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INTERNATIONAL SOCIETY FOR BAYESIAN ANALYSIS

# THE ISBA BULLETIN

OFFICIAL BULLETIN OF THE INTERNATIONAL SOCIETY FOR BAYESIAN ANALYSIS

## MESSAGE FROM THE PRESIDENT

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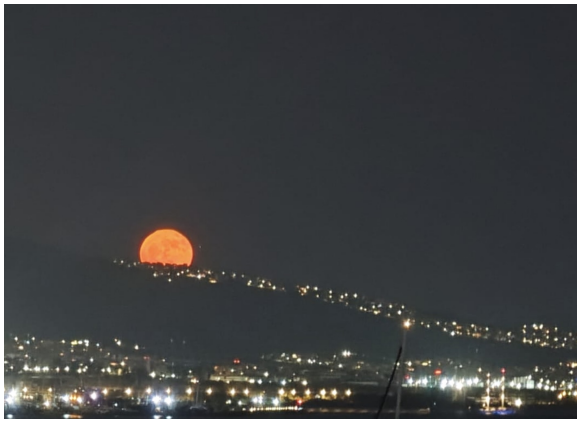
I'm writing this editorial a bit late, since - by the time you read it - June has come and gone. Every other year, instead of holding a single World Meeting, ISBA organizes a **series of Section conferences across the globe**. June 2025 followed this pattern, with meetings held on three continents that showcased the breadth and richness of our community. I had the opportunity to attend two of these meetings and was impressed by both the quality of the research and the energy and engagement of the attendees. The O'Bayes meeting in Athens marked its 15th edition and is, to my knowledge, the longest-running ISBA Section meeting, with the first held in West Lafayette, Indiana, in 1996. The 14th Bayesian Nonparametrics (BNP) meeting took place in Los Angeles, with the first edition held in Belgirate, Italy, in 1997. The BayesComp meeting, held this year in Singapore, continues the tradition that began with the MCMC-Ski conferences in the early 2000s. Alongside these long-standing meetings, we also celebrated the launch of the inaugural Bayesian Biostatistics and Pharmaceutical Conference (BBP), hosted at UCLA by the Biostatistics and Pharmaceutical Statistics Section. Additional events included the East Asia ISBA Chapter Conference in South Korea, the Bayesian Inference in Stochastic Processes in Milan, and the 15th RCEA Bayesian Econometrics Workshop in Gran Canaria, Spain, with several more meetings planned for the remainder of the summer.



*A "Strawberry" full moon rising in the distance at the O'Bayes conference dinner on June 11th, 2025 in Athens, symbolizing the abundance, illumination, and insight bestowed on the Bayesian community. Courtesy of F. Leisen.*

**IN THIS ISSUE**

Compared to the World Meeting, these smaller meetings provide a more intimate and collaborative environment, leading to deeper discussions and stronger connections between participants. While we organize the next World Meeting in Japan, these meetings allow our community to meet and discuss new directions. Our thanks go to everyone who contributed their time and energy to organizing and participating in these events over the years.

Even without a World Meeting, our activities and commitments continue. I am happy to announce that Juhee Lee and Cathy Chen have joined the **Prize Committee**, and Nadja Klein has graciously agreed to join the **Finance Committee**. We've also new member for the **ISBA Fellows Committee**: Sudipto Banerjee, Scott A. Sisson, Li Ma, and Rosangela Loschi have agreed to join the Committee. Last but not least, Yang Ni joined the **Program Council** earlier this year and has already been actively contributing to its work. We thank them for their willingness to serve and support our society.

For the first time, ISBA will share a table with the ASA Section on Bayesian Statistical Science in the **exhibit hall at JSM 2025**, which will take place in Nashville from August 2 to August 7, 2025. We look forward to connecting with both current ISBA members and Bayesians who may not yet be part of our society, including colleagues from industry that may not always come to our meetings. Please pass by!

Finally, I'm very pleased to announce that the **ISBA 2028 World Meeting** will be held from Sunday, June 18, to Friday, June 23, at the Baird Center in downtown **Milwaukee**, Wisconsin. This marks the return of the ISBA World Meeting to the United States after 35 years. The very first meeting was held in San Francisco in 1993!
The Baird Center is a world-class convention and exhibition venue that offers the capacity needed for the ISBA World Meeting, along with built-in infrastructure for hybrid participation, if need be. Milwaukee is a lively and welcoming city, especially in the summer, with beautiful lakefront views, a vibrant food and arts scene, and numerous festivals taking place throughout the season. We're excited to welcome the global Bayesian community to this wonderful setting and look forward to an engaging and memorable meeting.

