President’s Corner

Greetings!

Well my seven-month research visit to the United Kingdom (UK) is over, and now I am sitting in the airport in Marrakech, awaiting travel first to the UK for just one day and then home to Seattle and the University of Washington. My visit to the UK enabled me to participate more easily in European Regional IBS Meetings, and I very much enjoyed both the EMR Meeting in Thessaloniki in May and the NBBC in Copenhagen in June. These regional meetings show the vibrant strength of our Regions, with events directed to, and participation from, our younger members, who will provide the next generations of leadership of our Society.

However, I make no apology for focusing this President’s Corner not on an IBS meeting but on the ISI 61st WSC here in Marrakech. The IBS has been much in evidence at this meeting, from the Opening Session where the inaugural International Prize in Statistics (IPS) was awarded to our Honorary Life Member David Cox to the very last award presented in the final Awards Ceremony to our two young IBS members, funded to be here under the new joint ISI/IBS program to bring members of each Society to the biennial conference of the other. Both awardees participated actively here, and showed again the strength we have in our younger members. Also here at IBS were many more senior IBS members, participating actively in both their ISI and IBS roles.

Back to the Opening Session and the award of the IPS – this was a memorable and moving occasion, at which the presidents of all the five societies supporting the Prize were present: ASA, RSS, IMS, IBS and of course the ISI itself. Although David Cox was sadly unable to be there, he gave a gracious speech of thanks by video. His very first acknowledgement was to IBS, in which he spoke of attending the British Region Meetings in the early years of our Society, when our founding President, R.A. Fisher, was also present (again a strong recognition of IBS as a Society of Regions). We were also reminded of David’s strong support for Young Statisticians. Many will remember David’s presence at IBC2014 in Florence, where he spoke and presented awards to the winners of our IBS Young Statisticians Paper Competition. A young statistician at NBBC told me that for him this was the landmark event of the conference, and one he will always remember. David will have an impact on statistics and statisticians for generations to come, and it was an honour to be a part of this ceremony. As the only woman among twelve Moroccan government ministers and five statistical society presidents, my presence on stage aroused enthusiasm from many younger Moroccan statisticians, both men and women, who would not otherwise have recognized me, or even known of IBS. Many approached me, and I am now on many Moroccan cell phones – selfies being the younger-generational form of commemorating important interactions at meetings.

ISI President Pedro Silva took advantage of the presence of the five presidents to organize two special sessions, one for ASA and RSS and the other for IMS and IBS, to present our societies to the wider ISI membership. The IBS talk was well received, and I was able to explain who we are, what we do and how we do it, as well as encouraging all to consider coming to IBC2018 in Barcelona. As always I emphasized two things: the three main areas of our disciplinary diversity in Ecology, Agriculture and Human Health, and our geographic diversity as a Society of 35 Regions worldwide. The talk attracted attention, and potential IBS members from countries where we currently have few (if any) members, including Gabon, Iran, Egypt and Ethiopia, and I am very grateful to Professor Silva and ISI for the opportunity to present IBS to a broad audience.

Continued on p. 4
Dear Readers,

In this issue I am happy to publish an introductory paper on the STRengthening Analytical Thinking for Observational Studies (STReATS) initiative chaired by Wouter Schilder (University of Freiburg, Germany). This initiative aims to provide statistical education and training for researchers in observational studies and is comprised of nine Topic Groups (TG) – for example, Missing data, Study design, Causal inference, Survival analysis and more.

The first introductory article is written by my supervisor, Prof. Laurence Freedman, who is Chair of the Measurement error TG. Later on I heard a few talks about the initiative at several IBS conferences. In the next issues we will publish a series of short articles regarding each of the nine TGs. In each article we will give a general description of the TG, as well as aims and a few examples that illustrate good statistical practice.

In the Region News you can read about events in the bio-statistical field. I would like to congratulate the Society’s new Singapore Region (SGRE), which has contributed new articles to this issue of the Biometric Bulletin for the first time. May you have lots of news items to share with the IBS community in the future.

In the Software Corner Garth Garr (AR) and Havi Murad (EMR) will jointly write a series of articles on How to easily interpret interactions in various statistical models in R and SAS. Understanding statistical interactions requires some calculations; however, recently statistical packages have incorporated new automatic options and graphs that we would like to bring to your attention. Garth will demonstrate the R program, and I will demonstrate the SAS program on some real data that we have chosen. The first article in this series to appear in this issue will be about Visualisation and interpretation of interactions in binary logistic regression models. The example is from the Birth Weight Data and graphs that we would like to bring to the IBS community in the future.

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I would like to remind you about the IBS Journal Club, which is a new welcomed initiative designed by the Society’s Education Committee. The purpose is to widen the scope for understanding recent papers published in IBS journals and to provide a networking opportunity for IBS members through a regular internet forum. The last Journal Club discussion was held on Thursday, 10 August 2017. It was centered around the following paper recently published in Biometrics: Rouanet A, Joly P, Dartigues JF, Proust-Lima C, Jacqmin-Gadda H. JASA later class model for longitudinal data and interval-censored semi-competing events: Application to dementia. Biometrics 2016;(December):1123–35. IBS members can register for future Journal Clubs online, free of charge. Future dates are listed on the IBS website. 

Havi Murad
Twitter: @havimurad

From the Editor

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Havi Murad
Twitter: @havimurad
President’s Corner

Continued from p. 1

I also met with representatives from Morocco, who are in the final stages of planning to apply to form a new North African Region of the IBS, located in Morocco but also representing members in other countries across North Africa. They have a list of twelve regular members with completed application forms, as well as a similar number of student member applications. They have draft bylaws, currently in English but pending translation into French and Arabic for their local needs, and they have met to elect the initial officers of their proposed region. In fact, I have no doubt that we will soon be welcoming this newly established IBS Region, and I am immensely grateful to Ziad Taib, President of the Nordic-Baltic Region, for helping to facilitate this new initiative.

Next, on to the IBS Invited Session, now a regular feature of the IJSI. Here the talks again represented our disciplinary diversity, with talks on monitoring species biodiversity, on new models for modeling disease progression in banana crops and on whole-genome genetic and genomic studies. Each talk addressed specific examples and issues but demonstrated the much broader impact of statisticians who collaborate deeply with scientists in the biological disciplines. I am very grateful to our three speakers for presenting what our Society has to offer in Ecology, Agriculture and Human Biology.

Last but not least, to our new ISIBS jointly funded program to bring younger members of each Society to the biennial conference of our parent society. The call for papers for this year ran from 1 July to 31 July, and we received 62 applications from 26 different countries, and the selection committee met in the middle of August to choose 35 papers to be presented. All are fantastic, and I am sure this program will continue to grow, as we have seen with the early success of IBS in Buenos Aires this year.

Finally, planning for Barcelona is now proceeding fast. The invited sessions, short courses and Statistics-in-Practice Session are now set. The organization of our slate of other special sessions is my next main task, and in fact, the presence of many more senior IBS members in Marrakech was helpful in that regard. Testing of the abstract submission and review system is in progress, and we recently announced the 2018 Call for Contributed Papers (IBC2018) in Barcelona looks to be another great IBS event, if that of course depends also on each of you. Make your plans now for July 2018 – you see there in Barcelona.

