THE ISBA BULLETIN

Vol. 9 No. 2 *June 2002*

The official bulletin of the International Society for Bayesian Analysis

A MESSAGE FROM THE PRESIDENT

by David Draper
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Hedibert Lopes has done an excellent job in managing the transition from the Fabrizio Ruggieri era at the *Bulletin*, but these things take time (Hedibert had to round up an almost entirely new Editorial Board), so—even though the publication date says June 2002—this issue reports on some developments since the first of June (an example is Steve Fienberg's article on the 2002 DeGroot Prize, which was presented at the Valencia meeting in Tenerife on June 6th).

Here are a few other ISBA announcements and developments which may interest you.

➤ The entire Valencia meeting was, as usual, a big success, but I'd like to single out for particular praise the job performed by the committee—chaired by Hal Stern—which organized the ISBA Selected Contributed Papers sessions (see the article by Hal on how the committee did their work). The form and content of these sessions were superb, and it's especially encouraging to note that the number of submissions which were of sufficient quality to merit inclusion in the program exceeded the number of available slots by 60%. Hal and the rest of the committee deserve our warmest thanks for the time and effort they spent on this task—if you attended the meeting and were impressed by the ISBA sessions, I encourage you to write to Hal <sternh@uci.edu> and congratulate him and his committee for an excellent job.

➤ An ISBA General Assembly was held during the Valencia meeting, on 6 June 2002; approximately 180 ISBA members attended. Brief reports were received from Treasurer Peter Müller, Program Council Chair Luis Pericchi, and Presidents of many of ISBA's local chapters, including Brazil (Sergio Wechsler), Chile (Pilar Iglesias), South Africa (Paul Mostert), and the new Australia-New Zealand chapter (Kerry Mengersen); all seems reasonably well in the Bayesian world based on these reports. The main item discussed by the ISBA membership at this Assembly was the advisability of our launching an ISBA electronic journal (this topic was also debated at the combined meeting of the ISBA Board and Executive in Tenerife, where the vote supporting further exploration of how such a journal might work was 17 to 1 in favor). A report from a committee co-chaired by Alicia Carriquiry and Rob Kass on what form such a journal might take is available under `Discussions` at the ISBA web site `www.bayesian.org`.

In broad outline, the form of a possible ISBA journal—tentatively titled *Bayesian Analysis*—currently under consideration is as follows: it would be fully electronic in the submission, review, and publication processes; it would be broad in scope and inclusive in outlook, seeking authors both from within the field of statistics and from many disciplines outside the field (including, e.g., computer science, law, health policy, bioinformatics, marketing, astronomy, and medicine); it would feature very fast turnaround (the target median, or possibly even maximum, review time would be something like 10 weeks, with quick publication after final acceptance); it would welcome case studies, and would serve as a natural home for Bayesian articles that benefit from the opportunity to present lengthly substantive details about the background of the problem posed and solved; and authors could readily provide links to datasets, additional analyses or demonstrations, references, and even figures, video, and audio. To the critical question "Won't people continue to send their very best work to *JASA* and other established journals, so that this will just become another second-rate journal?" the main answer is: if we're stubborn and we only accept first-rate papers, then how can *Bayesian Analysis* be anything other than a first-rate journal? (Nothing says that an electronic journal *has* to publish k papers per year on a fixed schedule.)

I'm especially pleased that Rob Kass has agreed to be put forward for consideration in the process of choosing the founding Editor of this journal, if we do decide to launch it; I find it highly reassuring that the candidate pool for Editor already contains at least one person who is extraordinarily stubborn about quality, and many people with whom I've spoken about this are of similar mind.
A number of leaders in our field who have in the past expressed skepticism about the wisdom of launching an ISBA journal voiced their strong support in Tenerife for something along the lines above. The vote at the Assembly to continue further exploration of the practicalities of launching such a journal was 133 in favor, 1 opposed, and 45 abstentions. Rob is therefore now preparing a more in-depth proposal, including details about costs, and the ISBA Executive will bring his report to the attention of the membership when it becomes available. If you have any comments on this topic, please write to me at the email address above and I'll pass your remarks on appropriately.

➤ ISBA Program Council Chair Luis Pericchi has been working behind the scenes for some time now, trying to help organize a joint meeting between ISBA and the Institute of Mathematical Statistics (IMS), and in August he announced to the Executive that his efforts had been successful. The first ISBA-IMS joint meeting will take place from 24–26 July 2003 at the Intercontinental Hotel, Isla Verde, San Juan, Puerto Rico, with arrival and reception on Wed 23 July and departure on Sun 27 July. The four main themes of the meeting are causal networks, graphical models, spatial statistics, and the analysis of extremes. The Program Committee for the meeting consists of Susie Bayarri (Chair), Jim Berger, Alicia Carriquiry, Susan Murphy, Larry Wasserman, and Luis Pericchi (who also serves as Chair of the Local Organizing Committee). The broad organization of the meeting will involve plenary overview talks, some parallel sessions for all the other talks, and several poster sessions. Please get in touch with Luis <pericchiluis@hotmail.com> or Susie <susie.bayarri@uv.es>, as appropriate, for more information, and please join me in congratulating Luis for successfully leading this effort.

➤ Peter Müller and I will be working over the next few months on two ways to make it easier for you to continue as an ISBA member without having to remember to send a yearly check for your membership payment: (1) we'll explore what's involved in setting up automatic renewal of membership via credit card or automatic debit from a bank account, and (2) we'll continue discussions with the Board and Executive about ISBA life membership.

➤ As I mentioned at the conference banquet in Tenerife, ISBA has two recent milestones to celebrate: the society is now 10 years old, and (at the Valencia meeting) we recorded our 500th member. This raises the following question: in addition to the possibility that we'll launch an ISBA electronic journal, have we become mature/large enough to begin thinking about any (other) new initiatives? For example, I'm not sure what's the appropriate level of size and/or maturity for a scholarly society to begin considering the election of ISBA Fellows—do you think we've reached that point?
As two possibly relevant data points, roughly 9–10% of the (living) members of the American Statistical Association (ASA) and the IMS are Fellows. With a similar honorific rate for ISBA, if we began electing Fellows of our own, the goal would be to ramp up to about 45–50 people honored in this way over the first (say) five years of Fellowship elections (if our membership numbers held roughly constant at 500). An advantage of doing this reasonably soon is that if we don't, some of the people who have clearly done important things for Bayes over the past 30 years might not be around to accept the honor; a disadvantage is that some people may feel we're not yet sufficiently mature/large as a learned society. What are your views? And do you have any ideas for other new initiatives you would regard as appropriate for ISBA to undertake at this point in our history? I'd be glad to hear from you by email.
To end these comments on a research note, it's good from time to time to step back from our day-to-day efforts on specific research problems and think a bit about where Bayesian statistics is—or should be—going: to identify the important problem areas that most urgently deserve our attention. What could we work on over (say) the next 10 years that would most advance the ability of Bayesian methodology to satisfyingly solve real problems?

