

# THE ISBA BULLETIN



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## A MESSAGE FROM THE PRESIDENT

- Kerrie Mengersen -  
[k.mengersen@qut.edu.au](mailto:k.mengersen@qut.edu.au)

Hello again. We are now halfway through 2017, so it is timely to pause and reflect on the activities of ISBA over the last six months as well as our ambitions for the remainder of the year. These activities and ambitions could be framed under a common theme of 'Reaching Out'.

Reaching out to our members: As discussed in our last newsletter, we have been focusing primarily on two activities. The first is the World Meeting to be held in Edinburgh next year. To date, the organising committee and program committee have been busy making plans and deciding on key speakers. Looking forward, it will soon be our turn to register our participation in this exciting event, so keep an eye out for the call! The second activity is the website: I have learnt a lot about the intricacies and challenges of creating a site that will meet the diverse needs of our Society, so a huge thank you to the team who has been working so hard on this.

Reaching out to others: Our Society is attracting a stream of expressions of interest in partnering with other cognate organisations and supporting related activities such as conferences and workshops. We have also seen Bayesian influences in the outputs and commentaries of sister societies such as ASA, RSS and ISI. This reflects the increased visibility of our Society, its strong reputation and its relevance to the broader community. A vibrant Society is only possible with a vibrant membership, so thanks to all of you for your efforts in promoting the values of ISBA!

Reaching out to the future: We are now a diverse, multidisciplinary community of researchers and practitioners who are variously engaged in theory, methods, computation and applications related in quite different ways to Bayesian anal-

ysis. Through our individual and combined efforts, we are increasing the knowledge base for the ISBA of the future. Given the ride that Bayesian statistics has experienced over the past few decades, it is very exciting to consider what ISBA will look like in the same period going forward. What will be our triumphs and our challenges? What will be the face of our membership? What role will each of us play in creating this? Over four decades ago, Dennis Lindley wrote about "The Future of Statistics: a Bayesian 21st Century" (Advances in Applied Probability, 1975). He writes, among many other things, that 'in pursuing a sound path it is important to rescue those who are trying to cross the mountains by bad routes' (p.112). Through ISBA, we are clearing a path. However, it is still steep and rocky for many, so we cannot stop yet, Dennis!

Reaching out to the world: It is not necessary to list the many societal, environmental and health challenges that face our world. As Bayesians, we have the opportunity to play a role in so many areas that impact on the challenges. The role of our Society, ISBA, is to collate these individual efforts and magnify their effect. It's a big ask, but collectively we can make a difference.

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**FROM THE EDITOR**

- Beatrix Jones -

[m.b.jones@massey.ac.nz](mailto:m.b.jones@massey.ac.nz)

We have a small but jewel-like issue this quarter. The Bayesian Analysis editor provides some details on a new BA feature, the invited review. The Program Council section provides some important info about ISBA@NIPS 2017, as well as initial information about ISBA 2018. Our international ISBA meetings are worth anticipating well in advance, and the prospect of visiting Edinburgh (picture below) makes for an even more exciting prospect. And of course News of the World has a catalog of other events you may want to put on your calendar.

I know many of you are busy with conferences, short courses, and workshops this time of year. J. Andrés Christen has kindly written a short summary of the Latin American Bayesian meeting COBAL V for this issue. Such reports serve many purposes: for recurring conferences, to entice people for next time; to give people ideas of attractive features to include in conferences they are organizing; and simply to help us get a feel for what's going on in your part of the world or your part of the discipline. We hope to feature many such reports in the September issue—why not contribute one on a conference you attend between now and then?