Elizabeth Thompson

Well, of course other things are happening beyond ISI. Another very important program in the non-IBC year is the program under the Awards Fund Committee to fund IBS members from Developing Countries to participate in IBS Regional Meetings. The program got off to a rousing start in 2015, but 2017 will show even greater and broader participation. Due to the number of applicants, we have implemented a third August 31 deadline to accommodate the late-in-year Regional Meetings such as the Australasian and East Asian Meetings, and IBS Officers will recommend providing additional funding to support the program, both for this year and in future budgeting. The Representative Council program to fund inter-regional and network collaborative projects, often associated with Regional IBS Meetings, has also been active.

As a Society of Regions, I consider these initiatives as among the most important things we do, although I should also mention another that is bringing IBS members of different regions together – the IBS Journal Club, under the Education Committee, has got off to a great start! A third session in August was recently held, with two more to follow in October and December. These sessions are also made available through our website, so that all IBS members can benefit, even those with time zones that may preclude participation in the live event. Please visit the newly reorganized web page of our educational materials, both audio and video. I hope you will all be pleased by the quality and quantity of the materials we now show there.

The IBS biennial cycle continues, and this is the year that about half our members of Representative Council start their four-year terms of service (1 July). I welcome new and renewing Council members who will serve from July 2017 to June 2021. I also thank continuing Council members, and a special thank you for their service goes to those who rotated off this year. To remind you all who your representatives are, a full list of the current Council appears in this issue of the Bulletin.

Our new and returning RC members are more important than ever, as they are responsible for sharing their unique perspectives on the issues that are of concern to individuals and the scientific community in all 35 IBS Regions. RC members are strongly encouraged to join us at an in-person meeting once every two years during the IBC (the next meeting will take place in Barcelona in July 2018), be willing to serve on a standing committee of the IBS and participate fully in their Region’s activities/governance. Finally, RC members are also asked to share information they have learned at in-person Region and Network meetings.

We are pleased to present our RC members for 2017 through 2019:

As of September 9, 2017

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Welcome to Our New / Returning Representative Council Members! (2017-2019)

As of September 9, 2017

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<td>Andrea Berghold, Chair</td>
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Appreciation Expressed to Members of the Representative Council!

Continued from p. 4

As of September 9, 2017

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Celebrating Diversity in the International Biometric Society

Beginning with the September 2017 issue and in celebration of our 70th birthday, we’ve given Biometrics a facelift with a new design that allows for a rotating image on the front cover. The first image shows participants at the Society's inaugural meeting at Woods Hole, Massachusetts USA, in 1947. You can read more about this on the ‘History’ tab of the IBS webpage, where you will find an excellent article by Past President, Lynne Billard. The first article of the September issue of Biometrics also talks about some of this history. One of the striking things about the image (aside from the fashion!) is that the participants are almost all white males. I think I can count five, maybe six women from the approximately 80 attendees. It is harder to assess ethnicity from an old photo like this, but Professor Billard's article suggests that there were at least two Indian delegates at the meetings. As we were planning what to put on this first new Biometrics cover, there was concern about the message it might send. Rather we recognized that the lack of diversity was unfortunately indicative of those times and needed to be considered in historical context. For this reason, I thought it would be helpful to write this short article reflecting how things have changed over the years and also taking a look at how the IBS looks these days in terms of gender and ethnic diversity. Given our global footprint, it is not surprising to see that the Society has become highly ethnically diverse. The Eastern North American Region (ENAR) has taken a particularly proactive stance, having held a Workshop called “Fostering Diversity in Biostatistics” as part of their annual Spring Meetings for many years now. Interestingly, we don’t collect information on gender from our members, so it is not possible to provide figures related to the general membership. However, the International Biometric Office provided me with a spreadsheet listing the names of the Regional Presidents over the past few years, combined with some detective work via Google, allowed me to determine the gender of most of them. Exactly one-third were women. Among the eight most recent elected Presidents of the Society as a whole (including myself), 50% were women. So it is clear that we are heading in the right direction. But of course there is more work to be done. Sadly, I do hear reports from members describing situations where diversity has not been appropriately considered and appreciated. But there are also positives, for example the Australasian Region’s efforts to put together an all-female cast of invited speakers for their upcoming meetings. I’m also most appreciative of the efforts of Professor Charmaine Dean and the International Program Committee to put together a slate of invited sessions for IBC2018 that are not only scientifically outstanding but also diverse in terms of gender-ethnicity, country topic and sector (industry versus government versus academia). All in all, we see that history for the International Biometric Society is a dynamic process whose progress we celebrate in this, our 70th year.

As of September 9, 2017

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IBC2018 Short Courses and Invited Sessions Announced!

The IBS has announced the IBC2018 short courses being planned for Sunday, 8 July 2018 in Barcelona, Spain, as well as the invited session program. For more information on the five short courses and invited sessions, please visit the conference website: http://2018.biometricconference.org.

### IBC2018 Short Courses

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<tr>
<td>Cecile Proust-Lima</td>
<td>Guido Schwarzer</td>
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<td>University of Freiburg</td>
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<td>Melbourne, Australia</td>
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### IBC2018 Invited Sessions

**Recent developments in the design and analysis of crop variety and breeding trials**

**Chair:** Hans-Peter Piepho (University of Hohenheim, Germany)

**Johannes Forkman** (SLU, Sweden)

Design and analysis of small complete block experiments when blocks are rows in a rectangle

**Emelyn Williams** (Agricultural National University, Australia)

Design considerations for single and multi-location breeding trials: Randomization and efficiency

**Fred van Eeuwijk** (Wageningen University, the Netherlands)

Modeling spatial trends in field trials by 2D PoPlines in a mixed model context

**Discussant:** Chloe Boyard (BioStat Team Limagrain Europe, France)

Dynamic individualised risk prediction: Recent developments and real world applications

**Chair:** Ruth Keogh (London School of Hygiene and Tropical Medicine, UK)

**Peter Diggle** (Lancaster University, UK)

Real-time monitoring of health outcomes using routine clinical data

**Angela Wood** (University of Cambridge, UK)

Estimating cardiovascular disease risk: in electronic health records with incomplete records and repeated measurements of risk predictors

**Cecile Proust-Lima** (University of Bordeaux, France)

Dynamic individualized predictions of cause-specific disease progression using repeated measures of biomarkers: comparisons between joint models and dynamic landmark models and application in prostate cancer

**Discussant:** Jeremy Taylor (University of Michigan, USA)

**Analysis methods using multiple type of -omics measurements**

**Chair:** Charles Kooperberg (Fred Hutchinson Cancer Research Center, USA)

**Nancy J. Cox** (Vanderbilt University, USA)

Integrating genome with transcriptome for Electronic Health Records discovery
No Discussant

Statistical methods for high throughput phenotyping data in plant sciences

Chair: Fred van Eeuwijk (Wageningen University, the Netherlands)
Scott Chapman (University of Queensland, Australia)