My personal list includes the following areas.

- *Bayesian nonparametric methods.* By what he calls Cromwell's Rule, Dennis Lindley draws our attention to a simple and vexing Bayesian fact: anything that gets prior probability zero must have zero posterior probability no matter how the data come out. This is a potential source of serious embarrassment to us in Bayesian modeling: we try to choose a model class without looking (too hard, at least) at the data (otherwise we're specifying what amounts to a data-determined prior on model space, which uses the data twice), and then something turns up in the analysis which makes us wish we had chosen a different (usually richer) model class to begin with. How to go back and change the prior on model space without cheating, which will typically lead to understatement of uncertainty? One potential way out is a kind of Bayesian three-fold cross-validation (this idea also arises in machine learning), in which the data are divided into three non-overlapping subsets instead of the more usual two, but you typically need quite a lot of data for this to work well. Bayesian nonparametrics provides perhaps the most satisfying solution—if everything worth paying attention to has nonzero prior probability, then the problem disappears—but many technical and implementational details remain to be addressed.
- *Improved methods for elicitation of informative priors in complex problems.* As limiting as conjugate priors can be in practice, they offer (among other things) a really valuable heuristic: the prior is like a data set which can be merged with the sampled data in such a way that a frequentist analysis of the merged data set would coincide with a Bayesian analysis of just the sampled data using this prior. Even in really complicated problems we ought to be able to use this as a tool for eliciting informative priors. Apart from some work that David Madigan and colleagues did on this some years ago I'm not aware of much progress with this approach, or for that matter with other methods for elicitation in complex settings; this may say more about my lack of knowledge of the relevant literature than anything else, but the problem seems (a) important and (b) under-addressed.
- *Serious applications of Bayesian decision theory.* With our steady increase in use of MCMC methods we have gotten increasingly bold in our efforts at solving complex inferential problems, but we still seem to be surprisingly timid in our efforts at eliciting utility functions in complicated situations and exploring where expected utility maximization tells us to go in real-world case studies. As I noted elsewhere (in the Valencia 6 volume), an embarrassingly difficult example is found by examining "the possible conflicts between the individual utility functions of the multiple actors in the health care drama: patient, doctor, hospital, government/society. As an ordinary citizen thinking utterly selfishly, I place a pretty low value on spending *my* tax money on fixing *your* health problems (unless I know you, perhaps), but then when I get sick I want the system to spend millions on me if necessary. [My doctor would like me to get well, but she gets a bonus if the total cost of all treatments and referrals she specifies across all of her patients in a given year falls below a threshold her Preferred Provider Organization has set.] The hospital I like turns out not to have had my direct welfare in mind when it decides to buy an expensive scanner that's of no use to me with my illness, thereby (given cost constraints) failing to buy a different piece of equipment that would materially have helped me. The government has the unenviable task of figuring out how much money should optimally be spent on the *monitoring* of health care quality, and how best to spend that money." Can these sorts of conflicts be resolved in Bayesian decision theory with a kind of meta- or societal-level utility

function, or does decision theory only apply to single-actor situations, or what? It would seem that our subject would benefit from an increased attention to utility.

I'd be very interested to hear about your personal list of highest-priority big-picture Bayesian research topics—let me know and I'll summarize the replies in a later issue.

Oh, Boy!

by Hedibert Lopes
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I would like to start this introduction quoting a short Woody Allen passage brilliantly presented in James Gleick's book (*Faster, The Acceleration of Just About Everything*), 1999

> I'm going to kill myself. I should go to Paris and jump off the Eiffel Tower. I'll be dead. You know, in fact, if I get the Concorde, I could be dead three hours earlier, which could be perfect. Or wait a minute. It – with the time change, I could be alive for six hours in New York but dead three hours in Paris. I could get things done, and I could also be dead.

Mr. Gleick visited Duke University a couple years ago when I was still a PhD Student about to graduate. His talk was as thought-provoking as his book. What interested me more was his view of how much time we spend trying to track the time we should be spending on our uncountable tasks! Paradoxally, here I am trying to put myself into major troubles once again.

Now seriously, the main reason that led me to accept this important task is a latent desire to participate more effectively in the Society. Despite the more administrative aspect of the task, I see the bulletin as an avenue that links several neighborhoods, allowing its members to exchange experiences, knowledge, technology as well as creating debate and discussion.

Fabrizio has left the bulletin at an unprecedented level, that makes my work both easier and harder. Easier because I should simply maintain it with the background he kindly passed to me in the last few months. Harder, well, for the same reason.

Let me get more practical before you flip to the next page. There are a few things my Associate Editors and I have been discussing in the last couple of months and that I would like to share with you. First – and following Fabrizio's initiative – I will keep a web site for the bulletin under the Institute of Mathematics' (Federal University of Rio de Janeiro) main page. Second, we have been thinking about merging the Bayesian History and the Interview sections. Third, we would like to have a Students' Corner section more oriented to themselves, by bringing their experiences in Academia, such as software they find interesting for a specific class of problems, difficulties they find when starting their PhD programs and theses, especially nowadays where computers are evolving so fast and the demand for more sophisticated and well elaborated routines are pressing. Also, problems with MCMC schemes (convergence, anyone!?), identifiability concerns in highly parametrized models, etc. Finally, I would like to register my gratitude to our Associate Editors both for accepting the invitation to participate in this adventure and for working hard to make this issue possible. Thanks Brunero, Bruno, Caterina, Duncan, Gabriel, Lilla, Luca, Sérgio and Viridiana. And do not forget, suggestions, criticisms, complaints and money (just kidding!) are all very welcome. Enjoy the issue.

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VALENCIA 7/ISBA 2002 SELECTED CONTRIBUTED PAPERS PROGRAM COMMITTEE

by Hal Stern
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➤ Introduction

ISBA, in cooperation with the Valencia 7 organizing committee, offered a series of Selected Contributed Papers at the recent Valencia 7 meetings. This was in addition to the two traditional Valencia presentation formats: invited papers accompanied by invited discussion and poster sessions. This is a brief report of the process.

➤ Committee

A contributed paper review committee was formed by the ISBA-appointed Chair (Hal Stern, Iowa State University, USA). The review committee consisted of the Chair plus Kathryn Chaloner, University of Minnesota (USA) Andrew Gelman, Columbia University (USA) Simon Godsill, Cambridge University (UK) Chris Holmes, Imperial College (UK) Katja Ickstadt, Universitat Dortmund (Germany) Jun Liu, Harvard University (USA) Kerrie Mengersen, University of Newcastle (Australia) Eduardo Gutierrez-Pena, UNAM (Mexico) Dale Poirier, University of California - Irvine (USA) Wolfgang Polasek, University of Basel (Switzerland) Dalene Stangl, Duke University (USA) Branislav Vidakovic, Georgia Tech University (USA) Jon Wakefield, University of Washington (USA) The individuals were selected to provide international coverage and to provide coverage of the topics under which contributors were asked to submit their papers. (See list below).

