Oregon State University

IISA Newsletter Spring 2016

Visit our website: *http://intindstat.org/*

Get Involved!

We are looking for volunteers to serve on IISA committees and **at JSM (sit at the IISA desk)**. Please **email *volunteers@intindstat.org*** if you would like to participate.

Update Your Contact Information

We have a new feature on our website which allows you to update your contact information and affiliation.

Please visit *www.intindstat.org/update-contact*

Message from Amarjot Kaur, President of IISA

Dear Colleagues,

Welcome to 2016! It is my honor to serve as the President of IISA this year. Thank you for giving me this opportunity and I will do my best to execute the objectives of our organization.

There were many moments of achievement in 2015. Last year we had a successful IISA conference at Pune on the theme of "Celebrating Statistical Innovation and Impact in a World of Big & Small Data" with close to 300 participants. In addition to the scientific talks, there were outstanding sessions on professional development and outreach by experts from both industry and academia. Pre-conference short courses were also offered by renowned statisticians and were very well attended. I want to take this opportunity and congratulate again the winners of the Young Researcher Award and the Student Paper Competition. Many congratulations to Cyrus Mehta

for receiving the IISA Life Time Achievement Award; we are proud and grateful for all his achievements along with his contributions to the association. On behalf of the Executive Committee and the Board of Trustees, I want to thank all the participants for attending and sharing their work, and the organizers for working hard in putting together this conference. Additional details about this conference are included in this newsletter.

Continuing our quest to be inclusive of our membership and incorporating new and diverse ideas in executing IISA objectives. One effort we initiated last year was to establish various committees to carry on the objectives of our organization. We plan to expand and execute on this initiative this year. The initial set of committees will focus on Awards, Constitution, Fundraising, Membership, Young Professional Statisticians' Development, Outreach, and Newsletter. Further details of these committees will be shared with you and added to the IISA website (*http://www.intindstat.org/trustees#committees*). If you have any additional ideas about these committees and/or are interested in getting involved, please contact me or any of the Executive Committee Members. Our goal is to be as inclusive as possible in carrying out the functions of our organization. I also want to welcome the new leadership of the India Chapter and thank the outgoing leadership team for their great IISA outreach efforts.

An exciting year lies ahead of us. Our next North American conference will be held in Oregon this year from August 18-21 at Oregon State University, USA. The program is shaping out well with the diligent efforts of the organizing committee. I encourage you all to attend this conference and make it a productive forum for discussions across the statistical community. You can read more about the conference and the keynote speakers in this newsletter. In addition, the Executive Committee is planning the IISA mixer and scientific sessions at the 2016 Joint Statistical Meetings at Chicago. The initial discussions are underway for planning the next

IISA conference in India as well. If you have any suggestions for these conference and mixers, please send them along.

The success of IISA depends entirely on the dedicated efforts of its member volunteers. It has been nearly a decade since I became involved with the organization and I have always felt a sense of pride in belonging to the IISA community. I hope you feel the same and will actively participate and help shape its future!

While writing this column in the midst of the American primary elections, I couldn't help but make an analogy from the presidential campaigns. "Energizing the Base" appeared to be a key success factor for all the candidates regardless of their ideology. And it remains relevant for IISA. Our organization will grow even stronger when we are successful in energizing our base and have participation from as many of you as possible, including our younger generation.

Your feedback is important. If you have an idea or a suggestion for the Executive Committee to consider, please send me an email at *amarjot_kaur@merck.com*.

In closing, I hope this year will be a productive and fulfilling year for the IISA community. Together, we must continue focusing forward on the future. I hope to continue to have your support and engagement to carry forward the legacy of our organization.

- Amarjot Kaur, IISA President

2015 IISA Election Results

We would like to welcome our 2017 President, Prof. Sujit K. Ghosh, and our 2016-2018 Board of Trustees member, Prof. Dipak Dey. Both were elected unopposed and as per IISA bylaws.

Prof. Sujit K. Ghosh is currently a professor at North Carolina State University along with being the Deputy Director at SAMSI, also in North Carolina, USA. He is a prolific researcher with interests in statistical applications to biomedical and environmental data. He has supervised over thirty doctoral students and was awarded the Cavell Brownie Mentoring Award by his university in 2014. Furthermore, he is a fellow of the American Statistical Association and won the IISA Young Investigator Award in 2008. Ghosh has also recently been honored by the Government of India and Thammasat University, which we encourage you to read more about in our Member News section.