High Throughput Phenotyping in crops – challenges and needs in biometrics

Maria Xosé Rodríguez-Alvarez (Bascue Center for Applied Mathematics, Spain)
Hiroyoshi Iwata (University of Tokyo, Japan)

Modeling response of plants to environment via high-throughput phenotyping and machine learning

Discussant: Fred van Eeuwijk (Wageningen University, the Netherlands)

Functions of variance components in mixed effects models: estimation, confidence intervals, hypothesis tests and boundary issues

Chair: Nino Demestravili (National Center for Disease Control and Public Health, Georgia)
Alan Welsh (Australian National University, Australia)

Construction of confidence intervals for the components of variance when the components are close to the boundary of the parameter space

Regev Scheweiger (Tel Aviv University, Israel)

Using stochastic approximation techniques to efficiently construct accurate confidence intervals for heritability

Mohamed M. Shoukri (King Faisal Specialist Hospital and Research Centre, Saudi Arabia)

Index of individuality and the determination of the reference range of biochemistry parameters: point, interval estimation and sample size requirements

Barbora Kessel (University of Göttingen, Germany)

TBD

Discussant: Geert Molenberghs ( Hasselt University and KU Leuven, Belgium)

Statistical analysis of self-reported outcomes that are subject to measurement error

Chair: Laurence Freedman (Gertner Institute for Epidemiology and Health Policy Research, Israel)
Ruth Keogh (London School of Hygiene and Tropical Medicine, UK)

Statistical issues related to dietary intake as the response variable in intervention trials

David Steinberg (Tel Aviv University, Israel)
Raj Balasubramaninan (University of Massachusetts – Amherst, USA)

Variable selection in high dimensional datasets in the presence of error-prone, self-reported outcomes

Juned Siddique (Northwestern University, USA)

Addressing Differential Measurement Error in Self-Reported Dietary Data Using an External Validation Study: Application to a Longitudinal Lifestyle Intervention Trial

No Discussant

Experimental Design as a Framework for Solving Challenging Problems in Clinical Drug Development

Chair: Jesus Lopez-Fidalgo (University of Navarre, Spain)
Holger Dette (Ruhr Universität Bochum, Germany)

Design and analysis of dose response studies

Nancy Flourney (University of Missouri, USA)

Statistical implications of early stopping rules imposed on sequential dose-finding studies

Atanu Biswas (Indian Statistical Institute, India)

Optimal covariate adjusted adaptive designs for binary response trials

Katrin Kettelhake & Katrin Roth (Bayer AG Development Pharmaceuticals, Germany)

Experimental Design in Theory and Praxis: Examples from the Pharmaceutical Industry

Weng Kee Wong (UCLA, USA)

Nature-Inspired Meta-heuristic Algorithms for Generating Efficient Designs for Biomedical Problems

Discussant: Vladimir Draganal (Janssen Pharmaceuticals, USA)

Statistical challenges in family studies: from design to risk prediction

Chair: Mar Rodriguez-Girono (Leiden University Medical Centre, the Netherlands)
Thomas Scheike (University of Copenhagen, Denmark)

Statistical challenges in competing risks data

Malika Gorline (Tel Aviv University, Israel)

A fully nonparametric estimator of the marginal survival function based on case-control clustered age-at-onset data

Antonis Antoniou (University of Cambridge, UK)

Developing comprehensive risk prediction models for familial breast and ovarian cancer

Jeanine Houwing-Duistermaat (Leeds University, UK)

Modelling mortality in long lived families

Discussants: Mar Rodriguez-Girono (Leiden University Medical Centre, the Netherlands)

Adaptive designs with multiple objectives

Chair: Martin Posch (Medical University of Vienna, Austria)

Cyrus Mehta (Cytel & Harvard T.H. Chan School of Public Health, USA)

Design and Monitoring of Multi-Arm Multi-Stage Clinical Trials

Toshimitsu Hamasaki (National Cerebral and Cardiovascular Centre Japan)

Designing complex survival clinical trials with multi-stage and multi-endpoints

Lisa Hampson (AstraZeneca & Lancaster University, UK)

Optimising the data combination rule for seamless Phase III clinical trials

Franz König (Medical University of Vienna, Austria)

Decision Theoretic Approaches for Adaptive Enrichment Designs in Personalized Medicine

Discussant: Hans Ulrich Burger (F. Hoffmann – La Roche Ltd., Switzerland)

The Bleeding Edge: advancing statistical methodology through blood sector applications

Chair: Louise M. Ryan (University of Technology Sydney, Australia)

Emmanuel Lesaffre (KU Leuven, Belgium)

Prediction of hemoglobin in blood donors using a latent class mixed-effects transition model

Martin Nieuwoudt (Stellenbosch University, South Africa)

The South African National Blood Donor Services: Analysis and Modelling of donor/donation type for a given immediate need?

With millions of donors giving blood, can we identify the optimal donor/donation type for a given immediate need?

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No Discussant

New developments in mediation analysis

Chair: Stijn Vansteelandt (Ghent University & London School of Hygiene and Tropical Medicine, Belgium)

Tyler VanderWeele (Harvard T.H. Chan School of Public Health, USA)

Decomposition analysis to identify intervention targets for reducing disparities

Rhian Daniel (University of Eastern Finland, Finland)

Cohort studies of chronic diseases: methods for design and analysis

Niels Keiding (University of Copenhagen, Denmark)

Observational cohort studies and register data – experiences from Denmark

Daniela De Angelis (University of Cambridge, UK)

Challenges in estimating HIV testing behavior from observational cohort data

No Discussant

Modelling grouped environmental and forestry data

Chair: Lauri Mehtätalo (University of Eastern Finland, Finland)

Juhja Lappi (University of Eastern Finland & University of Jyväskylä, Finland)

Some pitfalls of mixed models

Arne Nothdurft (University of Natural Resources and Life Sciences Institute of Forest Growth, Austria)

Spatial and temporal modeling in forest monitoring

Andrew Finley (Michigan State University, USA)

Bayesian modeling of grouped environmental data

Discussant: Lauri Mehtätalo (University of Eastern Finland, Finland)

Challenges in the Analysis of Observational Cohort Data

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Biometrics

December 2017 Issue Highlights


The Biometric Practice section features “Bayesian population finding with biomarkers in a randomized clinical trial,” by Satoshi Morita and Peter Mueller; “A fast small-sample kernel independence test for microbiome data,” by Yang Zhang, Anna Plantinga, N Zhao, and Michael C. Wu; “Sensitivity analysis for matched pair analysis of binary data: From worst case to average case analysis,” by R. Haagwada and D. Small; and “Parameter overdispersed frailty models for current status data,” by Steven Abrams, Marc Aerts, Geert Molenbergs, and Niels Hens.

As always, lists of papers to appear can be found at the Biometrics website. Papers to appear in future issues may also be found under the “Early View” link at the Wiley-Blackwell website, which may be accessed by IBS members by visiting http://www.biometrics.co.uk/earlyview/joint using “Biometrics” from the drop-down menu at the “Publications” link at the top of the page, and accessing the “Click here” link.