**UPDATE FROM BA**

- Bruno Sansó -  
[bruno@soe.ucsc.edu](mailto:bruno@soe.ucsc.edu)

The June issue of the journal is available online at <https://projecteuclid.org/euclid.ba/1488963620>. This issue does not include a paper with discussion as there is a need to reduce the long list of papers in advance publication status. It does include a feature which is new to Bayesian Analysis, which is an invited review paper. This is the first of a series of such papers that will be published in the journal in the next few issues. This is part of an initiative to showcase state of the art topics that are important for the different sections of ISBA. The invited paper in the June issue is written by Sudipto Banerjee and deals with “High-Dimensional Bayesian Geostatistics”. The paper focuses on the problem of “big data” from the point of view of geostatistics. This is an area where the wide availability of spatial data naturally produces large and even huge datasets. Professor Banerjee’s paper focuses on two approaches to build hierarchical space and space-time models that can be practically used for large datasets. In that sense, the paper provides a comparative assessment of predictive Gaussian processes and nearest-neighbor Gaussian processes. The former are examples of models that use a representation of the spatial process on small dimensional subspaces. The latter seeks the construction of models with finite dimensional distributions specified by sparse precision matrices. I would like to thank Professor Banerjee for contributing this paper to BA, as I expect that it will be a very useful reference for people interested in the state of the art of methods that are key for statistical models for georeferenced data.

As in previous years, Bayesian Analysis will have a presence at the Joint Statistical Meetings, which this year are taking place in Baltimore. The invited session “Highlights from Bayesian Analysis” will take place on Weds 8/2/17, from 10:30 to 12:20. The session number is 485 and the room is CC-325. Ming-Hui Chen, one of BA’s editors, will be the chair. The talks are: • *Bayesian Estimation of Principal Components for Functional Data* by Adam Justin Suarez, North Carolina State University and Subhashis Ghosal, North Carolina State University; • *Solution Uncertainty Quantification for Differential Equations* by Oksana A Chkrebtii, The Ohio State University, David A Campbell, Simon Fraser University, Ben Calderhead, Imperial College London and Mark A Girolami, University of Warwick; • *Adaptive Shrinkage in Polya Tree Type Models* by Li Ma, Duke University; • *Multivariate Stochastic Process Models for Correlated Responses of Mixed Type* by Tony Pourmohamad, Genentech and Herbert Lee, University of California, Santa Cruz. If you are attending JSM, do not miss this session as it will be an excellent opportunity to hear about some exciting research in cutting edge Bayesian methods.

**FROM THE PROGRAM COUNCIL**

- Clair Alston-Knox, chair

[program-council@bayesian.org](mailto:program-council@bayesian.org)

## ISBA 2018 World Meeting

Preparations are now well underway for the 2018 World Meeting to be held 24th-29th June, 2018, University of Edinburgh.

Information will soon start being posted on the ISBA website, so we encourage everyone to check in frequently over the coming months: <https://bayesian.org/2018-world-meeting/>.

The Scientific Committee can confirm the Foundational Lectures at the event will be given by:

- Professor Alan Gelfand, Duke University, USA.
- Professor Edward George, University of Pennsylvania, USA.
- Emeritus Professor Anthony O'Hagan, The University of Sheffield, UK.
- Professor Judith Rousseau, Université Paris Dauphine, FRANCE.

The selection process for issuing invitations for Keynote Lectures is nearing completion and we will be announcing these on the website in the coming months.

Section Chairs and Section Program Chairs should have received an email last week in regards to proposing contributed Sessions at the event. If you have not received this correspondence please contact [c.alston-knox@griffith.edu.au](mailto:c.alston-knox@griffith.edu.au) or the program council email.

A general call for member contributed sessions and other forms of participation will be broadcast in the coming months, so please check the website regularly.

## ISBA@NIPS Initiative

The International Society for Bayesian Analysis (ISBA) supports initiatives that highlight the importance and impact of Bayesian methods related to current challenges in machine learning and data science. For the past several years, ISBA has actively promoted proposals for workshops related to Bayesian methods submitted to the Neural Information Processing Systems (NIPS) Conference. ISBA will continue this tradition for the 2017 meeting, which will be held in Long Beach, California, USA, December 4-9, 2017 (<https://nips.cc/Conferences/2017>).

The ISBA Program Council is encouraging individuals planning to submit proposals for post-conference workshops related to Bayesian methods at NIPS 2017 to consider requesting ISBA endorsement. Last year, three ISBA-endorsed workshops were chosen for the final program.