Prof. Dipak Dey is a Board of Trustees Distinguished Professor of Statistics and Associate Dean of the College of Liberal Arts and Sciences at the University of Connecticut, USA and is replacing Kirti Shah on the Board of Trustees. He is also a prolific researcher, working on categorical and longitudinal data problems in spatio-temporal and survival data analysis. Dey is an elected fellow of the American Association for the Advancement of Science and the American Statistical Association, among other organizations. Recently, he became Editor-in-Chief of *Sankhya* as well. He was a past president of IISA, so we are happy he is back on the team!

New Executive Committee, India Chapter

We would like to introduce the members of the Executive Committee of the India Chapter of IISA: President, Prof. Ayanendranath Basu; Vice President, Dr. Vishwanath Iyer; and Treasurer, Dr. Sanjeev Sabnis.

President

Prof. Ayanendranath Basu is currently a Professor at the Applied Statistics Division of the Indian Statistical Institute, Kolkata. He received his Ph.D. in Statistics from Pennsylvania State University. Apart from his primary interest in robust minimum distance inference, his research areas include applied multivariate analysis, categorical data analysis, statistical computing and biostatistics. Basu is a recipient of the C. R. Rao National Award in Statistics given by the Government of India, a Fellow of both the National Academy of Sciences, India and the West Bengal Academy of Science and Technology. He was also a past editor of *Sankhya A, the Indian Journal of Statistics*. (Contact: *ayanendranath.basu@gmail.com*)

Vice President:

Dr. Vishwanath (Mahesh) Iyer is currently Head of Oncology Biometrics at Novartis, Hyderabad, heading up a team of Biostatisticians, SAS programmers and Data Analysts. He has a Ph.D. in Statistics from Temple University. Iyer has been involved in analyzing clinical trial data with companies like Boehringer-Ingelheim and Bristol Myers Squibb and is involved in research regarding multiple comparison procedures. Furthermore, he is an adjunct faculty member at the Institute of Ayurvedic and Integrated Medicine in Bengaluru, serves on the Advisory Council of India for the DIA, serves as the Secretary for the Indian Association for Statistics in Clinical Trials (IASCT), is on the Board of Studies for Statistics at Manipal University and is the co-editor of a pharmaceutical journal. He is also a Ph.D advisor, currently advising 2 students. (Contact: *vishwanath.iyer@novartis.com*)

Treasurer:

Prof. Sanjeev Sabnis is a professor in the Department of Mathematics at IIT Bombay. He obtained his PhD from Old Dominion University. His research areas are reliability theory and industrial statistics. He has so far advised more than 60 M.Sc. projects (of two semester duration) and 3 Ph.D. students. He offers consulting services to industries in and around Mumbai and Pune, and conducts in-house workshops on "Statistical Modelling" for firms. Sabnis was awarded the Excellence in Teaching Award by IIT Bombay in 2011. (Contact: *sabnissanjeev@gmail.com*)

If you are interested in becoming a member of the IISA India Chapter, please contact the Treasurer, Sanjeev Sabnis at *sabnissanjeev@gmail.com*

Lifetime Achievement Award for Cyrus Mehta

By Elizabeth Cole, Marketing Content Manager, Cytel, Inc., UK

Cyrus Mehta with Cytel Employees

Dr. Cyrus Mehta was the 2015 recipient of the IISA Life Time Achievement Award, recognized for his "professional achievements, exemplary leadership and unrelenting support" for IISA's cause. An influential biostatistician and thought leader, Mehta is a fellow of the American Statistical Association and an Elected Member of the International Statistical Institute. He holds degrees from the Indian Institute of Technology, Mumbai and Massachusetts Institute of Technology and is Adjunct Professor of Biostatistics at the Harvard School of Public Health. He is a co-founder and President of Cytel Inc., a leading global Clinical Research Organization and Software Services provider.

Mehta is a recognized pioneer in the field of clinical trial design and is well known for his research on developing innovative methods and software for flexible clinical trial designs and non-parametric exact statistics. His recent research centers on adaptive and group sequential clinical trial methods and design tools. As the driving force behind Cytel's East®, the pharmaceutical industry's most widely used trial design and simulation software, he regularly provides adaptive trial design training for leading pharmaceutical companies, academic collaborators and FDA personnel.

Upon receipt of the award, Mehta commented: "I'm so very grateful for the recognition and hope others will join around the world to advance the application of statistical sciences to better understand and, hopefully, help to improve our world. Looking at the names of the previous recipients of this award I am absolutely humbled and amazed to be added to the list. I sincerely thank the IISA executive committee for this great honor."