Biometrics Cover Image

Incoming IBS President, Louise Ryan has spearheaded an exciting initiative for the journal. Starting with the September 2017 issue, the slightly re-vamped cover of Biometrics will feature a rotating image relating to the issue. For the issue in question, the image might be a photo, a graphic or other depiction and will change with each issue. A short description of the cover image will appear with the table of contents. A process for identification and selection of the cover image for each issue is currently being formulated, and the Executive Editor will have responsibility for overseeing this process.

Biometrics was founded in 1945 as Biometrics Bulletin, and became Biometrics in 1947. The year the IBS was founded was also the first Biometric Conference (IBC) was held in September of that year at the Marine Biological Labs at Woods Hole, Massachusetts, USA, and according to the founding of the Society. The inaugural cover image (September 2017) thus features a special 70th anniversary logo, and the cover image is a photograph of delegates to the conference.

Editorial Board News

As we reported previously, Co-editor Mike Daniels’ term will end on 31 December 2017. According to geographic convention, the new Co-editor should reside in North America. We are delighted to report that the search committee nominated Debashis Ghosh, Professor and Chair of the Department of Biostatistics and Informatics at the Colorado School of Public Health at the University of Colorado Anschutz Medical Campus, Aurora, Colorado, USA, as a Biometrics Co-editor. The nomination was approved by the IBS Executive Board. Debashis’ term will be 1 January 2018 – 31 December 2020. We look forward to working with him.

We welcome several new AE’s to the Editorial Board with terms beginning 1 July or later: Marco Carone, Phil Dixon, war Goldberg, Paul Gustafson, Ruth King, Eric Labec (Tal) Shonhira and Peter Thall.

We also recognize AE’s who have retired from the Editorial Board in 2017: Harald Binder; Ken Cheung, Leven Clement, Diana Cole, Richard Cook, Kevin Dobbin, Shlomo Egger, Niel Hens, Debashis Ghosh, Andy Houseman, Ben Reses, Shaun Seaman, Anna-Maria Staciak, Rajeshwari Sundaram, Roula Tsokna, Lu Wang, and Ernst Wit.

As we reported in the last column, Geert Molenbergs will take over as Executive Editor (EE) on 1 January 2018 for a three-year renewable term. Geert will succeed Marie Davidian, who has served as EE since 2006, Geert and Marie have been working together to ensure an orderly and seamless transition. In light of this, we repeat below a review of the role of the EE that appeared in the July – September 2016 issue of the Biometric Bulletin.

The Executive Editor Position

The official description of the EE position, as approved by the former IBS Council, is as follows: “The Executive Editor of Biometrics shall coordinate the activities of the three scientific Co-editors to ensure consistency of practices and performance and to achieve scientific balance in terms of manuscript assignments. She shall also oversee all administrative functions, including monitoring journal performance and working with the journal Editorial Manager, BS Officers, the International Business Office (IBO) and the Publisher.”

Thus, the EE is not the “head editor” rather she serves in an administrative role on equal footing with the CEs, complementing their efforts to oversee the scientific aspects of the journal and freeing them from the burdens of administrative activities. As such, the EE is not to be involved in scientific activities related to review and editorial decisions on papers submitted to the journal these are the sole purview of the CEs. The only scientific duty of the EE is to assign incoming submissions to CIEs on the basis of scientific expertise and workload, thereafter, she plays no role in the fate of submissions. Otherwise, the EE has a purely administrative, with duties including compiling and monitoring journal performance statistics, arranging editorial board meetings and handling the logistics of Biometrics-sponsored events, working with the publisher in advising on content and strategy, and representing the journal at IBS events.

Frequently, authors contact the EE directly expressing dismay over a CIE’s scientific decision on a particular submission and requesting the EE’s intervention, with the expectation that the EE can review and overrule CE actions and decisions. As should be clear from the above description, the EE has no such authority in such scientific matters. Likewise, authors contemplating a submission to Biometrics sometimes contact the EE, asking for a “pre-screen” of the paper’s suitability for the journal. Again, this determination is a scientific issue outside the realm of the EE’s charge and can only be made by a CE once the paper has been formally submitted. In short, contacting the EE regarding scientific matters is futile, as the position carries no mandate for involvement in such situations.
Journal of Agricultural, Biological, and Environmental Statistics (JABES)

We are currently discussing ways to raise the profile of the journal. We plan to open a Twitter account shortly and will invite authors of accepted papers to submit a tweet summarizing their papers. Announcements, such as calls for papers for Special Issues, will also be made through tweets. Authors will also be given the option of submitting a press release to be publicized with publication of their paper. This might be appropriate for papers that addresse issues of interest beyond the statistical community.

The Special Issue on Animal Movement Modeling, with Melvin Hoogen, Ruth King and Roland Langrock as Guest Editors, will appear in the September issue. It comprises nine articles by authors at the cutting edge of model development in response to technological changes, together with an introduction putting the modeling in context, by the guest editors.

If you have a suggestion for a special issue, I would be pleased to hear from you.

The June issue of JABES included the following papers:


For more information on upcoming issues, the editorial board, and the aim and scope of the journal, please visit our website http://link.springer.com/journal/13253. We also accept submissions of books to review in the upcoming issues of JABES; to submit a book for review, please see the above website (click on “Editorial Board”) or contact the Editor in Chief.

The June issue of JABES included the following papers: Bayesian

Software Corner

Visualizing and interpreting interactions in logistic regression models

Havi Murod and Garth Tarr

Biostatistics Unit, Gertner Institute, Israel (EMR)

University of Newcastle, Australia (AR)

Assocations in logistic regressions are usually expressed as odds ratios, which is the ratio of the odds for an event given a specific category of the predictor to the odds given a reference category for a categorical predictor, and the ratio of the odds for an event for c units increase in a continuous predictor. However, the logistic regression statement in the Logistic Procedure (SAS 9.4), using the CONTOUR and SICEFIT options, can help in the visualization and interpretation of interactions. In R, packages such as margin and visreg can similarly aid interpretation of equivalent R plots, which are shown below their SAS counterparts, and the R code can be found at the end of the article.

The following example is taken from the Birth Weight Data from SAshelp Data Sets. There are 50,000 records. Each row gives information about the birth weight of a baby and includes information about the mother. We used the following variables:

- MomAge: The mothers were between the ages of 18 and 45. The MomAge variable is centered at the mean age, which is 27. Thus MomAge=-7 means the mother was 20 years old, whereas MomAge=7 means the mother was 32 years old.
- CigPerDay: The average number of cigarettes per day that the mother smoked during pregnancy. This variable has 30 levels. It is interpreted as the number of cigarettes smoked per day during pregnancy increases the predicted probability for an underweight baby is lower by 11%. For the odds for an underweight baby boy, they are lower by 11% than the odds for an underweight boy girl.
- The following SAS code with the EFFECTPLOT SICEFIT statement produced Figure 1:

```
ods graphics on;
proc logistic data=babyWeight;
   class Boy (ref='first');
   model Underweight(event='1') = MomAge*CigPerDay; Boy*CigPerDay;
   store logiModel;
ods graphics off;
```

Figure 1: Predicted Probability for an underweight baby by MomAge, sliced by CigPerDay for girls and boys. SAS output on the left and R on the right. R code can be found at the end of the article.