## FROM THE EDITOR

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Hello ISBA community, and welcome to a new issue of the ISBA Bulletin! Apologies for the delay; I know many of you were looking forward to fresh news from the Bayesian world. But here we are!

Inside, you'll find key updates from the Program Council about the 2026 ISBA World Meeting in Nagoya, be sure to mark your calendars and keep an eye on the upcoming deadlines! We also hear from BA Editor Igor Prünster with a status update on our flagship journal. Two newly accepted papers are now open for discussion – consider sending your contributions!
Matteo Giordano brings important news from j-ISBA. For example, the junior section is currently seeking new officers – please spread the word! And don't forget to follow their brand-new LinkedIn page to stay connected.

Many of us had the pleasure of reconnecting with fellow Bayesians at recent ISBA events. However, the momentum continues: check out the News of the World section for more upcoming meetings and opportunities to get involved. This issue also features a contribution by Sylvia Frühwirth-Schnatter, who shares insights from her remarkable career.

Finally, don't miss the Teaching Bayes section in this issue – it's full of inspiring reflections and useful ideas for bringing Bayesian thinking into the classroom.

As usual, thanks to everyone who contributed! ISBA community, enjoy!

## FROM THE PROGRAM COUNCIL

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**Update on ISBA 2026.** Next year's World Meeting will be held from June 28 to July 3, 2026 in Nagoya, Japan. Please check the website regularly for updates.

The Scientific Committee has received many outstanding proposals for Invited Sessions for the meeting – thanks to everyone who has submitted a proposal so far! The Scientific Committee will continue to accept proposals at this form until 11:59pm (Anywhere on Earth) on July 6, 2025. The results will be announced in early Fall, and after that, there will be a call for individual contributed oral presentations and posters.

**(Co)-sponsorship & Endorsement Requests.** If you are planning a meeting and would like to request financial sponsorship (or co-sponsorship) or non-financial endorsement from ISBA, please submit your request to the Program Council at this email address. Detailed information on how to submit requests for sponsorship or endorsement is available at this link.

## UPDATES FROM BA

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It has been a rewarding experience settling into my role as Editor-in-Chief of Bayesian Analysis. While the initial transition came with its share of challenges, I am now fully embracing the opportunity to work alongside our outstanding Editorial Board and help shape the journal's future. I am deeply grateful to our Co-Editors and Associate Editors, who are doing a fantastic job handling an increasing number of submissions. I am particularly proud of the quality of feedback we are able to provide to authors: timely, constructive, and thorough, regardless of the final editorial decision.

This June was especially active for many of us, with three exciting ISBA section meetings taking place around the globe – O'Bayes in Greece, BayesComp in Singapore, and BNP in the United States – showcasing the breadth and vitality of the Bayesian community. I look forward to the stimulating discussions these events has sparked and to the manuscripts they may inspire. Please keep Bayesian Analysis in mind as a home for your best work.

I am also pleased to announce the first two discussion papers of my term, both of which will appear in the Fall issues of the journal:

- A Tree Perspective on Stick-Breaking Models in Covariate-Dependent Mixtures
  by A. Horiguchi, C. Chan and L. Ma
- Model Uncertainty and Missing Data: An Objective Bayesian Perspective
  by G. García-Donato, M. Eugenia Castellanos, S. Cabras, A. Quirós and A. Forte

We welcome contributed discussions on both papers. These should be no more than two pages in length and prepared using the Bayesian Analysis LaTeX style. Submissions should be made through EJMS by the following deadlines:

- July 31, 2025 for the Horiguchi et al. paper (BA1462)
- September 15, 2025 for the García-Donato et al. paper (BA1531)

Please choose *contributed discussion* as the manuscript type and clearly indicate which paper your submission refers to.
All accepted discussions will be shared with the authors, who will have the opportunity to respond in a rejoinder. We look forward to receiving thoughtful and engaging contributions from the community.