➤ Procedure

A call for Contributed Paper submissions went out in early September of 2001. Authors were required to submit an extended abstract (3 or fewer pages, in 10pt or larger font) to the Microsoft Conference Management Tool by October 15, 2001. A set of 18 topics was provided and individuals were asked to identify up to three topics under which their paper might fit. The topics were:

1. Inference, optimality, probability and distribution theory, foundations, causality;
2. Linear models and regression, surveys and sampling, hierarchical models, mixed models, measurement error;
3. Non-linear regression, generalized and additive models, multivariate methods, graphical models;
4. Stochastic processes, time series, filtering, dynamical systems, control systems, spatial and spatio-temporal modeling;
5. Non-parametric and semi-parametric methods, smoothing;
6. Model selection, model diagnostics, model comparison and averaging, robustness;
7. Grouping, clustering, classification, discrimination, visualization;
8. Machine learning, probabilistic expert systems, neural nets;
9. Decision analysis, construction/assessment of priors and utilities, psychological and behavioral decision theory;
10. Computational methods, algorithms, convergence, sampling, software;
11. Medical statistics, epidemiology, disease mapping, biostatistics;
12. Genetics, bioinformatics;
13. Physical sciences, engineering, environment;
14. Industrial applications, applied probability, queues, reliability, quality control, experimental design, response surfaces;
15. Economics, social science, finance, commerce, public policy, law and forensics, history/archaeology;
16. Other applications and case studies;
17. Teaching Bayesian statistics;
18. None of the above.

➤ Results

In all 123 submissions were received, primarily from North America (46) and Europe (27 UK, 29 non-UK). Submissions were also received from each South America, Central America, Asia, Australia and New Zealand, and Africa.

Each article was allocated to three reviewers, who were asked to provide an overall score (on a 5 point scale) by mid-December 2001 along with any comments (comments were optional). The top 50 papers were identified and invited to participate in mid-to-late January. All agreed to present. The papers to be presented were organized into sessions at the request of the Valencia organizing committee (this was done by the chair).

➤ Comments/Summary

Remarks at the Valencia 7 meeting suggest that the Selected Contributed Papers were of high quality and added a great deal to the meeting. The review committee's sense is that at least 2/3 of the submissions (approximately 80) were of high enough quality to merit presentation (if there were no restrictions on time).

CARLINHOS PEREIRA

by Sérgio Weschler
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Carlos Alberto de Bragança Pereira (Carlinhos) might be considered the pioneer of Bayesian Statistics in the Southern Hemisphere. But certainly this is not his most striking trait, at least for people who know him. Great friendliness and generosity, instead, distinguishes this Copacabana native who grew up in Leblon. In this interview we expect to hear from him on his many papers, many friends - including his PhD supervisor, Dev Basu - and Bayesianism.

I (Hedibert) started this interview, by e-mailing Carlinhos a few general questions, but it was Sergio's hard work that brought this delightful interview into fruition.

1. How did you become a statistician?

I was 11 years old, and my brother Basilio 12, when our mother had to find us a public school to attend. The National School of Statistical Sciences - ENCE - was starting to offer a Basic Commercial Course for kids. They hired very good teachers from Rio de Janeiro. My mother managed to enroll us even half an hour after the deadline. As soon as we finished that four year course, they decided to close it. It seems that they had opened it just for us! After this step, we started the 3-year school of Technical Statistics at ENCE. Finishing this sort of professional high school, we finally entered the ENCE undergraduate 4-year program, which is still active. We stayed 11 years in a Statistics School, in my case for half of my life. People don't always believe when I tell them I had to draw histograms at age 11. While on the undergraduate program I had to work as a technician during the day. Classes were held during night shift. After graduating, I moved to São Paulo in 1969 to work as an instructor at the department of Statistics at USP - University of São Paulo. Since then I have been always affiliated with the Department. I completed the Master program in 1971 and started my PhD program at Florida State University in 1977. I graduated from FSU in 1980, under Dev Basu's supervision.

2. How was life in ENCE?

I had a good time at ENCE. It was located in downtown Rio de Janeiro. I could then meet people of different backgrounds. The teachers also were very special. I remember the one who was responsible for probabilities, Helio Gopfert. First year at undergraduate school and he talks about Borel sets and Measure Theory. He used to say that only after thinking about solutions for problems could you go to textbooks to see standard stuff. I remember one of his definitions: "Experiment is an abstract concept where you give meaning to the words realization and observation". My definition today is: Experiment is a mechanism that transforms unknown quantities into known ones. I believe my Bayesian background starts just there.

3. All right. Every intelligent kid is Bayesian. But how and when did you become a Bayesian in the academic sense?

Well that would be in São Paulo when the Statistics Master Program was first organized. There was no history about MSc dissertations and I was the first student to graduate. So I had to sort of do lots of reading by myself. There were of course very interesting people teaching the disciplines. Norman Severo, Uppulury and Harold Larson were my first contact with non-Brazilian professors. I also used to go to the Institute of Biology to see the "real" experiments going on. One of their problems interested me very much and looking for good solutions I started to read Savage's 1961 (not 1954!) book on Statistical Inference. It was hard and challenging to read that little book. I decided to read a book by Jeffreys, *Scientific Inference*, where a biologist discusses Science with a statistician. After those two books I started to look for books on Bayesian methods. I decided at that time to translate Blackwell's "Basic Statistics" book, in collaboration with Wagner Borges who already had very good English. I believe it is the most interesting elementary book in Bayesian Statistics. I used it for undergraduate courses in Mathematics and Medical schools. The trouble was that no standard stuff was in it and nobody else liked the book. But some of my young students moved from Medicine to Biostatistics and from Mathematics to Bayesian statistics. Finally, I graduated in 1971 having written a MSc dissertation with a strong Bayesian flavor on a Genetics problem. As a result, I had my first Statistics publication in *Science and Culture*, a Brazilian journal.

4. Tell us about your PhD program experience.

When finishing my MSc, most of my faculty colleagues at USP were abroad in PhD programs. I had to wait for them to return before looking for a new step in my career. Already when joining the research team at the Biology Institute I started to study Reliability and liked the mathematics of Frank Proschan. So in 1977 I joined the PhD program at FSU. I was very fortunate as I could meet great people. Some of them strongly anti-Bayesians but good challengers. Oscar Kempthorne, for example, gave me very tough intellectual challenges. Basu invited true Bayesians like David Blackwell for whom I have great admiration and respect. Anyone who had him as a teacher is very fortunate. Dick Barlow visited us several times and we became friends after some collaboration. He became Bayesian after his visits to FSU. My conviviality with Frank Proschan, mainly in his Saturday Seminar, and with Dev Basu, my wonderful supervisor, made them my gurus. With Frank I learned also about scientific politics. With Dev I also learned how to survive in academia keeping intellectual freedom and avoiding scientific faddism. My dissertation, under Dev's supervision, was one of the few Bayesian dissertations in FSU, I believe.