Organizers of workshops related to Bayesian methods at NIPS 2017 can apply for ISBA endorsement by emailing the following information to the ISBA Program Council [program-council@bayesian.org](mailto:program-council@bayesian.org):

1. Workshop Name
2. Names/affiliations of organizing committee members
3. Abstract describing the purpose of the workshop and its relationship to Bayesian methods
4. Names/affiliations of confirmed speakers
5. Tentative program schedule

The ISBA Program Council will promptly review all requests submitted by July 10, 2017 and will reply with a decision by July 13, 2017 so that workshop organizers can include the ISBA endorsement in their proposal to NIPS.

Endorsed workshops will not involve a financial contribution from ISBA and ISBA cannot be exposed to any loss or expect to receive any profits.

Further inquiries can be directed to the Program Council of ISBA at [program-council@bayesian.org](mailto:program-council@bayesian.org).

## ISBA@NIPS Travel Award

As part of the ISBA@NIPS 2017 initiative, ISBA expects to grant at least one ISBA special Travel Award across all accepted workshops at NIPS endorsed by ISBA. The number of awards and corresponding dollar amounts will be determined by ISBA at the time of the call for applications for the award (expected to occur in September 2017). The organizers of ISBA endorsed workshops at NIPS will be invited to propose candidates for the competition.

Eligibility criteria:

- Only participants in ISBA-endorsed workshops at NIPS will be considered.
- The recipients should be graduate students or junior researchers (up to five years after graduation) who will be presenting at the workshop.
- The recipients should be ISBA members at the time of receiving the award.

Application procedure:

- The organizers of ISBA-endorsed workshops at NIPS who wish to apply will select at most two individuals and propose them as candidates to the ISBA Program Council. The timeline for nominations will be established by the Program Council in coordination with the workshop organizers.
- The ISBA Program Council will select the recipient(s) from among the candidates proposed by all ISBA-endorsed workshops and communicate the results to the workshop organizers.

The winner(s) will be recognized as ISBA@NIPS Travel Award recipients at the NIPS workshops. For further information, email [program-council@bayesian.org](mailto:program-council@bayesian.org).

## Upcoming ISBA endorsed events in 2017

We would like to highlight the following upcoming meetings that are being co-sponsored by ISBA:

*CBMS: Regional Conference on Spatial Statistics*, August 14-18th, 2017.

<https://cbms.soe.ucsc.edu/>

*Summer School on Advanced Bayesian Methods*, September 19th-22nd, 2017.

<https://ibiostat.be/seminar/summerschool2017/Summer2017Bayesian>

*School of Statistics for Astrophysics 2017: Bayesian Methodology*, October 9-13th, 2017.

<https://stat4astro2017.sciencesconf.org/>

*O-Bayes17: International Workshop on Objective Bayes Methodology*, December 10-13th, 2017.

<https://sites.google.com/site/obayes2017/>

## CONFERENCE REPORT: COBAL V

- J. Andrés Christen -

[jac@cimat.mx](mailto:jac@cimat.mx)

The fifth Latin American conference on Bayesian statistics was held at CIMAT, Guanajuato, Mexico, this past 7-9 June. COBAL V (its acronym in Portuguese and Spanish) was sponsored by CONACYT-CIMAT (Mexico) and Google, and endorsed by ISBA as a regional meeting.

The COBAL V is the continuation of Latin American Bayesian meetings held before in Ubatuba, Brasil (2002), Los Cabos, Mexico (2005), Pucón, Chile (2011) and Medellín, Colombia (2015). This time we had 98 participants from 12 countries, mainly but not only from the region (México 45, Brasil 17, Colombia 11, Chile 2, Peru 3, USA 8, UK 4, Italy 3, Canada 1, Honduras 1, Puerto Rico 1 and Spain 2).

The official languages of the conference were Spanish and Portuguese and the scientific program included a thrilling array of presentations ranging from applications, methodology and theory of all fields of Bayesian statistics; the full program is available from the conference website, <http://cobal2017.eventos.cimat.mx>. We had 3 mini-courses, 19 invited talks, 20 contributed talks and indeed, following the ISBA conferences tradition, two exciting poster sessions with more than 70 poster presentations.

The next COBAL will be held at the Pontificia Universidad Católica, in Lima, Peru in 2019. We, in the Bayesian Latin American community, will contribute to make COBAL VI an even greater success.