Looking ahead, we are currently assembling a *Highlights from Bayesian Analysis* session for the ISBA 2026 World Meeting in Nagoya. The line-up will be announced in the September issue of the Bulletin, so stay tuned.

Finally, do not miss the June 2025 issue of Bayesian Analysis, which features 12 new manuscripts. And keep an eye on the Advance Publication section, which is continuously updated with new and stimulating contributions to Bayesian statistics.

## JUNIOR ISBA

Matteo Giordano
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Dear ISBA community,

We are very excited about numerous events and initiatives coming up this summer! We are looking for three new board members in the upcoming elections; we have extended the deadline for nominations for the 2025 Blackwell-Rosenbluth Award; and we have an exciting event planned at the BNP14 in Los Angeles. More details about all the activities are provided below. For any questions or suggestions please feel free to reach out to the j-ISBA board via e-mail at this email address, or also on our new official LinkedIn page!

### BAYSM 2025 in the books and BAYSM 2026

We successfully held the Bayesian Young Statisticians Meeting - Online (BaSYM 2025) in April 2025 as an entirely virtual conference. With more than 180 total participants, 96 speakers and 18 sessions that spanned five days across various time zones, BaSYM 2025 was our largest conference yet, providing an open, accessible and inclusive conference venue for early-stage researchers. We would like to congratulate all BaYSM 2025 talk award winners again for their great presentations! The long talks awards winners were Kamélia Daudel, Valentin Killian, Martina Amongero, and Changwoo Lee. The short talks awardees were Josh Jacobson, Ziyou Wang, Apratim Shukla, and Alex Ziyu Jiang. We want to thank all senior discussants who provided constructive feedback during each long talks session, and all five plenary talk speakers, Samuel Livingstone, Stéphanie van der Pas, Surya Tokdar, Fernando Quintana, and Julia Palacios, who showcased the broad spectrum of cutting-edge Bayesian research.

We are delighted to announce that the next edition of BAYSM will be held in June 26 – 27, 2026 at Chiba University, Japan! This will be just before the ISBA World Meeting 2026. Stay tuned for more information!

## j-ISBA is looking for officers!

In the next ISBA elections, the j-ISBA board will need three new board members, to fill in the positions of Chair-Elect, Program Chair and Secretary for the years 2026-2027. I can tell you firsthand that serving in the board is a really rewarding and exciting experience. Senior PhD students, postdocs, and early career researchers are encouraged to apply. Those interested in being nominated for the elections are invited to contact the j-ISBA board by July 15, 2025 via e-mail at this email address. Please include your CV and a short motivation letter.

## 2025 Blackwell-Rosenbluth Award

The deadline for the Blackwell-Rosenbluth Award 2025 has been extended to July 15, 2025. The award aims to recognize outstanding junior Bayesian researchers based on their overall contribution to the field and community. We welcome nominations of junior researchers working in the broad spectrum of topics in Bayesian statistics, including but not limited to methods, theory, computation, machine learning, data science, biostatistics, econometrics, industrial statistics, environmental science, and software. See the Blackwell-Rosenbluth Award webpage for more info.

## Other sessions and conferences

- The first j-ISBA-sponsored session of 2025 took place in May at the Bayesian Inferece in Stochastic Process Workshop (BISP14) in Milan, Italy, featuring three outstanding speakers. Louise Alamichel (Bocconi University) presented a talk titled "Enriched zero-inflated stochastic block models". Lorenzo Ghilotti (University of Milano-Bicocca) discussed his work on Bayesian calculus and predictive characterizations of (extended) feature allocation models. Finally, Giovanni Rebaudo (University of Turin) talked about multivariate Species Sampling Models.
- At the recent Bayes Comp 2025, in Singapore, we organized a sponsored session titled "Parallel Computations for Markov chain Monte Carlo". Our great lineup of speakers included Dootika Vats, Lu Yu, and Sebastiano Grazzi, and the exceptional contribution of Charles Margossian as discussant.
- Do not miss out on the upcoming j-ISBA organized and sponsored sessions in 2025, at the International Day of Women in Statistics and Data Science (IDWSDS) 2025 Conference, and the 19th International Joint Conference on Computational and Financial Econometrics and Computational and Methodological Statistics, CFE-CMStatistics 2025, in London. More details can be found here: j-ISBA activities list.