Wed, 8/3/2016,
2:00 PM - 3:50 PM
Recent Advances in Empirical Bayes Methods — Invited Papers
International Indian Statistical Association , IMS
Organizer and Chair: Gourab Mukherjee, University of Southern California

2:05 PM	[Complex Empirical Bayes Models for Normal Data](#) Ya'acov Ritov, Hebrew university and University of Michigan
2:30 PM	[Optimal Shrinkage Estimation in Heteroscedastic Hierarchical Models: beyond Gaussian](#) Samuel Kou, Harvard University ; Lawrence D Brown, Univ of Pennsylvania ; Xianchao Xie, Two Sigma Investments
2:55 PM	[An Empirical Bayes Improvement of Common Shrinkage Estimators.](#) Eitan Greenshtein, Central bureau of statistics, Israel ; Ya'acov Ritov, Hebrew university and University of Michigan ; Ariel Mansura, Bank of Israel
3:20 PM	[Empirical Bayes Prediction for the Multivariate Newsvendor Loss Function](#) Lawrence D Brown, Univ of Pennsylvania; Gourab Mukherjee, University of Southern California ; Paat Rusmevichientong, Univ of Southern Calif
3:45 PM	Floor Discussion

IISA Sponsored Sessions

Tue, 8/2/2016,
2:00 PM - 3:50 PM
Recent Developments in the Study of Social Networks — Invited Papers
International Indian Statistical Association
Organizer and Chair: Sanjay Chaudhuri, National University of Singapore

2:05 PM	[Some Applications of Graph Mixtures for Social Network Analysis](#) Carter Tribley Butts, University of California, Irvine
2:35 PM	[Alternatives to Exponential-family Models for Social Networks](#) Mark Stephen Handcock, University of California - Los Angeles
3:05 PM	[Nonparametric Network Summaries](#) Sofia Olhede, UCL
3:35 PM	Floor Discussion

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Upcoming IISA Conference
Oregon, USA

By Debashis Mondal, Oregon State University

The 2016 International Indian Statistical Association (IISA) Conference on "Statistical and Data Sciences: A key to healthy people, planet and prosperity" will be held at Oregon State University, USA, on **August 18–21, 2016**. The conference is co-organized with the Department of Statistics at Oregon State University. Please visit *http://iisaconference.org/* for the full details.

Some important information and dates:

Conference registration and abstract submission begins on March 11th. There are early and regular registration fees (before/after May 15th):

- *IISA member, $300/$350*
- *Non-IISA member, $350/$400*
- *Student, $125/$175*
- *Participants from developing countries, $200/$250*
- *Accompanying guests, $100/$125*
- *See the website for short course fees*

Nominations for the **Young Researcher Awards** in the categories "Probability, Theory, and Methods" and "Applications" are being solicited. The deadline for nominations is May 31st, 2016 at 11:59 PM Pacific Standard Time. Applications should be sent to awards@intindstat.org. See *http://www.intindstat.org/awards* for eligibility and submission requirements.

Submissions for the **Student Paper Competition** are being accepted as well in the categories "Probability, Theory, and Methods" and "Applications". The deadline for submitting a paper is May 15th, 2016 at 11:59 PM Pacific Standard Time. Applications should be sent to *spc@intindstat.org*; IISA membership is not required for this competition, but is encouraged. See *http://www.intindstat.org/spc* for eligibility and submission requirements.

The conference will feature two plenary talks:

Prof. Kanti Mardia
Senior Research Professor
University of Leeds
Mardia has received many prestigious honors, including the Guy Medal in Silver by the Royal Statistical Society and the Wilks Memorial Medal by the American Statistical Association.

Prof. Xiao-Li Meng
Dean of the Graduate School of Arts and Sciences and Whipple V. N. Jones Professor of Statistics
Harvard University
Meng was the recipient of the COPSS Presidents' Award in 2001 given by the American Statistical Association.

The conference will also include four half-day short courses on August 18th, which are open to conference participants. Topics include multiple comparisons, Monte Carlo methods in SAS, statistical computing and time series analysis. If you would like to attend, please visit the conference website to register.

In addition to a great selection of technical talks, the conference will bring attention to early career development, collaborations across academic, industry and government organizations, and funding opportunities in industry and federal institutions through three panel discussions. Sastry Pantula, Dean of the College of Science at Oregon State University will moderate a panel on career development. Amarjot Kaur, current IISA president, will lead the panel on collaborations across organizations.

