of these roles, please contact me at stats4biol@gmail.com before the end of July.

Joint meeting between BIR, RSS and BES on “Challenges and opportunities of analysing ecological citizen science data”, Monday 10th October 2016

RACHEL MCCREA

On Monday 10th October 2016, the BIR is organising a one-day meeting on “Challenges and opportunities of analysing ecological citizen science data”. The meeting is organized together with the Royal Statistical Society and the British Ecological Society and will be held at the David Attenborough building in Cambridge.



Photo by Karlie Roland



There will be an introductory talk to open the day, and then a combination of methodological and application talks covering how citizen science data are used and issues which may arise for the analysis of such data. The confirmed speakers are Michael Pocock (CEH), Anne Goodenough (University of Gloucestershire), Emily Den-

nis (Butterfly Conservation and University of Kent), Steffen Opper (RSPB), Alison Johnston (British Trust for Ornithology) and Nick Isaac (CEH). More details on the programme, including titles of the talks, will soon be provided at <http://bir.biometricsociety.org/events/ecolcitsci>.