## NEWS FROM THE WORLD

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# Q&A: what do you ~~believe~~ think?

**How has your research evolved along your career? And why?**

Sylvia Frühwirth-Schnatter (Vienna University of Economics and Business)

*To be successful in academia, it is of importance to make wise decisions regarding the research topics you are working on. In particular young researcher should think beyond the immediate future and choose sustainable research topics on which you enjoy working for many years to come. Among other skills, such a focus is a main cornerstone for building a fulfilling career.*
*For me personally, a sustainable research topic would involve challenging questions which were still within the range of problems I very likely was able to solve. This gave me the intrinsic motivation to keep doing research, even if I had to meet many other obligations as a full professor at a public Austrian university . On the one hand, I searched for such topics at every conference I attended. A brilliant presentation by Amy Racine, for instance, sparked me to work on Gibbs sampling for state space models in 1989 which led to one of my most cited papers.*
*On the other hand, great inspiration for my research also came from collaborations with applied scientists. Throughout my entire career, I was able to work on interesting and innovative research projects with collaborators from the area of economics, finance and business, who were eager to apply up-to-date Bayesian techniques to analyze their data. In this way, I learned a lot about the gain of using Bayesian methods in a specific application context. At the same time, I came across interesting methodological problems that were unsolved at that time and where I could make a statistical contribution. Much of the research I have been doing on state space models, mixture models, factor models or treatment effect models was inspired in this way. Working on the challenging problem of choosing the number of clusters and mixture components for multivariate mixtures model, for instance, started with an applied project on conjoint analysis in marketing in the late 1990s.*
*I even became a Bayesian statistician in the first place, because as an undergraduate I got involved in 1982 in a research project at the Department of Water Resources Research at TU Vienna. Within this project, a group of hydrologists used Bayesian inference to estimate extreme upper quantiles of run-off distributions at a specific location in the Austrian mountains by combining a few yearly observations with a prior distribution based on regional information. My task as a mathematician was to perform numerical analysis using Gauss-Hermite integration. This research project was an intriguing combination of applied mathematics, probabilistic modelling and getting the most out of data and I knew immediately that I found my calling.*

# Awards and Achievements beyond ISBA

**Noel Cressie honoured with Hannan Medal from the Australian Academy of Science.** Distinguished Professor Noel Cressie at the University of Wollongong (UOW) Australia has been awarded the Hannan Medal from the Australian Academy of Science. Noel is Director of UOW's Centre for Environmental Informatics in the National Institute for Applied Statistics Research Australia (NIASRA) and Distinguished Professor in the School of Mathematics and Applied Statistics at UOW. The Hannan Medal, which recognizes outstanding research in mathematics including statistical science, is named for the late Professor E.J. (Ted) Hannan FAA FASSA. Noel is a world leader in the

analysis of spatial and spatio-temporal data and a leading authority on statistical methods in environmental science, especially for large-scale phenomena such as oceanic and atmospheric processes and climate. He has developed powerful Bayesian-statistical methodology that integrates physical principles with stochastic models to capture uncertainties in scientific inference from large and complex datasets.

His research has been instrumental in scientific applications that include global CO2 flux, regional climate, sea surface temperature, air pollution, disease mapping, ocean biogeochemical cycles, soil carbon dynamics, glacier movement, and river pollution. Noel's recent work on uncertainty in climate-model downscaling investigates causal links between ecology and climate, and hence it has impact in evidence-based policy making.

# Upcoming Meetings, Conferences, and Workshops

## ISBA sponsored or endorsed events

- European Seminar on Bayesian Econometrics (ESOBE) 2025, 26-27 August 2025, University of Melbourne, Australia. The University of Melbourne is also funding travel awards.
- Bayesian Macroeconometric Modelling Workshop, 31 August - 1 September, University of Queensland, Australia. Selected papers will appear as a volume in Advances in Econometrics: Bayesian Macroeconometric Modelling. The workshop will be preceded by a short course on Bayesian methods for empirical macroeconomics by Gary Koop.
- SISBayes 2025 Workshop, 4-5 September 2025, Department of Statistical Sciences of the University of Padova, Italy. This workshop is organised by the Bayesian group of the Italian Statistical Society. The workshop will consist of two Foundational Lectures delivered by Guido Consonni (Università Cattolica di Milano) and Sonia Petrone (Università Bocconi), two Keynote presentations delivered by Serena Arima (Università del Salento) and Tommaso Rigon (Università di Milano Bicocca), six invited sessions, and a contributed poster session.