We hope you will be able to join us!

Report on IISA Conference in Pune, India

By Sudipto Banerjee, University of California, Los Angeles

Student volunteers in Pune

The 2015 annual conference of the International Indian Statistical Association (IISA) was held at the Yashwantrao Chavan Academy of Development Administration (YASHADA), Pune, India, December 20th-24th, 2015. The theme was "Celebrating Statistical Innovation and Impact in a World of Big & Small Data." It was jointly organized by IISA and the Department of Statistics at Savitribai Phule Pune University and was attended by nearly 300 participants attracting scholars and researchers from India and across the globe.

Opening ceremony at the IISA conference in Pune

Prior to the start of the main conference, four workshops or short courses were offered to participants on December 19th. These workshops were held at the Modern College of Arts, Science and Commerce, Pune, and covered important topics on adaptive designs for clinical trials, statistical issues in Bioinformatics, statistical practice in collaborations and consultations, and Bayesian statistics.

There were four plenary talks delivered by ASA President Jessica Utts from the University of California, Irvine USA; Dipak Dey from the University of Connecticut, USA; Kerrie Mengersen from Queensland University of Technology, Australia; and Probal Chaudhuri from the Indian Statistical Institute, Kolkata.

There was also a well-attended panel discussion organized by Amarjot Kaur (Merck & Co. Inc.) and Soumendra N. Lahiri (North Carolina State University). The session, "Professional Development Skills for an Effective Statistician Organizer," gathered statisticians from both academia and industry from the US and India. It was led by Amarjot Kaur and Amit Bhattacharya (GlaxoSmithKline). Ajay Sathe, Cytel; Hira Koul, Michigan State University, East Lansing; and Eric A. Vance, Virginia Polytechnic Institute and State University were participants.

There were sixteen special invited talks, over sixty invited sessions with three speakers each and over twenty contributed sessions. Two sessions were devoted to presentations from students competing for travel awards. IISA also gave out its Young Researcher Awards during the conference. There were two winners each in category: (i) Theory & Methods - Debashis Mondal of Oregon State University and Krishanu Maulik of the Indian Statistical Institute, Kolkata; (ii) Applications - Dipankar Bandyopadhyay of Virginia Commonwealth University and Veera Baladandayuthupani of the MD Anderson Cancer Center.

IISA banquet

IISA conference

We would like to congratulate the winners of the Young Researchers Award who collected their plaques in Pune. Debashis Mondal and Krishanu Maulik won in the Probability, Theory, and Methods category and Veera Baladandayuthapani and Dipankar Bandyopadhyay won in the Applications category.

Probability, Theory, and Methods

Dr. Krishanu Maulik is an Associate Professor in the Statistics and Mathematics Unit at the Indian Statistical Institute in Kolkata, He completed his PhD in statistics at Cornell University. Maulik works on problems related to record sequences, extreme values, and random recursions. He was an Associate of the Indian Academy of Sciences from 2008-2011 and won the Microsoft Research Young Faculty Award in 2008. Furthermore, he has taught short courses and workshops around the world. Currently, he is an Associate Editor of *Sankhya A*.

Dr. Debashis Mondal is an Assistant Professor in the Department of Statistics at Oregon State University. He received his PhD in statistics at the University of Washington where he won the Z.W. Birnbaum Award for his graduate student examination performance. His research interests include spatial and environmental statistics, Markov Chain Monte Carlo, and time series. Mondal has a National Science Foundation (NSF) Career grant and is currently Associate Editor of *Environmetrics* and the *Journal of Statistical Planning and Inference*. Mondal is also the Program Committee Chair for the upcoming IISA Conference in Oregon.

Applications

Dr. Veera Baladandayuthapani is currently an Associate Professor and Faculty Scholar in the Department of Biostatistics at UT MD Anderson Cancer Center. He received his PhD in Statistics from Texas A&M University. His research interests include big data analytics, mainly in high-dimensional data modeling and Bayesian inference. These methods are motivated by large and complex datasets such as high-throughput genomics, epigenomics, transcriptomics and proteomics as well as high-resolution neuro- and cancer- imaging. A special focus is on developing integrative models combining different sources of data for biomarker discovery and clinical prediction to aid precision/translational medicine. He also holds several grants from the US National Institutes of Health (NIH) and the US National Science Foundation (NSF) as Principal and a Co-investigator.