Odds Ratio Estimates and Wald Confidence Intervals

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<th>MomAge</th>
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<th>CigPerDay=5</th>
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If such papers also speculate on likely future developments, so much the better. If you feel that you could offer such a paper or can suggest a topic together with possible authors, please let me know.

The meaning of the main effects, in the presence of interactions is different than their meaning in a main effects only model. For example the main effect of mother’s age is in the subgroup of non-smoking mothers. An increase of 5 years in the mother’s age is expected to reduce the odds for an underweight baby by 7% in non-smoking mothers. The main effect of Boy is again in the subgroup of non-smoking mothers. The odds for an underweight baby boy are lower by 11% than the odds for an underweight boy girl.

The following SAS code with the EFFECTPLOT SICEFIT statement produced Figure 1:

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Oddsratio CigsPerDay AT (MomAge=-10, 0, 10);
units CigsPerDay =15;

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<th>95% Confidence Limits</th>
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<tr>
<td>CigsPerDay at MomAge=-10 Boy=0</td>
<td>1.808</td>
<td>1.485- 2.200</td>
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<td>CigsPerDay at MomAge=-10 Boy=1</td>
<td>1.280</td>
<td>1.042- 1.572</td>
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<td>CigsPerDay at MomAge=0 Boy=0</td>
<td>2.360</td>
<td>2.095- 2.658</td>
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<td>CigsPerDay at MomAge=0 Boy=1</td>
<td>1.671</td>
<td>1.463- 1.909</td>
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<td>CigsPerDay at MomAge=10 Boy=0</td>
<td>3.080</td>
<td>2.557- 3.710</td>
</tr>
<tr>
<td>CigsPerDay at MomAge=10 Boy=1</td>
<td>2.181</td>
<td>1.795- 2.651</td>
</tr>
</tbody>
</table>

Figure 2 shows that the odds ratios for an underweight baby for a five year increase in the age of the mother increase according to the number of cigarettes smoked by the mother per day. Figure 3 shows that the odds ratios for an underweight baby for an increase of 15 cigarettes per day are higher when the baby is a girl compared to a baby boy. This finding is independent of the mother’s age, i.e. the increase in the odds for a 15 cigarette increase, when the baby is a girl versus a boy, is about 24% for each mother’s age. This increase is fixed since the interaction between mother’s age and baby’s gender was not significant.

The following additional EFFECTPLOT CONTOUR statement within the Logistic Procedure yielded the Contour graph presented in Figure 4:

effectplot contour (x=MomAge y=CigsPerDay plotby=Boy)/noobs;

Figure 4: Contour graph. Upper graph is from SAS, and the second graph is from R.

The following additional EFFECTPLOT CONTOUR statement within the Logistic Procedure yielded the Contour graph presented in Figure 4:

effectplot contour (x=MomAge y=CigsPerDay plotby=Boy)/noobs;

In conclusion, both SAS and R are capable of generating informative visualizations to help interpret interactions in logistic regression models. While one might argue that the graphs from R are more attractive, they do require more effort to obtain (see code appendix), whereas the graphs from SAS are easy to produce using a simple statement within the Logistic Procedure.

For additional examples applied to the Titanic Data see (Downer 2013) for SAS users, and Fox and Hong (2009) for R users.

References


http://data.library.virginia.edu/visualizing-the-effects-of-proportion-odds-logistic-regression/

Appendix: R code

model = glm(Underweight ~ MomAge+CigsPerDay + Boy+CigsPerDay, data = x, family = binomial(link = 'logit'))

# Figure 1
library(lmsmeans)
library(visreg)

ls1 = lmsmeans(model, ~ Boy + MomAge + CigsPerDay, at = list(CigsPerDay = c(0, 15, 30, 45, 60), MomAge = c(-10, 0, 10)), type = "response")

ls1_df = data.frame(summary(ls1))

ls1_df %>%
  ggplot(aes(x = MomAge, y = prob, colour = factor(CigsPerDay))) +
  geom_line() +
  facet_grid(Boy ~ .) +
  coord_cartesian(xlim = c(0, 1)) +
  theme_bw() +
  labs(x = "Mother's Age", y = "Predicted probability") +
  scale_colour_manual(name = "Cigarettes per day", values = c("blue", "red", "green"))

CI1 = data.frame(pairs(ls1))
CI1 %>%
  ggplot(aes(x = factor(CigsPerDay), y = odds.ratio) + geom_point()) +
  coord_flip() +
  theme_bw() +
  labs(title = "Oddsratio with 95% importance limits")

# Figure 2
orl = lmsmeans(model, ~ MomAge | CigsPerDay, type = "response", at = list(CigsPerDay = c(0, 15, 30, 45, 60), MomAge = c(5, 0)))
CI2 = data.frame(pairs(orl))
CI2 %>%
  ggplot(aes(x = factor(MomAge), y = odds.ratio, colour = factor(Boy))) +
  geom_point(position = position_dodge(0.5)) +
  geom_errorbar(aes(ymin = asymp.LCL, ymax = asymp.UCL), width = 0.2) +
  coord_flip() +
  theme_bw() +
  labs(title = "Oddsratio with 95% confidence limits")

# Figure 3
or2 = lmsmeans(model, ~ CigsPerDay | MomAge + Boy, type = "response")

CI3 = data.frame(pairs(or2))
CI3 %>%
  ggplot(aes(x = factor(MomAge), y = odds.ratio, colour = factor(Boy))) +
  geom_point(position = position_dodge(0.5)) +
  geom_errorbar(aes(ymin = asymp.LCL, ymax = asymp.UCL), width = 0.2) +
  coord_flip() +
  theme_bw() +
  labs(title = "Oddsratio with 95% importance limits")

# Figure 4
library(vireg)

vireg2d(model, var = "MomAge", var2 = "CigsPerDay", scale = "response", cond = list(Boy = 1, zmin = c(0, 1)), main = "Underweight prob (Boy=1)", levels = seq(0, 1, 0.1))