5. How was your return to Brazil?

I came back in March of 1981. I really thought that as people down here had never been exposed to Bayesianity they would be really happy to finally see the light. This was a huge mistake (laughs!). Soon all my lectures were ending with conflict. It was difficult in the beginning since I did not realize that conflict is what matters in the progress of scientific groups. I started to understand why Basu used to quote Max Planck: "A new scientific truth does not triumph by convincing the opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it". Today, in Brazil, I believe half of the good statisticians are Bayesian. I would like to emphasize that although my colleagues did not buy Bayesian ideas at that time, they never tried to stop my way. In fact I was invited to lecture a Bayes course in the Brazilian symposium in 1982, when I and my colleague Marlos Viana wrote the first, I think, Bayesian book in Portuguese.

6. What projects and areas interested you most at that time? The list of collaborators on your more than one hundred papers is impressive.

I tried to find echo from my Bayesian background at the Institute of Biology and I realized that it became even harder than in our statistical community. However, I met a young biologist, Andre Rogatko, who was struggling to find a frequentist solution for the Penetration problem in Genetics. We became good friends and he understood that Bayesian ideas were in fact what he needed to go on in his bright career as a scientist. Today, being a very productive scientist, he is the Head of the Biostatistics group in the Fox Chase Cancer Center. His work is 100% Bayesian. I have been working since then with some important groups in the medical and biological areas. My strongest links are with people in Cytogenetics. Most of our papers appeared in *Mutation Research*. I believe the most important is a consequence of my collaboration with Peter Groer when he was in ORAU: "Current status of Cytogenetics procedures to detect and quantify previous exposures to radiation. *Mutation Research* 196: 103-59, 1988." I believe that was the first time Bayesian inference appeared in Cytogenetics. Peter is a very good scientist and I believe he is now also 100% Bayesian.

7. According to I.J.Good, there are 46656 varieties of Bayesians. How do you place yourself?

In fact there could be as many Bayesians as that. However few varieties if not just one hold the lead these days. One does not see independent minds choosing their ways too often. Publication pressure is a very strong barrier to freedom of ideas. One of my last papers got this one-line answer from an important journal: "It considered a problem, obtained data, invented the modeling and applied it. No novelty!" Do you know any paper on applications of Bayesian Statistics that does not follow this way? I did not use MCMC nor Bayes Factors. The computational methods were based on "old-fashioned" ... Mathematical Analysis! Fortunately the paper was published in a biological journal and I'm having as many requests as one would like to have.

8. Important Institutions like the American Food and Drug Administration seem to have become more Bayesian recently. Do you see much impact for the Bayesian standing? What else do you think will help disseminate Bayesian practice and ideas?

Dev Basu made me promise him that I would not become a priest for Bayesian statistics. He wanted me rather to do applied work in other areas of knowledge. He kept telling me that only people working in applications would be listened to. I believe this is what is going on today. I tried to do my best to have my students going this way. Telba Irony took my first course while she was an undergraduate. After that I became her MSc dissertation supervisor (Fisher vs Bayes). We had a good time developing her dissertation and in fact it was published in the JSCS. She is a very intelligent person and even before graduating at the PhD program in Berkeley she made me understand how to use Bayesian statistics in practice. Her experience working for a bank was crucial to understand the way for applications. We became very good friends and I cannot say that she was really only a student of mine as I have learned a lot from her too during the development of our many papers in collaboration. Today she is playing a vital role in developing and implementing the effort to define, coordinate, promote, and disseminate the use of Bayesian statistics at the Center for Devices at the FDA. I am sure that, with her strong background in foundations and her sharp common sense, she will contribute to the progress of design and analysis of clinical trials. Only with smart people like Telba working professionally the dissemination of Bayesian statistics will grow.

9. Application of Bayesian Statistics has undoubtedly benefited a lot from the development of MCMC and stochastic algorithms in general. How do you see this route?

I believe MCMC algorithms are most important numerical tools and help significantly in the application of Bayesian Statistics. They are tools however, not a body of ideas. I have seen people willing to use MCMC where simple "old-fashioned" calculus techniques would do a good job. It seems to me, quoting Leo Breiman, that when having a hammer in your hands, all problems tend to become nails. MCMC is a heavy hammer.

10. What advice would you give to young Bayesian researchers? What are the most fertile areas?

I had the opportunity to be in close contact with very bright and interesting scholars and I learned a lot with them, especially the ones who visited me in Brazil: Basu, Zacks, Lindley, Pericchi, Barlow, and others. I would say to the young Bayesians to always try to find, meet, talk, and listen to great scholars. Students will learn more by having contact with them than in lonely readings. Rephrasing Dennis in one of his recent writings: Unfortunately, nowadays, many of the books and teaching are more interested in the methodology ritual than in ideas or in understanding problems and data. Hence my advice is that people should direct their attention to ideas rather than to methodology per se.

11. You have a reputation of being a wonderful teacher of frequentist Statistics as well.

We were forced to go through all the Statistics ritual of Neyman-Pearson-Fisher. In fact I never took a genuine Bayesian course in my life. Even Basu's course was directed to present counter-examples to classical statistics. My choice for Bayesianity was very careful and conscientious. Most people who criticize Bayesian thinking have not been exposed to our basic ideas. They actually don't have a clue on what they are talking about. It amuses me but, on the other hand, makes me think that we Bayesians had to go through Lehman's books and Fisher's writings and so forth. So we know what we are talking about when criticizing frequentist procedures. In any case this reputation you mention comes as a surprise to me. I think I need to be more aggressive when talking about frequentist stuff to the undergrads. (laughs!). I actually think that it is very nice when they give you the opportunity to discuss in front of an audience. We have to ask for such opportunities.

12. Tell us about your advisor, Professor Dev Basu.

Professor Debabrata Basu was a great man. He was a real thinker, a true scholar. He used to tell me to find the master key because a real thinker could not carry a loaded key holder. When we were walking in downtown São Paulo he said it looked just like Calcutta.

Then he asked me to go back and answer "what would be the probability that he and myself be walking together in that place?" The probability had to be zero and that is why it related to an important fact. In his opinion only events with zero probability are relevant.

13. Who is your favorite Brazilian thinker? People say you like Nelson Rodrigues very much. [Nelson Rodrigues is a renowned Brazilian playwright and writer].

Sure it is Nelson since he was born Bayesian. And deFinettian! He coined the term "idiots of objectivity". He also said that every unanimity is stupid. In his last interview, before his death, he was asked about needed skills to be a good writer and he answered that one has to be obsessive. I believe that to be a good researcher in Statistics, like deFinetti, Blackwell and Savage, one also has to be obsessive. This is, by the way, why I believe that the FBST will replace the industry of Bayes Factors.