Our final winner is **Dr. Dipankar Bandyopadhyay** who is an Associate Professor in the Department of Biostatistics, School of Medicine at Virginia Commonwealth University. He completed his PhD at the University of Georgia. Bandyopadhyay works on applying methods in Bayesian biostatistics, spatial data analysis, and survival analysis, among others, to problems in epidemiology, behavioral studies, and precision medicine. He is Principal Investigator on NIH/NIDCR grants for modeling periodontal disease and tooth survival and is Co-investigator on several other grants. He received the Best Associate Editor Award for his work for the *Journal of Agricultural, Biological, and Environmental Statistics* from the American Statistical Association (ASA) and International Biometric Society. Currently, he is serving as Associate Editor for the *Journal of the American Statistical Association, Applications & Case Studies* and is Program Chair of the Biometrics Section of the ASA for the 2016 Joint Statistical Meetings.

Why Everyone Needs Statistics
by Jessica Utts, University of California, Irvine

David D. Hangal and Jessica Utts in Pune, India

A summary of a plenary address by Jessica Utts (2016 ASA President) at the 2015 IISA Conference in Pune.

First, I want to thank the organizers of the 2015 IISA for inviting me to present a Plenary Address. And now I want to thank the newsletter editors for giving me the opportunity to summarize my talk so that the information can be shared more broadly. I am excited to be able to represent the American Statistical Association (ASA) and to showcase the amazing array of resources the organization has made available to members and non-members alike. The many resources and programs are a testament to the dedicated ASA staff, and the volunteers whose terms as officers and board members have preceded mine.

The title of my talk was, "Why Everyone Needs Statistics….And What the American Statistical Association is Doing to Help," but I encouraged the audience (and now the readers of this newsletter!) to get involved as well. Our profession is growing, and we need to broadcast what we can do and have done to help society. We need to encourage more students to pursue careers in and related to statistics, and we need to educate leaders in all sectors of society on why statisticians should be involved when decisions are made.

Here are some ways ASA is involved in promoting statistics, and what you can do to help.

Campaign to get information on statistics to K to 12 students

ASA has initiated a website called ThisIsStatistics.org, with abundant resources on the attraction of careers in statistics. There are separate pages devoted to students, parents, educators, and counselors who help students make career choices. There are illustrated video interviews with a diverse collection of statisticians from a variety of jobs, talking about how they became statisticians, and what they do in their jobs. There is a wealth of information on job growth, salaries, and other pertinent information.

One of my presidential initiatives is to expand the impact of statisticians on informing secondary school children about careers in statistics. A Working Group of ASA members is developing materials and procedures for use in getting the word out, to accompany "This Is Statistics".

You can help this effort in multiple ways. There is a power point file you can download to show to students, complete with talking points. If you teach, you can show it to your own students. If you don't teach, you can volunteer to visit a classroom, especially at a secondary school, and talk with students about your career as a statistician. You can show them the slides and some of the videos. Statistics is a very attractive profession now and for the foreseeable future – we need to get the word out!

Informing the Media and the Public about Proper Interpretation of Statistical Results

ASA co-sponsors another website that should be of interest to journalists and the public, called Stats. org. This website includes resources for journalists, and articles written by statisticians explaining and critiquing statistics in the news. One example is "Death by Bacon," critiquing stories reporting on a study indicating that red meat is carcinogenic. The critique explains the difference between high confidence that something is carcinogenic and the degree to which it is carcinogenic. It also explains how the media missed the difference between an increase of 18% in relative risk and an increase of 18% in absolute risk. The article also includes a graphic from Cancer Research UK comparing bacon and smoking as carcinogens.

Two of my presidential initiatives are aimed at increasing the interaction between statisticians and the media. One initiative is to offer media training for any ASA member who wants it, to help us be more responsive to the media and to work well with them. The other initiative is to create a small cadre of statisticians who will be "Statistical Ambassadors"

Why Everyone Needs Statistics (continued)

and will reach out to journalists to provide interesting stories with statistical content.

You can help this effort too. Volunteer to write an article for *Stats.org*. Watch for stories in your local media that misuse statistics, and write to the reporter or editor and help educate them. If you are a member of ASA, take the media training when it's offered, and/or apply to become a Statistical Ambassador.