vireg2d(model, var = "MomAge", var2 = "CigsPerDay", scale = "response", cond = list(Boy = 0), zmin = c(0, 1), main = "Underweight prob (Boy=0)", levels = seq(0, 1, 0.1))
analyze empirical data to find insights leading to complex problems and situations. The statistical methodology has seen substantial development in recent decades, focusing on better practical implementation of appropriate statistical methods, making the results of these separate developments accessible and ensuring their application in practice. In addition, many researchers need to be determined; fractional polynomials have gained some popularity and many spline based approaches have been proposed and (c) is the commonly used Cox proportional hazards (PH) model suitable for another recent method for right censored data (extensions to models allowing time-varying effects exist). Methods to handle these interrelated challenges are available, but often these important developments are ignored in everyday practice of data analysis. Consequently, the design and analysis of observational studies, which can be complex and costly, may have serious weaknesses, resulting in misleading inferential and design conclusions. For example, see section 3.1 in Sauerbrei et al (2014). During the last two decades several initiatives were started with the aim of improving the research process in the health sciences. Substantial progress was made concerning transparent and complete reporting in order for readers to be able to judge the usefulness of the results reported in the medical literature are often based on unrealistic assumptions or use unsuitable methods, casting doubt on the reliability, validity and conclusions. Thus, there will be an increased focus on better statistical analysis methods, ensuring their application in practice. In addition, many researchers need to be determined; fractional polynomials have gained some popularity and many spline based approaches have been proposed and (c) is the commonly used Cox proportional hazards (PH) model suitable for another recent method for right censored data (extensions to models allowing time-varying effects exist). Methods to handle these interrelated challenges are available, but often these important developments are ignored in everyday practice of data analysis. Consequently, the design and analysis of observational studies, which can be complex and costly, may have serious weaknesses, resulting in misleading inferential and design conclusions. For example, see section 3.1 in Sauerbrei et al (2014). During the last two decades several initiatives were started with the aim of improving the research process in the health sciences. Substantial progress was made concerning transparent and complete reporting in order for readers to be able to judge the usefulness of the results reported in the medical literature are often based on unrealistic assumptions or use unsuitable methods, casting doubt on the reliability, validity and conclusions. Thus, there will be an increased focus on better statistical analysis methods, ensuring their application in practice. In addition, many researchers need to be determined; fractional polynomials have gained some popularity and many spline based approaches have been proposed and (c) is the commonly used Cox proportional hazards (PH) model suitable for another recent method for right censored data (extensions to models allowing time-varying effects exist). Methods to handle these interrelated challenges are available, but often these important developments are ignored in everyday practice of data analysis. Consequently, the design and analysis of observational studies, which can be complex and costly, may have serious weaknesses, resulting in misleading inferential and design conclusions. For example, see section 3.1 in Sauerbrei et al (2014). During the last two decades several initiatives were started with the aim of improving the research process in the health sciences. Substantial progress was made concerning transparent and complete reporting in order for readers to be able to judge the usefulness of the results reported in the medical literature are often based on unrealistic assumptions or use unsuitable methods, casting doubt on the reliability, validity and conclusions. Thus, there will be an increased focus on better statistical analysis methods, ensuring their application in practice. In addition, many researchers need to be determined; fractional polynomials have gained some popularity and many spline based approaches have been proposed and (c) is the commonly used Cox proportional hazards (PH) model suitable for another recent method for right censored data (extensions to models allowing time-varying effects exist). Methods to handle these interrelated challenges are available, but often these important developments are ignored in everyday practice of data analysis. Consequently, the design and analysis of observational studies, which can be complex and costly, may have serious weaknesses, resulting in misleading inferential and design conclusions. For example, see section 3.1 in Sauerbrei et al (2014).
Region News

Australasian Region (AR)

Australasian Regional Conference

The next regional conference of the Australasian Region, titled “Biometrics by the Borders”, is to be held from 26 – 30 November in Kingscliff, NSW, at the Mantra on Salt Beach. Registration and abstract submission is now open: http://www.biometric2017.org.

The all-female line-up of keynote speakers celebrates achievements by women in the field of biometrics. We are excited to confirm that Elisabetta Carfagna (University of Bologna), Di Cook (Monash University), Rachel Fewster (University of Auckland), Louse Ryan (University of Technology Sydney) and Jean Yang (University of Sydney) are sharing their latest insights in their respective fields. We will also be joined by IBS President Elizabeth Thompson.

Three pre-conference workshops are being offered: “Spatial-Temporal Statistics with R” presented by Chris Wikle and Petra Kurzveit (25 – 26 November), “Use of geospatial technology for agriculture & ag-environmental statistics” presented by Elisabetta Carfagna (26 November) and “Exploring data and models visually” presented by Di Cook (26 November).

The venue provides a range of accommodation types and budgets. It is adjacent to a great surf beach which is patrolled during that period. The Local Organizing and Programme Committees are working hard to make this a conference you will appreciate attending from both a social and science perspective.

Further information is available on the conference website: http://www.biometric2017.org.

Please send answers to Hasil@biometrichealth.gov.hk. The first five people to answer correctly will be mentioned in the next issue of the Biometric Bulletin. Please also email interesting riddles to be published in future issues.

Mathematical Riddle

Let’s see if you can solve this riddle – What is the largest number you can create by moving only two matches? The digits in this number should be similar in size. You are not allowed to change the place of digits, just to move two matches.

* Please ignore the Hebrew/IBS does not reserve the rights for this riddle.

Vanessa Cave

Mantra on Salt Beach (Gold Coast, Australia), the venue of “Biometrics by the Border”.

RBras attendees in the main lecture room.

Closing of the meeting.

Brazilian Region (RBras)

The 2017 RBras Annual Meeting, the 62nd RBras, was jointly held with the 17th Symposium on Statistics Applied to Agronomic Experimentation (SEAGRO) from 24 – 28 July 2017 by the Department of Statistics of the Universidade Federal de Lavras, MG, Brazil.

The theme of the meeting was “Recurrent challenges of applied statistics: making sense of big data.” Once again this was a very lively meeting gathering around 435 people from whom more than 60% were students (66% research and 34% undergraduate students). Professor John Hinode, representing the IBS, gave the opening address on “Transnational Statistics: Relevance, Reproducibility and Communication”.

There were several invited paper sessions, one roundtable, two showcases, seven short courses and two tutorials, as well as contributed paper sessions and poster sessions – these summing to 380 contributions. There were activities for all tastes, such as statistics in medicine, biology, environment, agriculture and forestry to cite some of the applications. Attendees left Lavras applauding the Local Organizing Committee that once more put together a very interesting program and brought to Brazil around twelve international speakers and hundreds of Brazilians from very far away.

Thank you to Julio Bueno and Isabela Oliveira (UFLA, Lavras), Local Committee Chairs, for providing all the stats above.

Dutch Region (ANed)

BMS-ANed Spring Meeting 2017

The 2017 Spring Meeting on June 6 was organized around the Hans van Houwelingen award winning paper “Dynamic frailty models based on compound birth-death processes”, by Hein Putter and Hans van Houwelingen from the Leiden University Medical Center. Because of the occasion, Hein Putter was asked to organize this meeting and of course he focused on survival analysis. Speakers were Hein himself with “Dynamic frailty models based on compound birth-death processes”, Steffen Unkel from the Georg-August University Göttingen with “Shared frailty models and the relative frailty variance”, Malka Gorfine (Tel Aviv University) with “Different aspects of frailty modeling” and Philip Hougaard (Lundbeck and University of Southern Denmark) with “Survival of Danish twins born 1870-2000 – preliminary report”. It was a very interesting and well attended afternoon.