14. Tell us about your students.

I must at this point call most of them colleagues or even Big Bosses. José Leite from São Paulo, Pilar Iglesias from Chile, Carlos Paulino from Portugal, Victor Salinas from Chile, Luis Montoya from Colombia, and Veronica Lopez from Argentina are few names that have important professional and academic positions. Their scientific accomplishments and intellectual independence make me extremely proud. I believe that without my students and colleagues, as you Sergio, I would have never built my career and would not be a Full Professor today. I would also like to say that I owe a lot to some great writers. I would like to remember some of them here: Basu, Blackwell, Savage, Good, deFinetti, deGroot, Hald, Lauritzen, Dawid, Kadane, Berry, and Mouchart. I might be missing many others with high probability.

Since Sergio has left the room I would like to talk about him. He has been, like Telba, a good friend and collaborator since I return from FSU. His background in the understanding of sciences is very sharp and he helped our Bayesian group a lot with his critiques and improvements. Lately when Julio Stern and I started to develop the FBST he could show how this procedure could look under the decision theory. His paper in Test *was the added support we needed to believe we are in the right track. I am very fortunate to have a colleague and friend like Sergio. Thank you!*

Thanks to Carlinhos for his involving and thought-provoking answers.

SUGGESTIONS

PLEASE, FEEL COMPLETELY FREE TO SEND US SUGGESTIONS THAT MIGHT IMPROVE THE QUALITY OF THE BULLETIN

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ISBA/SBSS ARCHIVE FOR ABSTRACTS

All authors of statistics papers and speakers giving conference presentations with substantial Bayesian content should consider submitting an abstract of the paper or talk to the ISBA/SBSS Bayesian Abstract Archive. Links to e-prints are encouraged. To submit an abstract, or to search existing abstracts by author, title, or keywords, follow the instructions at the abstract's web site,

www.isds.duke.edu/isba-sbss/

BAYESIAN STATISTICS AT *Los Alamos National Laboratory*

by Dave Higdon
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The Los Alamos National Laboratory has a rich history of scientific exploration, collaboration and computing. The lab was originally founded in 1942 as the site of the *Manhattan Project* which brought together prominent scientists from around the world to develop the atomic bomb. One by-product of the push to develop the bomb before the Axis powers and the subsequent cold war push to develop the hydrogen bomb was the invention of modern computing.

At the time the Manhattan Project began, computers consisted of a group of people using desk calculators. At the end of World War II, Los Alamos scientists were using the first electronic computer. John von Neumann was primarily responsible for this change, which led to the Laboratory's strong program in computer science and technology, as well as making it possible to calculate the behavior of nuclear explosives.

It was at LANL in this postwar era that von Neumann, along with Stanislaw Ulam and Nicholas Metropolis pioneered the Monte Carlo method. In particular, it was Metropolis' 1953 paper *Equations of State Calculations by Fast Computing Machines* (with A. Rosenbluth, M. Rosenbluth, A. Teller and E. Teller) where Markov chain Monte Carlo (MCMC) – a cornerstone of current Bayesian computation – first appeared.

Formally organized statistical activity first began at the lab in the early 1950's. Projects included analyses related to the weapons program, computer-based approaches for solving non-linear least squares problems, and assisting with the lab's budget. It wasn't until 1968 that a formal statistics group was founded at LANL. As near as I can tell, Bayesian analyses at LANL were first carried out by Harry Martz and Ray Waller beginning in the mid-1970's in applications to reactor safety in nuclear power plants. Here the appeal of the Bayesian approach was in its ability to combine various sources of information, such as expert judgement and component level data, while dealing with very limited amount of full system data.

Since then, the use of Bayesian statistical methods has become increasingly more commonplace at LANL. This is in large part due to the nature of the large, multi-disciplinary applications here – computer simulations, expert judgment, as well as other sources of information can be used to assist in understanding a problem, while direct data is often limited.

Currently, the Statistical Sciences Group is involved with a number of very interesting projects that feature Bayesian methodology. An appealing feature of most of these projects is that they are a genuine collaborations with scientists from various disciplines.

Current areas that make heavy use of Bayesian methodology are:

- Reliability;
- Experimental Design;
- Uncertainty quantification in the application of complex computer code output;
- Fusing various sources of information – including expert judgment;
- Inverse and calibration problems; and
- Development of Monte Carlo (and MCMC) methodology.

In most cases, Bayesian hierarchical models (typically fit via MCMC) are used to capture the nature of the variability of the systems being modeled and to incorporate the various of sources of information that can be brought to bear on the application.

For additional information regarding the history of Los Alamos, I suggest the book *The Making of the Atomic Bomb* by Richard Rhodes. For the lighter side, Richard Feynman's annectdotes on his experiences while at Los Alamos are entertaining in *Surely you're Joking Dr. Feynman*. Finally the website `www.lanl.gov/worldview/welcome/history.html` provides a more compact synopsis of the making of the atomic bomb. I refer you to the Statistical Sciences webpage at LANL for statistics activities at LANL `www.stat.lanl.gov`.

CLUSTER ANALYSIS OF GENE EXPRESSION DYNAMICS

by Paola Sebastiani
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Microarray technology enables investigators to measure the expression level of thousands of genes simultaneously. The promise of this technology is the ability to observe the entire genome in action and, in so doing, to uncover its underlying expression mechanisms. Cluster analysis is today one of the favorite unsupervised learning approaches to identify these mechanisms. Typical clustering algorithms share the general strategy of grouping together genes according to the similarity of their expression levels across different experimental conditions or different samples. The intuition behind this approach is that genes behaving similarly belong to similar, or at least related, functional categories. Several applications of genome-wide clustering methods focus on the temporal profiling of gene expression patterns. In these experiments, the expression level of thousands of genes is observed at particular time points during the temporal evolution of some biological process. A complication with the analysis of temporal gene expression data is the serial correlation, which fails to be accounted for by standard clustering methods. For example, the similarity measures currently used for clustering gene expression data, such as correlation or Euclidean distance, are invariant with respect to the order of observations. CAGED (Cluster Analysis of Gene Expression Dynamics) is a program implementing a novel model-based approach to cluster temporal gene expression patterns that is able to account for the temporal dependency. The program was developed by Marco Ramoni, at Children's Hospital Informatics Program, Harvard Medical School, and myself, and it implements the clustering method described in Ramoni, Sebastiani and Kohane (2002). A comprehensive description of the program is in Sebastiani, Ramoni and Kohane (2002). The main novelty of the clustering method implemented in CAGED is the concept of similarity: two time series are similar when they are generated by the same stochastic process. With this concept of similarity, the Bayesian approach to clustering a set of time series consists of searching the most probable set of processes generating the observed time series.