ASA Career Resources
ASA has lots of career resources for current and future statisticians! Visit the career part of the website, at *http://www.amstat.org/careers/index.cfm*. For students and young professionals, visit the website http://stattrak.amstat.org/. It has articles of interest on topics such as applying for graduate school, being a successful statistician, publishing in peer-reviewed journals, and so on. It also has links to internship opportunities, awards for travel (and other awards), conferences, contests, and so on.

ASA and Public Policy
ASA has a full-time Director of Science Policy, Steve Pierson, who works to promote statistics in policy-making arenas, help get statisticians appointed to important boards and panels, and otherwise raises the profile of statistics and statisticians in policy decisions. Visit the ASA's policy website at *http://www.amstat.org/policy* to learn more.

You can get involved in various ways. Help ASA write a white paper or position paper on a topic of your expertise. Read the position statements and white papers that have been written, and if you have an opportunity to advertise them, do so. Some examples of topics are climate change, forensics, election auditing, big data and statistics, and precision medicine.

Lots More!
In this summary, and in my presentation, I gave only a small (non-random!) sampling of what ASA is doing for the statistics profession, and what you can do to help. I encourage you to visit the ASA website for more information, and if you are a member, to become actively involved in ASA activities.

Getting IISA membership

Join the IISA Community! To become a member, please visit *http://www.intindstat.org/membership*. Fees differ based upon country of residence. Reduced prices are available for students. Life memberships are USD 450 (or INR 5,000 for residents of the Indian subcontinent).

New IISA Lifetime Members

Firoz Ahmad, *Aligarh Muslim University, India*

Mohammad Arshad, *Aligarh Muslim University, India*

Pradeep Chaudhary, *Chaudhary Charan Singh University, India*

Sanjay Chaudhuri, *National University of Singapore, Singapore*

Anil Gaur, *Thapar University, India*

Anuradha Rajkonwar Chetiya, *Ramjas College, University of Delhi, India*

Vishal Deo, *Ramjas College, University of Delhi, India*

Anindya Goswami, *Indian Institute of Science Education and Research, India*

Rakesh Gupta, *Chaudhary Charan Singh University, India*

Manoj Kumar, *Jamia Millia Islamia Central University, India*

Raosaheb Latpate, *Savitribhai Phule Pune University, India*

Po-Ling Loh, *University of Pennsylvania, USA*

Manmath Lohgaonkar, *Shrigonda College, India*

Krishanu Maulik, *Indian Statistical Institute, India*

Mamta Pandey, *Govt. P.G. College Damoh (Dr. Harisingh Gour University, Sagar), India*

M. Ramadurai, *University of Madras, India*

Sunil Shirvaiker, *Sunandan Divatia School of Science, India*

M.R. Sindhumol, *University of Madras, India*

Bhupendra Singh, *Chaudhary Charan Singh University, India*

S. Suresh, *University of Madras, India*

Eric Vance with workshop attendees

My Experience at the IISA Conference
By Eric Vance, Virgina Tech, USA

Thoughts before the trip

I wasn't sure what to expect. I had been invited to teach a workshop on collaboration skills at the IISA Conference in Pune by Amarjot Kaur, who knew me as a member of the American Statistical Association's Committee on Applied Statisticians in her role as its chair. The last time I had been to India was in 1999, almost 17 years ago when I backpacked up and down and back and forth taking public transportation across many parts of the country.

That time in India I traveled very fast and very cheaply. In 89 days of traveling around the country I spent the night in 51 different places, including 19 overnights on a train or bus because I wanted to see and experience as much as possible. Whenever I could, I chose the cheapest option including a few 3rd class train rides between cities, many, many cheap hotels and hostels, and bargaining over the price of every bottle of water I purchased. In those 3 months I spent only $900 total.

But that kind of fast and cheap travel came at a price. Every interaction with a merchant was a battle. ("This bottle says 10 Rupees, right here on the label." "Oh no, this is special water, 15 Rupees.") Every rickshaw ride required preparation to find out the "real" price from A to B. By being constantly aware of what I was charged compared to the price Indians were charged, I probably saved less than $50, a sum clearly not worth the constant battles. And because I traveled so fast (two days here, overnight train there, two days there, overnight bus to the next place, two more days, overnight train…), I got tired and I got sick. By the time I left India I had lost 20 pounds.

I wondered if I would I lose weight this time attending the IISA conference? Would I get overcharged on every purchase? Would I get sick? Would I enjoy my time in India? I didn't know what to expect.

What happened

After arriving in Mumbai, I was picked up by Prashant and Ketan—two young statisticians from Cytel—and a Cytel driver. On our pleasant and speedy trip to Pune we talked about our experiences in statistics and I gave them a sneak preview of what I would be teaching at my workshop.