## Other events

- Writing Workshop for Junior Researchers 2025, 18 July 2025, online. This workshop aims to provide instruction for junior researchers writing journal articles and grant proposals. Participants will be required to provide a recent sample of their writing, which will be reviewed by a senior mentor.
- International Conference on Monte Carlo Methods and Applications (MCM), July 28 - August 1 2025, Chicago, USA. This biennial conference is one of the prominent one on stochastic simulation and Monte Carlo methods. This edition features as plenary speakers Nicolas Chopin (ENSAE), Veronika Rockova (University of Chicago) and Peter W Glynn (Stanford University).
- 65th ISI World Statistics Congress, 5-9 October 2025, The Hague, The Netherlands. This is a major event for Statistics and Data Science, held every two years by the International Statistical Institute.
- Bayesian Biostatistics Conference 2025, 22-24 October 2025, Leiden, The Netherlands. This conference features a short course on Bayesian and Causal Networks for Clinical and Epidemiological Data by Marco Scutari. Early-career researchers who submit an abstract will be eligible for the Instats Junior Researchers Prize.

- 44th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering (MaxEnt), 14-19 December 2025, Auckland, Australia. The focus of the 2025 conference will be the application of Bayesian inference and/or the maximum entropy principle to inference and inverse problems in various scientific and engineering domains. Abstract submission deadline: July 7.
- IMS International Conference on Statistics and Data Science (ICSDS), 15-18 December 2025, Seville, Spain. Plenary speakers will include Francis Bach (Ecole Normale Superieure), Richard Samworth (University of Cambridge), Daniela Witten (University of Washington), Bin Yu (University of California). Look on website for updates.
- Joint Meetings of 2025 Taipei International Statistical Symposium and 13th ICSA International Conference, 17-20 December 2025, Taipei, Taiwan. This conference is co-organized by the Institute of Statistical Science, Academia Sinica (ISSAS) and the International Chinese Statistical Association (ICSA), in collaboration with the Chinese Institute of Probability and Statistics (CIPS).

## TEACHING BAYES

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In this issue, we share the reflections of two statistics researchers and teachers with many years of experience introducing Bayesian ideas to undergraduate students in statistics and data science. But first, here are some news and upcoming deadlines for Bayesian educators:

- The Journal of Statistics and Data Science Education published an insightful interview with Jim Albert, where you can read about his experience introducing statistical reasoning to beginners with a Bayesian approach and learn about useful articles and tools. By Juana Sanchez (UCLA) and Jeff Witmer (Oberlin College).
- The US Conference on Teaching Statistics will take place at Iowa State University on July 17-19, 2025, with pre-conference events starting on July 15, 2025. There is still time to register!
- The International Conference on Teaching Statistics will be held in Brisbane, Australia, July 12-17, 2026. The first deadline (for main topic paper proposals) is July 31, 2025.
- Every year, the ASA Section on Statistics and Data Science Education grants funds to promote the initiatives of the section. The deadline to submit an application is August 15, 2025.

### Teaching Bayesian Thinking: a Conversation with Jeff Witmer and Daniel Kaplan

**Jeff Witmer**, Professor of Statistics at Oberlin College, is a 2025 ASA Founders Award recipient and a former editor of the *Journal of Statistics and Data Science Education*. He has written extensively on Bayesian education, including the articles "Bayes and MCMC for Undergraduates" (*The American Statistician*, 2017) and "To Bayes or Not to Bayes? (The Answer Is Yes)" (in the *International Handbook of Research in Statistics Education*, 2017).

**Daniel Kaplan** is DeWitt Wallace Professor Emeritus at Macalester College and author of *Modern Data Science with R*. He received the CAUSE Lifetime Achievement Award in Statistical Education in 2017. Trained as a signal-processing biomedical engineer, Kaplan brings a distinctive interdisciplinary perspective to statistical thinking and curriculum development.