The current implementation of CAGED represents gene expression dynamics by autoregressive models, and uses an agglomerative procedure to search for the most probable set of clusters, conditional on the available data. Because the number of possible clustering models grows exponentially with the number of gene expression time series, CAGED uses a distance-based heuristic search procedure able to render the search process feasible. In this way, CAGED retains the important visualization capability of hierarchical clustering and acquires an independent measure to decide when two series are different enough to belong to different clusters. Furthermore, the reliance of CAGED on an explicit statistical model of gene expression dynamics makes it possible to use standard statistical techniques to assess the goodness of fit of the resulting model and validate the underlying assumptions.

An additional problem of standard hierarchical clustering methods is the arbitrary nature of the partitioning process. CAGED automatically identifies the number of clusters and partitions the gene expression time series in different groups. This is based on the clustering model posterior probability. In this way, CAGED allows the investigator to assess whether the experimental data convey enough evidence to support the conclusion that the behavior of a set of genes is significantly different from the behavior of another set of genes. This feature is particularly important as decades of cognitive science research have shown that the human eye tends to overfit observations, by selectively discount variance and "seeing" patterns in randomness. By contrast, a recognized advantage of a Bayesian approach to model selection is the ability to automatically constrain model complexity (Tenenbaum and Griffiths, 2001) and to provide appropriate measures of uncertainty.

CAGED runs under the various versions of Microsoft Windows and requires at least 128 MB of RAM and a 300 Mhz processor. The graphic user interface is implemented as a Wizard interface composed by subsequent screens that guide the user through the steps of analyzing a database of gene expression dynamics. The last screen offers the option to write a report of the analysis, in an automated way.

The program is freely available to academic and non-profit organizations, and can be downloaded from `http://www.genomethods.org/caged`.

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DEGROOT PRIZE WINNER ANNOUNCED

by Stephen E. Fienberg
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The winner of the 2002 DeGroot Prize in recognition of a published book in statistical science is: Robert G. Cowell, A. Philip Dawid, Steffen Lauritzen, and David J. Spiegelhalter (1999). *Probabilistic Networks and Expert Systems*. Springer-Verlag, New York.

The award, consisting of commemorative plaques and $1,500, was presented to the authors on June 6th, 2002 at the final banquet of the Seventh Valencia International Meeting on Bayesian Statistics, held in Tenerife, Canary Islands, Spain.

The DeGroot Prize, established in 2000, is awarded in recognition of a published book in statistical science. The Prize is named for Morris ("Morrie") H. DeGroot, and recognizes the impact and importance of his work in statistics and decision theory, especially in the form of monographs and textbooks, and his marked influence on the evolution of the discipline over several decades through his personal scholarship, educational, and professional leadership.

The Prize was established in 2000 by the DeGroot Prize Founders, and is administered on behalf of the statistical community by International Society for Bayesian Analysis (ISBA). The Founders provided initial financial contributions to the Prize Foundation and established the Charter governing administration and award of the Prize (A charter for the prize is posted on the ISBA webpage, `www.bayesian.org`).

For the inaugural award, books published between 1996 and 2000 were eligible for nomination. In all 15 books were nominated. These books were judged on (1) their overall quality and (2) the extent to which they represent important, timely, thorough, and notably original contributions to the statistics literature. The committee members also took cognizance of whether they thought that Morrie would have enjoyed reading the books.

Probabilistic Networks and Expert Systems possesses several special features that helped the Committee to distinguish it from the other excellent books that were nominated for the prize: 1. The quality of the writing is impressive; 2. It deals with problems on the cutting edge of the interface between statistics and computer science; 3. It contains succinct but clear expository material on graphs and probability networks, worthy of a text book; 4. It is replete with real examples and suggestions for further reading, along with an up-to-date bibliography; 5. While much of the material in the book has appeared in papers scattered about the literature, including in Valencia Proceedings volumes, the whole was far greater than the sum of these parts.

The selection committee believes that Morrie DeGroot would certainly have enjoyed reading the book, and perhaps would have used results in his own subsequent work. I want to thank the other members of the Selection Committee who labored hard at the task of choosing the winning bookby Philip Brown, Kathryn Chaloner, Edward George, and Adrian Smith.

STUDENT'S CORNER

by Lilla Di Scala and Luca La Rocca
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Let us first of all introduce ourselves. We are both third-year Ph.D. students at the Department of Mathematics of the University of Pavia (Italy), within the local Mathematical Statistics program, and we will be conducting the Student's Corner of the Bulletin for the upcoming year. Thanks are rightly due to Prof. Fabrizio Ruggeri for having introduced us to the ISBA community and to Prof. Hedibert Lopes for having accepted our candidature as Associate Editors for this Section. We are happy to embark on this new adventure and we will certainly do our best to keep up the good job carried out by the past Editors. In order to achieve this, we need foremost the help of all of you who read the Bulletin and, in particular, those who may have a special interest in the Student's Corner, either as Ph.D. students, post-docs or on the look-out for jobs within the statistical community: please send us your suggestions and tell us what you would like to see in this Corner, but which is not currently present. We will continue to feature Ph.D. dissertations and, more in general, Bayesian research developed by students all over the world. Our intention is also to allow space for statistics researchers, both inside and outside academia, whose know-how and experience in industrial, economical or medical settings may be of help to students. We start off by featuring five students who have recently defended their Ph.D. theses, Dr. Marco Ferreira, Dr. Sining Chen and Dr. Rui Paulo from the Institute of Statistics and Decision Sciences (ISDS), at Duke University, in North Carolina (USA), and Dr. Josmar Mazucheli and Dr. Tereza Dias from the Research Operations Program, at Federal University of Rio de Janeiro (UFRJ).

The Ph.D. program at Duke's Institute of Statistics and Decision Sciences usually requires four years to be completed; most students attend courses during their first two years and then, during their second year, they start dedicating themselves to original research. If you want to know more about the post-graduate program at Duke, you will find all the information at http://www.isds.duke.edu. Dr. Mazucheli was (co-)advised by Professor Helio Migon from the brand new Ph.D. program in Statistics located at the Institute of Mathematics. More information can be found at www.dme.ufrj.br/posgrad.html.

Marco Ferreira
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Bayesian multi-scale Modeling
Advisor: Mike West

We introduce two classes of multi-scale models: one for time series and another for more general random fields. The novel framework couples standard Markov models for time series and for random field stochastic processes, at different levels of aggregation, and links the levels via stochastic links to induce new and rich classes of structured linear models for time series and random fields. The framework allows a reconciliation of models and information processing at different levels of temporal and/or spatial resolution. Jeffrey's rule of conditioning is used to revise the implied distributions and ensure that the probability distributions at different levels are strictly compatible within a formal statistical framework. Our construction has several interesting characteristics: with just a few parameters, our framework produces a great variety of auto-correlation functions for time series and variograms for random fields. The models have the ability to coherently and efficiently combine information from different scales and the capacity to emulate long memory processes for time series and, perhaps more interestingly, for random fields. There are at least three uses for our multi-scale framework: integration of information from data observed at different scales of resolution; induction of long memory type processes when the data is observed only at the finest scale; assignment of priors for underlying multi-scale processes, such as a permeability field in the problem of fluid flow through porous media. Bayesian estimation based on MCMC analysis is developed. Issues of prediction through simulation are discussed. Several examples in time series include analysis of the flow of a river, log-volatility of exchange rates, potential hydroelectric energy and temperature of the northern hemisphere. Some applications to sub-surface hydrology include the estimation of one-dimensional and two-dimensional permeability fields.