The scientific part of the meeting was followed by the General Assembly 2017, where we said goodbye to our President, Jeanine Houwing-Duistermaat. Thank you Jeanine for all your efforts and enthusiasm! Jeanine will be replaced by Ernst Wit (Johann Bernoulli Institute for Mathematics and Computer Science, University of Groningen). The afternoon ended with drinks, bites and nice conversations.
As far as the scientific part of the meeting, Sharon-Lise Normand (Harvard University) was the winner of the Marvin Zelen Keynote Speaker Award, which is supported by Frontier Science Foundation Hellas (FSFH).

Christos Thomadakis (University of Athens, Greece), Marta Bofill Roig (Universitat Politècnica de Catalunya, Spain) and George Bartzis (Leiden University, the Netherlands) were the winners of the Lagakos Student Awards that have been established since 2011 from FSFH to honor the memory of Prof. Steve Lagakos.

IBS supported students from Italy and Spain to participate in the conference.

The next EMR conference is planned to be held in Israel in 2019.

Prof. Rich Gelber (during the opening session of the Symposium) talking about the work of Prof. Marvin Zelen.

Symposium Honoring Prof. Marvin Zelen
A satellite symposium to the EMR and Italian conference took place in the same place in Thessaloniki 7-8 May 2017. Frontier Science Foundation Hellas (FSFH), a non-profit organization, organized a symposium to honor Marvin Zelen, Co-founder of FSFH. The Symposium took place at Thessaloniki, Greece starting mid-day on Sunday, the 7th through Monday, the 8th of May prior to the 9th EMR-IBS and Italian Region Conference (8-12 May 2017, Thessaloniki, Greece). Marvin was a pioneer in the field of Biostatistics, professor and exceptional member of the Harvard School of Public Health community, founder of FSTRF, but above all a mentor for scientists working in medical statistics and research. This Symposium celebrated his memory and unique contributions in science. Speakers for the Symposium were: Su-Chun Cheng, Ori Davidov, Laurence Freedman, Constantine Gatsonis, Richard Gelber, Lupe Gomez, Joan Hu, Ping Hu, Mette Kågström, KyungMann Kim, Nuala McGrath, Cyrus Mehta, Sharon-Lise Normand, Meredith Regan and David Schoenfeld.

The meeting was full of memories of Zelen. Members of his family and his collaborators were also present, making his legend alive during the entire symposium.

Israel
A short course on Bayesian Methods in Clinical Research was held 9 – 13 July at Tel Aviv University’s School of Public Health. It was one of the courses held in the Summer Institute of Advanced Epidemiology and Preventive Medicine, in collaboration with Johns Hopkins University Bloomberg School of Public Health. The speaker was Prof. Emmanuel Lesaffre (Catholic University of Leuven and Hasselt, Belgium). There were 25 attendees, which included statisticians, epidemiologists and physicians. The course was very interesting and included many good applications. Prof. Lesaffre explained complicated issues in a simple way while having a fruitful discussion with the audience.

From left to right: Ori Capara (Teacher Assistant), Emmanuel Lesaffre (Speaker), Hani Murad (Organizer) and Daniel Cohen (Head of Public Health School, Tel Aviv University).

Audience at the Bayesian Methods short course.

Dinçer GÖKSÜLÜK

Eastern North American Region (ENAR)
WebENAR
The most recent installment of the WebENAR series was given by Tyler VanderWeele of Harvard University on 15 September. The topic was Causal Mediation Analysis. The following installment will cover Multistate-state Models Methods and Software, presented by Christopher Jackson of the University of Cambridge on 20 October. Registration instructions and additional information may be found here: http://www.enar.org/education/index.cfm.
**Mathematical Models in Medicine** of the German Region held
The Working Groups 'Statistical Methods in Bioinformatics' and
From the Working Groups of the German Region
online system, indicating session type and proposed partner society.

is #LeadWithStatistics. The deadline for invited session proposals is
Brian with any ideas or questions. The theme for the 2018 meeting
Brian Reich of NC State ([Brian_Reich@ncsu.edu](mailto:Brian_Reich@ncsu.edu)).
ENAR extends a huge thank you to Dionne Price from the Food
and Drug Administration for serving on the Program Committee
and the

\[ \begin{align*}
\text{ENAR Spring Meeting} & \\
\text{The ENAR Spring Meeting} & \text{will take place in Atlanta, GA at the}
\text{Hyatt Regency Atlanta on Peachtree Street from 25 – 28 March.}
\text{There will be over 40 invited sessions on the program. Submissions to}
\text{the student paper competition are due 15 October; all other contrib}
\text{uted oral and poster presentation submissions are due 1 November.}
\text{ENAR would like to thank Program Chair Veera Baladandu-thushanin}
(veera@mdanderson.org), and Associate Chair Jeff Goldsmith (jeff
\text{golddsmith@mdanderson.org}), the Education Advisory Committee
\text{and the Local Arrangements Committee for their hard work in planning}
\text{the ENAR Spring Meeting. More details may be found at https://}
\text{www.enar.org/meetings/spring/2018/index.cfm.}
\end{align*} \]

**2018 JSM – Vancouver, British Columbia, Canada**

The 2018 joint Statistical Meetings will be held in Vancouver, British
\text{ Columbia, Canada 28 July – 2 August, and ENAR is fortunate to have}
\text{Brian Reich of NC State (Brian_Reich@ncsu.edu) be our representa}
\text{tive to the Program Committee. ENAR members can contact}
\text{Brian with any ideas or questions. The theme for the 2018 meeting is}
\text{#LeadWithStatistics. The deadline for invited session proposals is}
\text{6 September. Session proposals must be submitted through the JSM}
\text{online system, indicating session type and proposed partner society.}

**German Region (DR)**

\text{From the Working Groups of the German Region}

The Working Groups ‘Statistical Methods in Bioinformatics’ and ‘Mathematical Models in Medicine’ of the German Region held
their annual Workshop on Computational Models in Biology and Medicine from March 2-3, 2017 at the University of Veterinary
\text{Medicine Hannover. About 50 researchers attended the workshop
this year. Keynote speakers were Vanessa Didelez (Leibniz Institute
for Prevention Research and Epidemiology, Bremen), Kerbinian
\text{Stinner (Imperial College, London) and Arne Traulsen (Max Planck}
\text{Institute for Evolutionary Biology Pölön). The presented talks and
\text{posters of the participants represent a variety of topics related to
\text{mathematical modeling and statistical bioinformatics. The workshop
\text{was organized by the speakers of the Working Groups (Klaus Jung,
\text{Hannover; Holger Fröhlich, Bonn; Markus Scholz, Leipzig and Ingrid
\text{Glauche, Dresden)}}.}

**Summer School on Sample Size Estimation**

The IBS-DR Summer School supported a summer school on sample size estimation that was held 5-7 July 2017 in Strobi on the beautiful St. Wolfgang Lake in the Salzkammergut, Austria, surrounded by the impressive
\text{mountain scenery. The workshop was led by Meinhard Kieser and
\text{Katrin Jensen from Heidelberg University (Germany) and Arne
\text{Batke from Salzburg University (Austria). The over 30 participants
\text{learned about sample size estimation in classical settings, as well as
\text{testing non-inferiority, superiority and equivalence. Additionally,
\text{methods for more than two treatment arms and multiple end-
\text{points, longitudinal and time-to-event data were discussed, as well
\text{as Bayesian and nonparametric approaches. Between the sessions at
\text{the excellent conference site, the perfect summer weather and invit-
\text{ing lake offered welcome breaks. Active networking and exchange
\text{of ideas also took place during the early morning jogs, the evening
\text{barbecue and the ferry tour. Several participants already promised
to return in the coming year!}}}