The next day was the workshop. After Anil Gore from

Cytel eloquently and inspiringly introduced me and the importance of learning statistical collaboration skills, I interacted with the ~30 attendees for four hours to convey some of the essentials of statistical collaboration. We covered how to have the right attitude for collaboration, how to structure meetings to help solve clients' problems, how to explain statistics to non-statisticians, and other communication skills such as listening, summarizing, and paraphrasing. We finished with Q and A related to career development and how to increase the impact of statisticians and statistics. The presentation is available here: http://prezi.com/v1edravlnsg1/.

After the workshop I was invited to dinner with Anil Gore and several more statisticians he gathered to learn more about the LISA 2020 program to create a network of statistical collaboration laboratories in developing countries. We had pleasant conversation to go with the excellent veg food.

The next day was officially the first day of the conference. I attended several excellent talks, met new people, and reconnected with old friends.

The second day of the conference was when I chaired a well-attended and well received session on "Application of Bayesian Approaches in Drug Development." And then I gave my talk on "LISA 2020: Growing a Network of Statistical Collaboration Laboratories to Impact the World." Slides: https://prezi.com/klvoov3dqmoa.

Because India has so many excellent theoretical statisticians but relatively few applied and collaborative statisticians who actually apply statistics to solve problems, the LISA 2020 program is especially appropriate for Indian universities and institutions.

LISA 2020 is a program created in 2012 at Virginia Tech's Laboratory for Interdisciplinary Statistical Analysis (LISA) in the United States to build statistics capacity and research infrastructure in developing countries to help scientists, government officials, businesses, and NGOs use data to solve real-world problems and make decisions. In this program, statisticians and data scientists from developing countries are trained to effectively communicate and collaborate with non-statisticians and assisted to create statistical collaboration laboratories modeled after LISA at their home universities or institutions. The five new statistical collaboration laboratories in the network so far foster education in collaborative statistics, enable and accelerate high impact research, and engage in statistical outreach to improve the statistical skills and literacy of their community.

With a strong mentoring network, just one statistician trained to communicate and collaborate with non-statisticians can enable and accelerate up to 50 research projects per year. Each project can impact hundreds or thousands of people. LISA 2020 unlocks the collaborative potential of technically trained statisticians, who in turn will unlock the research potential of their collaborators and likewise teach the next generation of statisticians. These collaborations, now with the extraordinary power of statistical thinking open to them, will be key to improving human welfare worldwide.

The third day of the conference was my last day there. The highlight for me was participating in a panel discussion on Career Development. One of the points I made, which was echoed by the other panelists, was that Indian statisticians need to improve their collaboration skills. The better able they are to understand the real questions being asked by their colleagues, clients, and collaborators and understand and contextualize the significance of the answers in the business, research, or policy domain, the more impact their technical statistics skills will have. Communication and collaboration are essential skills for statisticians that, when augmented with strong technical statistics and data science skills, will increase their impact in industry, academia, and government.

After attending more talks in the afternoon, I hired a taxi to drive me to the Mumbai airport and then flew back to the United States later that night.

My Reactions

My experience in India this time was very different from my previous experience. All of my financial transactions were easy, mostly because I made very few purchases. Also, the food was uniformly excellent. The meals at the YASHADA complex, especially the lunches, were delicious. I really enjoyed the veg and non-veg cuisine of Maharashtra. In fact, I stayed healthy while in India and I gained four pounds from all the good food.

I am hoping that attending the IISA conference will spark collaborations with Indian universities to create statistical collaboration laboratories to train the next generation of statisticians to be effective, collaborative statisticians who are as well versed in the practice of statistics as they are in the theory and methods, applying statistics and data science to generate real world impact.

I thoroughly enjoyed my time in Pune and Mumbai and am looking forward to when I can return!

Eric Vance at dinner with statisticians to learn more about the LISA 2020 program
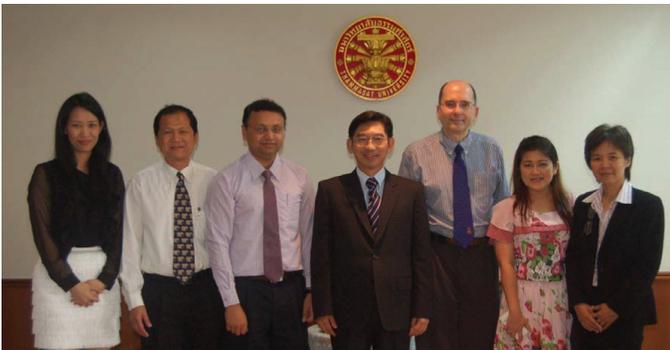
Member News

Susmita Datta

Susmita Datta began a new position as Professor in the Department of Biostatistics at the College of Public Health & Health Professions College of Medicine at the University of Florida, Gainesville, USA.