## NEWS FROM THE WORLD

**Meetings and conferences**

**Bayesian Modeling for Spatial and Spatio-temporal Data**, University of California Santa Cruz, CA. August 14-18, 2017.

Hierarchical Bayesian methods for modeling spatial and space-time data constitute an extremely important, topical area of research in the statistical sciences, with a wide range of applications. However, the explosive growth of all areas in spatial and spatio-temporal modeling have produced a massive body of literature which can be daunting for newcomers imposing a steep entry barrier into the field. This conference will provide a comprehensive review of Bayesian methods for spatial statistics by a highly distinguished statistician who has contributed foundational research in the field over the past twenty years.

The main lecturer for the conference will be Alan E. Gelfand, who is J.B. Duke Professor of Statistics and Decision Sciences at the Department of Statistical Science, Duke University. Professor Gelfand will deliver ten two-hour lectures. In addition to the lectures, three invited speakers will deliver complementary two-hour lectures. These are Sudipto Banerjee (University of California, Los Angeles), Michele Guindani (University of California, Irvine) and Christopher Paciorek (University of California, Berkeley). The conference will be hosted by the Department of Applied Mathematics and Statistics of the Baskin School of Engineering. The local organizers are Athanasios Kottas, Rajarshi Guhaniyogi and Bruno Sanso.

Early registration of the conference will end on July 28, 2017. For full details, please visit <https://cbms.soe.ucsc.edu/home>.

**Summer School on Advanced Bayesian Methods**, KU Leuven, Belgium. September 11-15, 2017.

The Interuniversity Institute for Biostatistics and statistical Bioinformatics organizes for the first time a summer school on advanced Bayesian methods. During one week, two courses will be taught on nonparametric Bayesian methods and Bayesian clinical trials, respectively. The focus will be on Bayesian methods that are relevant for the applied statistician. Special attention will be

devoted to novel statistical methodology. The target audience consists of statisticians and/or epidemiologists with a sound background in statistics, but also with a background in Bayesian methodology. The registration deadline is August 15, 2017. To register, please fill in the registration form at <https://ibiostat.be/seminar/summerschool2017/Summer2017Bayesian>.

**Biostatistics in the Modern Computing Era**, Medical College of Wisconsin, Milwaukee, WI. September 28-30, 2017.

This conference is co-sponsored by the Division of Biostatistics at the Medical College of Wisconsin, the ASA Section on Bayesian Statistical Science and the Wisconsin Chapter of the ASA. It will include invited presentations by leading statisticians from both Bayesian and frequentist perspectives. Presentations will focus on clinical trials, high-dimensional statistics, survival analysis, precision medicine and population health. A grant-writing workshop and a Bayesian additive regression trees short course are also included.

Travel awards may be available for PhD students and junior faculty. The autumn weather in Milwaukee is historically very pleasant and enjoyable. Beer-making, bratwurst and Oktoberfest are great German traditions brought to Milwaukee and Wisconsin by waves of immigrants. There will be social events featuring beer, bratwurst and biostatistics hosted at idyllic beer gardens on the "cheese coast". One event will include an exclusive engagement of polka-palooza with The Polkaholics led by Don Hedeker with a guest appearance by Brad Carlin. For more information, please visit [www.mcw.edu/biostatmcw](http://www.mcw.edu/biostatmcw).

**O'Bayes 2017**, University of Texas Austin, Texas. December 10-13, 2017.

O'Bayes is the biennial meeting of the Objective Bayes section of ISBA. It is one of the longest running and preeminent meetings in Bayesian statistics, going way beyond objective Bayes and covering topics like robust, default Bayesian analysis, reproducibility, variable selection, big data and nonparametric Bayes. Please join the meeting!

The organizing committee has worked hard to keep the registration fee as low as possible, and

has applied for NSF support for young researchers (they will solicit applications for support if and when they get any support). More details can be found at the conference site <https://sites.google.com/site/obayes2017/> and the conference poster can be downloaded at <https://goo.gl/5jqXGf>.

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[m.b.jones@massey.ac.nz](mailto:m.b.jones@massey.ac.nz)

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