### 1. Bayes Before It Was Cool

*What was your early experience with Bayesian education?*

**JW:** Back when I was a student it was fun to talk about Bayesian ideas, but applications were pretty much limited to the Normal-Normal (prior-and-likelihood) or Beta-Binomial settings. Don Berry wrote an introductory textbook in 1996 based on Bayesian methods and Jim Albert wrote some Minitab macros that could be used with Berry's book, but we were confined to looking at one or two means, or one or two proportions.

**DK:** I was trained as a signal-processing biomedical engineer, where Bayesian reasoning is used routinely - for example, in Kalman Filtering or generating diagnoses. So I was bewildered when I entered the Stat Ed world and found out that 1) most statisticians knew little about Bayes and 2) it was widely regarded as suspect. Since the textbooks were all Frequentist, I taught in that mode, but with some small deviations to save my sanity.

### 2. Introducing Bayesian Ideas in Non-Bayesian Courses

*How do you introduce Bayesian thinking into your teaching?*

**DK:** I learned that teaching about hypothesis testing is much more successful if one first teaches a simple Bayesian process, which, as has often been said, is intuitive and in fact the way many professionals misinterpret p-values. Hypothesis testing makes sense only if you first understand that it doesn't make sense! I developed a liberal arts course in epidemiology, which was a great context to introduce Bayesian terminology because it is so close to intuitively accessible concepts: prevalence of disease; sensitivity and specificity of tests. Prevalence plays the role of a prior. Sensitivity and specificity are... think about it... likelihoods. The traditional way in which the Bayes formalism is taught - $p(A \mid B)$, $p(B \mid A)$, where likelihood is presented as a probability - adds a lot of cognitive load and potential for confusion ("inverse probability"?). Instead, I preferred to use a planetary metaphor. Each planet stands for a hypothesis. You have some data from Earth. When you want to check out a hypothesis, you leave Earth and travel to that planet. On that planet, you compare your Earthly data to the kinds of things you see happening around you on the planet. If you want to compare hypotheses, you need to travel to different planets. As for sensitivity and specificity, you imagine that over the years the people definitively identified as sick have been sent to planet S. Similarly, definitively healthy people are residing on planet H. Sensitivity is the probability of a positive test on S. Specificity is the probability of a negative test on H. The basic Bayesian calculation is most compactly done using the likelihood ratio times odds form of Bayes' Rule.

**JW:** Like Danny, I also have taught frequentist methods because they have dominated the research and applications that students are going to see - although this is slowly changing. I only spend a day, at the end of the semester, showing my students Bayesian methods explicitly, but throughout the semester I flavor my teaching of frequentist methods with a bit of Bayesian spice, one might say. I probably spend twice as much time as most people do talking about the limitations of a hypothesis test, what a p-value doesn't tell us (e.g., having a small p-value doesn't mean that the effect is important), that a p-value is not even close to the probability that the null is true, etc.

### 3. A Turning Point in Bayes Education

*Which developments have most influenced the way you teach Bayesian statistics?*

**JW:** When Markov chain Monte Carlo software was developed, a whole new world opened up to statistics users and to educators. I created a course that I called "Bayesian Computation" because I wanted to feature how MCMC works (e.g., I spent a lot of time developing the mechanics of the Metropolis algorithm). I only required of my students that they had taken either an introductory course in statistics (i.e., standard, frequentist methods) or a semester of calculus, but I did not require any computer science background. We used John Kruschke's book *Doing Bayesian Data Analysis* and the R code that came with the book allowed us to fit a wide variety of models without becoming adept at writing our own code. We were able to go beyond a comparison of two means and do more complicated and interesting work, including fitting hierarchical models.

### 4. Looking Ahead

*Do you think the times are mature for developing an introductory statistics course that introduces students to both frequentist and Bayesian approaches? Or are there other developments that you would like to see?*

**JW:** We have seen a number of Bayesian textbooks published in recent years and the software has gotten much better and easier to use, so it has become a lot easier to teach Bayesian methods to undergraduates. That said, it is still the case that most published applications of statistical inference are frequentist-based, so students should learn about them. And it is hard to learn something as non-intuitive as a hypothesis test, so fully presenting frequentist and Bayesian methods in a single course is a tall order. But a second course in statistics that develops Bayesian reasoning would be quite appropriate - and valuable - as Bayesian methods are becoming more widely used in practice and so students should learn about them as well as learning about frequentist methods.