Sining Chen
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An inhomogeneous Markov random field model for images
Advisor: Valen Johnson

Large quantities of medical images are acquired daily at nearly every medical center in the USA, but statistical models and associated software that would facilitate the automated analyses of these images is lacking. The goal of this research is to develop a methodology that will make such automated image analysis possible. The methodology that we propose is based on an atlas-based deformation model which finds a one-to-one mapping from the atlas (reference) image to a target image in the same image class. The deformation is carried out by using generalized landmarks called "facets": knowledge about the atlas image is thus transferred onto the target image through these facets. A large number of facets is placed in the volume of the atlas. Each of these facets is then located on the target image through the application of a statistical model which has two components: a prior component on the facet location and a likelihood component based on the agreement of features between the atlas and target image, where the feature is a function of the facet location in the atlas or in the target image. A Markov random field with nearest neighbor system is used as the prior distribution for the facet locations, while the likelihood incorporates a feature difference which represents the difference in the direction of gradients, each weighted by its magnitude. This is a significant improvement, from traditionally used features, in many ways: it facilitates cross-modality matching, downplays the influence of noise and provides a solution for cases where a feature is missing in the target image. Posterior inference is obtained thanks to the ICM (Iterative Conditional Mode) algorithm. The model is applied in order to automatically segment atlases constituted of mouse brains and the comparison is then made with hand-segmentation results, showing a considerable improvement from the latter case.

Rui Paulo
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Problems on the Bayesian-Frequentist Interface
Advisor: James O. Berger

Two areas on the Bayesian/frequentist interface are explored. The first is simultaneous Bayesian-conditional frequentist hypotheses testing; the second is the development of objective prior distributions for the parameters of Gaussian spatial processes.

After presenting a structured overview of the theory of unified Bayesian-conditional frequentist testing, three particular problems in the area are explored in depth. The first is that of testing a simple hypothesis concerning the mean of an Exponentially distributed population, while the second is that of comparing the means of two Exponential random variables. In each setting, two different objective priors, leading to two different Bayesian-conditional frequentist tests, are considered and the presence of censoring and its consequences are investigated.

The third problem considered in this area is that of sequentially testing a precise hypothesis concerning the drift of a Brownian motion observed continuously in time. Most of the commonly used stopping boundaries do not conform to the established theory of conditional frequentist testing. Hence, a new conditioning strategy is developed, considerably extending the existing approaches. We first study the sequential probability ratio test for simple hypotheses, and then generalize to quite arbitrary stopping boundaries, including vertical lines.

In the second part of the dissertation and motivated by the statistical evaluation of complex computer models, we deal with the issue of objective prior specification for the parameters of Gaussian spatial processes. In particular, we derive the Jeffreys-rule, Jeffreys independence and reference priors for this situation, and prove that the resulting posterior distributions are proper under a quite general set of conditions. Another prior specification strategy, based on maximum likelihood estimates, is also considered, and all priors are then compared on the grounds of the frequentist properties of the ensuing Bayesian procedures.

Josmar Mazucheli
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Polyhazard and Mixture Models in Survival Analysis
Advisors: Jorge Achcar and Hélio Migon

In this thesis, we introduce some alternative lifetime models to the existing ones. Many of these models are generalizations to existing survival models that gives great flexibility of fit. These models are related to competing risks with independent causes and mixture models to be used to analise survival data. Some examples in the medical and engineering areas are introduced to illustrate the proposed methodology. Bayesian and classical approaches are considered for the inferences. Under the Bayesian paradigm, we use MCMC methods to simulate samples for the posterior of interest.

Tereza Dias
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Bayesian Analysis of Survival Data in Proportional Hazards Models
Advisor: Dani Gamerman

In this thesis proportional hazards models are studied using a Bayesian approach within the framework of the generalized linear model in survival analysis. These models widely discuted in the literature are extended considering presence of individuals and cluster specific random effects. We considere also other models classes such as accelerated lifetime tests and models using a independent gamma increment processes. The models parameters are estimate by MCMC to simulate samples for the posterior of interest. Bayesian and classical approaches are considered for the inferences. Some applications and simulations in the medical and engineering areas are introduced to illustrate the proposed methodology.

NEWS FROM THE WORLD

by Gabriel Huerta
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✻ *denotes an ISBA activity*

➤ Miscellanea

✻ First Bayesian Congress of Latin America and Sixth Brazilian Bayesian Meeing)
The first Bayesian Congress of Latin America together with the sixth Brazilian Bayesian Meeting were held at the city of Ubatuba (a beach at the coast of São Paulo) on last February. The meeting joined most top researchers on Bayesian Inference of Latin America and many students.
The meeting was successful in gathering Latin American Bayesians and spreading ideas among them, students included. Future COBAL meetings are already planned. Next COBAL will probably be hosted by Mexico in 2005. Several scientific partnerships were started at the meeting and students were exposed to state-of-the-art Bayesian research. This aspect is important as participation in the Valencia meetings became difficult to be financed for many Brazilian and Latin American researchers. A sole deficiency observed at the meeting was the absence of an official language for the oral presentations, as some Brazilians could not understand Spanish well and vice-versa for Portuguese. For the next COBAL meetings English tends to be adopted as the only language for presentations.
The meeting had a total of 14 main conferences (Brazil, 6, US, 4, Portugal, 1, Mexico, 1, Chile, 1 and Venezuela, 1), 26 technical talks (Brazil, 13, Mexico, 5, US, 4, Chile, 2, Colombia, 1 and Peru, 1), and 47 poster presentations. Finally, 27 out of 88 participants were students. The numbers of researchers/students per country are: Brazil: 36/20; Chile: 4/4; Colombia: 0/1; US: 9/1; Italy: 2/1 and Mexico: 7/0. Peru, Portugal and Venezuela with one researcher each. The complete program, list of participants and abstracts may be found at the meeting website: http://www.est.ufmg.br/cobal. The participation of Bayesians also from non-LatinAmerican countries (United States, Italy, Portugal) should be noted.
COBAL was sponsored by ISBRA - the Brazilian Chapter of ISBA- jointly with the Brazilian Statistical Association (ABE) and was endorsed as an ISBA Regional Meeting. The Brazilian Chapter gratefully acknowledges the support of ISBA and of ABE as well the Brazilian research agencies CNPq , CAPES, FAPESP, FAPERJ, FAPEMIG and IME-USP, the Institute of Mathematics and Statistics of Universidade de Sao Paulo.