**Japanese Region (JR)**

The 2017 Japanese Joint Statistical Meeting

The Biometric Society of Japan (BSJ) was one of the six spon-
\text{soring organizations of the 2017 Japanese Joint Statistical Meeting
\text{held on 3–6 September at Nanzan University in Nagoya, Japan.}
\text{The BSJ organized an invited session as the Biometric Symposium, which
\text{was entitled “P-values in medical and agricultural research: beyond the p<0.05 paradigm.” Issues on p-value were discussed in
\text{epidemiological, agricultural research and genomics. The Society also
\text{organized an invited session, in which the two winners of the Young
\text{Biostatisticians Award confered by the Society made a presentation on
\text{their research. One winner talked on methodology in diagnostic
\text{medicine and the other on the principal stratification approach in
causal inference.}}}

**Singaporean Region (SING)**

Workshop on Quantitative Methods for Drug Discovery and Development

A workshop on Quantitative Methods for Drug Discovery and
\text{Development was held in Singapore from June 19 to July 14, 2018.}
\text{The workshop was sponsored by the Institute of Mathematical
\text{Sciences in Singapore, and there were about 50 academic and indus-
\text{try participants from Singapore, Canada, China, Germany, India, Japan,
\text{Luxembourg, Russia, Sweden, Switzerland, UK and USA. In addition,
\text{IBS Singapore Region members Jialiang Li and Bihai Chakraibory
\text{gave talks on Nonparametric estimation and inference for polytomous
\text{discrimination index and Design and analysis of sequential multi-as-
\text{signment randomized trials, respectively during the workshop.}}}

**Western North American Region (WNAR)**

The 2017 Annual Meeting of the WNAR/IMS was hosted by the
\text{University of New Mexico from June 25-28 with over 150 partic-
\text{ipants. The meeting began with two short courses: “Clinical Trials:
\text{How to create, organize and implement a clinical trial from a sta-
\text{tistical perspective” presented by Tammy Massie from the National
\text{Institutes of Health and “Spatio-temporal dynamic statistical model-
\text{ing in practice” presented by Mevin Hooten from Colorado State
\text{University Trevor Helley from Kansas State University and Perry
\text{Williams from Colorado State University. Jairo Rojo from Oregon
\text{State University presented the WNAR Presidential Invited Address.}
\text{The conference included eleven invited sessions sponsored by
\text{WNAR, two invited sessions sponsored by IMS, three student paper
\text{competition oral sessions, nine contributed paper sessions and a
\text{poster session: WNAR thanks Charlotte Gurd (New Mexico State
\text{University) for her efforts as the Program Chair.}}}

**Participants of the Summer School on sample size estimation during the course.**
The August presentation of the IBS Journal Club was held on 10th August and included a presentation by Anais Rouanet on her paper “Joint Latent Class Model for Longitudinal Data and Interval-Censored Semi-Competing Events: Application to Dementia” (Biometrics 72, 1123–1135, December 2016) and a discussion led by Freedom Gumedze. The journal club and its preparation were well organized, with prior registration of participants by the International Biometric Office (IBO), who gave the access codes for phone and online login to potential participants. The webinar was well attended with about 30 participants present. The webinar had an appropriate length (a total of one hour) with a 20-30 minute presentation followed by a discussion and questions from the audience.

Following the journal club, we asked Anais and Freedom about the experience of presenting and discussing the paper. Both reported that this was the first journal club meeting they had attended and that they enjoyed the experience. The formality of having a presenter and a discussant was appreciated. Dr. Rouanet said, “It is a great experience for authors to valorize their work and for the audience to have a more accessible presentation and opportunity to discuss particular points.” Dr. Gumedze commented, “Overall I think this is an important activity which is hugely beneficial to both post-graduate students and established researchers, especially in developing countries. It is also a good initiative to support the IBS flagship journal Biometrics.

The discussion within the Journal Club was diverse. The presenter responded to the discussion points raised by the discussant and to two or more questions from the participants. In the end time can be used for further questions and discussion, but the opportunity for audience participation in asking questions was appreciated. Following the journal club there has been a debate about whether the presenter, discussant and the audience should have more (or less) access to the presentations before they are presented at the journal club. While this may encourage more thorough questions and answers, it may make the discussion less accessible to participants without specialist knowledge on the topic. It would be good to have the thoughts and comments from members who attend the journal club in the future.

For more information on future Journal Club dates for 2017, please visit https://www.biometricsociety.org/education/journal-club/

• 12 October 15:00 GMT
• 7 December 15:00 GMT

We would welcome suggestions for future Journal Club presentations based on papers in Biometrics or JABES.

IBS Education Committee

The Committee on Communications of the IBS invites you to...
**MEETINGS**

**2017**

4 – 5 October  
**German Region Two-day Course on Bayesian Clinical Trials**  
Ulm University  
Senatssaal, Helmholtzstrasse 16  
http://www.biometrische-gesellschaft.de/arbeitsgruppen/bayes-methodik/workshops/2017-ulm.html

17 – 20 October  
**Argentinian Region XXII Reunion Científica**  
Facultad de Ciencias Económicas y Estadística, Universidad Nacional de Rosario  
Argentina  

24 – 27 October  
**The Jamaica Statistics Symposium and Pre-conference Workshop Series 2017**  
“Statistics for Success: Ethics, Data Quality and Security”  
Kingston, Jamaica  
jssbiennial.rc@gmail.com

11 – 15 November  
**VI Iberoamerican Meeting of the RCAC**  
Central Campus of the University of the Armed Forces  
Sangolquí, Ecuador  
http://www.biometriaecuador2017.com/

26 – 30 November  
**Australasian Regional Conference**  
Kingscliff, NSW, Australia  

7 – 8 December  
**Workshop “Bayesian methods for hierarchical distance sampling models”**  
Hannover  
http://www.biometrische-gesellschaft.de/arbeitsgruppen/bayes-methodik/workshops/2017-hannover.html

**2018**

25 – 28 March  
**ENAR Spring Meeting**  
Atlanta, GA, USA  
http://www.enar.org/meetings/future.cfm

24 – 28 June  
**WNAR/IMS Meeting**  
Edmonton, Canada  
www.wnar.org

**2019**

8 – 13 July  
**XXIXth International Biometric Conference**  
Barcelona, Spain  
http://www.biometricssociety.org/meetings-events/ibcs/

July 28 – August 2  
**Joint Statistical Modeling**  
Vancouver, BC, Canada  
http://www.imstat.org/meetings/2018.htm

26 – 30 August  
**Annual Conference of ISCB and Biennial ASC**  
Melbourne, Australia  
www.iscbasc2018.com