➤ Events

Challenges in Stochastic Computation Workshop *September 25 - October 4, 2002, Research Triangle Park, North Carolina, USA*

The initial Workshop of the (SAMSI) Stochastic Computation Program involved tutorials, research presentations and group research meetings on topics including: numerical computing via simulation, importance sampling, sequential sampling and sequential computational methods, Monte Carlo Markov chain methods (MCMC), auxiliary variables, data augmentation, hybrid MCMC, perfect simulation methods, applications and case studies, and new challenges in simulation-based computation. The slides of several tutorial presentations and talks are available at SAMSI's web page. Web page: `www.samsi.info`

Workshop on Genomic Signal Processing and Statistics (GENSIPS) *October 12-13, 2002, Raleigh, NC, USA*

The Workshop on Genomic Signal Processing and Statistics is a cooperating conference of the IEEE Signal Processing Society and receives support from DARPA, NSF and the Kenan Institute. Genomic data represents enormous signal processing challenges due to the high variability of the data acquisition process, high dimensionality of the data space, and high complexity of genetic signals. The workshop will be held near the North Carolina State University campus in a thriving region known as the Research Triangle which is home to three major Research Universities, hundreds of companies in biotechnology, information technology, communications, computer hardware and software. The Research Triangle is easily accessible from all parts of the U.S. though the Raleigh-Durham International Airport. The beautiful ocean outer banks and the Smoky mountains are within driving distance of the conference venue.

The aim of this two-day workshop is to identify potential areas of collaboration between the biological, statistical, and signal processing communities and to open new avenues of research to address new challenges in genetics by exploiting potential synergies between signal processing, statistics and Genomics and by building on their respective strengths. Such problem areas might include: signal processing and extraction of microarray and gell images; incorporation of accurate image formation models into clustering and classification algorithms; application of communications/signal-processing/image-processing techniques such as array processing and blind equalization; and novel high-throughput hardware/software approaches to large scale genomic computation. This workshop will consist of both invited sessions and contributed sessions.

The invited speakers will give tutorial talks on genetics, bioinformatics, and genomic signal processing. There will also be a panel discussion and four plenary sessions.

Web page: `www.gensips.gatech.edu`

Combining Probability and Logic *November 4-6, 2002, London, UK*

The conference will focus on topics close to the wide range of scientific interests of B. V. Gnedenko. The aim is twofold: first, to highlight the contributions of B. V. Gnedenko in probability theory and its applications, history of mathematics, problems of educations, and, second, to present the developments of his ideas as well as the current trends in the theory of probability and related fields. Web page: `www.kcl.ac.uk/logic`

Fourth International Workshop on Objective Prior Methodology *June 15-20, 2003, Centre Paul Langevin, Aussois, France*

Following two earlier workshops on Objective Bayes Prior Methodology in Valencia and Ixtapa, we will hold an open conference in the French Alps next Spring. While open to anyone interested in Objective Bayes issues, one central theme of the conference will be Nonparametric Bayes. Invited papers will be discussed during the conference, while contributed papers will be presented during evening poster sessions, in the spirit of the Valencia Bayesian meetings. Practical informations and details are available on the Web site of the conference `www.bayesian.org` (click "meetings").

Partial travel support for US participants is available on a competitive basis. New researchers and underrepresented groups, such as women, minorities, and persons with disabilities, are especially encouraged to apply. Please see the conference homepage for details.

23rd International Symposium on Forecasting: Forecasting in Business, Finance and Economics in the Electronic Era
June 15-18, 2003 Merida, Yucatan, Mexico

Authors are invited to submit papers related to Forecasting in Business, Finance and Economics in the Electronic Era or to any related topic on forecasting research and practice, including: Bayesian Modeling, Data Mining, Dynamic Models, Econometric Methods, Forecasting Techniques, High Frequency Data, Judgmental Forecasting, Model Selection, Multivariate Methods, Neural Networks, Non-linear Models, Scenario Forecasting, Seasonal Adjustment, and Time Series Analysis. Forecasting Applications in Business, Finance, Economics and any other area of current interest are welcome.

Contributors may participate organizing a Session, a Workshop or presenting a paper. For those interested in organizing a Session or a Workshop please contact directly Victor M. Guerrero (ITAM) guerrero@itam.mx, or Benito Flores (Texas A&M U.) bflores@cgsb.tamu.edu before December 13, 2002. Authors wishing to present a Paper or a Poster are invited to submit an abstract of 300 or fewer words by February 28, 2003.
Web page: `www.isf2003.org`

MORE ON BAYESIANS IN MEXICO

by Henrique de Alba
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In the December 2001 issue of this Bulletin, Manuel Mendoza wrote a historical sketch of Bayesian statistics in Mexico: "Bayesians in Mexico". I want to congratulate him for his paper and for the effort he put into gathering all the required information. In this note I want to provide some additional pieces of information that have been coming to mind after his inquiry. With this I want to contribute to his effort. I have the following pieces of fresh information. a) Another contribution to the development of Bayesianism in Mexico is the longstanding relation of some of us with Arnold Zellner. This began in the Summer of 1980 when I visited the Graduate School of Business at the University of Chicago. Since then he has visited Mexico, specifically ITAM, on several occasions. Since that Summer several Mexicans attended some of the NSF-NBER Seminars on Bayesian Inference and Econometrics. This undoubtedly contributed to the growth of Bayesian inference in Mexico. b) The Seminar that Manuel mentions that took place in 1986, was actually the "15th Anniversary Meeting of the NSF-NBER Seminar on Bayesian Inference in Econometrics". This meeting was originally planned for November 1985 and had to be postponed until January 1986 due to the earthquake that shattered Mexico City on September 19, 1985. The event took place at ITAM with very strong support, from A. Zellner. In fact a number of people traveled from the U.S. to the meeting with NSF-NBER funds. The list of distinguished Bayesians that attended is long. I do want to mention that the late M. de Groot was among them. I should say that Arnold's contribution to organizing the meeting was decisive. Several Mexican students who attended have eventually done graduate work on Bayesian topics; among them I can recall Carla Incln, who got her Ph.D. under George Tiao, at the U. of Chicago in 1991. At that meeting, NSF-NBER made a donation to the Library at ITAM to start a collection of books on Bayesian Statistics. This collection has continued to grow far beyond the original fund. c) The "Third World ISBA Meeting" organized in Oaxaca, in 1995 was also strongly supported by A. Zellner, who at the time was president of ISBA, and was attended by distinguished Bayesians, with many Mexican students participating. Since then some of these students have gone on to get their Ph.D.'s and have joined the faculty at ITAM as well as other Mexican universities. d) A. Zellner visited ITAM again in 1996 on occasion of the 50th anniversary of its foundation, where he gave a talk on Bayesian econometrics.

INTERNATIONAL SOCIETY FOR BAYESIAN ANALYSIS