Sujit K. Ghosh

SAMSI's Deputy Director, Professor of Statistics at North Carolina State University, and IISA President-Elect, Sujit K. Ghosh, received the 2016 Hind Rattan Award. It is one of the highest awards granted annually by the Non-Resident Indian (NRI) Welfare Society of India, a branch of the Government of India. High-ranking members from the government and the Supreme Court of India attended the awards ceremony. Furthermore, Ghosh was awarded an honorary doctoral degree in statistics from Thammasat University in Thailand on November 16, 2015. The honor is one of the highest forms of recognition the university bestows. He has been teaching short courses and supervising students at the university since 2005.

Sujit K. Ghosh (third from the left) with colleagues from Thammasat University, Thailand

Bani K. Mallick

Bani K. Mallick has been appointed as the inaugural holder of the Susan M. Arseven '75 Chair in Data Science and Computational Statistics. The post was established by the Texas A&M University Statistics graduate Ersen Arseven '74 to honor his late wife. The purpose is to support statistics faculty who are successful in both publishing and attracting funding in the areas of integrating statistical and computational methods for applications to diverse areas of science, technology, and engineering.

Cyrus Mehta

Co-founder and President of Cytel Inc. and past IISA President, Cyrus Mehta, was recently awarded the Distinguished Alumni Award by his undergraduate alma mater, the Indian Institute of Technology, Bombay, India.

J.N.K. Rao

J.N.K. Rao of Carleton University, Ottawa, Canada published the second edition of his Wiley book, *Small Area Estimation*, in September 2015, jointly with Isabel Molina of Universidad Carlos III de Madrid, Spain.

Satrajit Roychoudhury

Satrajit Roychoudhury, Novartis Oncology, is contesting for the post of 2017 Chair-Elect for the American Statistical Association (ASA) Biopharmaceutical Section. Voting closes on May 1, 2016. We highly encourage our members to vote for him.

Call for papers

The General Secretary, V. Srinivasa Rao, of The Andhra Agricultural Journal is encouraging researchers to submit papers. This journal was established in 1954 at the Agricultural College, Bapatla and has an NAAS rating of 3.51. Please submit papers to Rao at *vs_raoin@yahoo.co.in.*

Obituary: Subramanian Panchapakesan (1933-2016)

By H. N. Nagaraja,
The Ohio State University

> "Kesan was extremely generous with his time in the service of the statistical community and provided mentorship for many young researchers."

Subramanian Panchapakesan (known as Kesan among his numerous friends and colleagues) passed away on January 28, 2016, in Chennai (formerly Madras), where he was born on August 27, 1933. He graduated from Vivekananda College in Chennai with a BA (Honours) degree in Mathematics in 1954 and obtained an M.Stat. degree from the Indian Statistical Institute in 1962. He moved to Purdue University, Indiana, in 1965 as a PhD student in Mathematical Statistics. Working under the guidance of Shanti S. Gupta, Kesan wrote his thesis entitled "Some Contributions to Multiple Decision (Selection and Ranking) Procedures" and graduated in 1969. Beginning with this research, he had an illustrious career with pioneering contributions to the area of ranking and selection methodology and many other areas of mathematical statistics including order statistics, reliability theory, and inference.

Throughout his long academic career, Kesan served in various capacities all over the world. His first academic position was as a Lecturer in Mathematics at Islamiah College, Vaniambadi, Tamil Nadu, India (1955-1960). He retired from the Department of Mathematics at Southern Illinois University, Carbondale, after 28 years of distinguished service and became Professor Emeritus on June 1, 1998. In between, he worked for the Indian Statistical Institute in various capacities during 1962-1965, held visiting faculty positions at Purdue University (1970, 1984, 1986), and at the Institute of Mathematics at Academia Sinica, Taipei, Taiwan (1980). Even in retirement, he continued to be active in research and participated in many international conferences.

Kesan was best known in the research community for the Wiley research monograph, *Multiple Decision Procedures: Methodology of Selecting and Ranking Populations*, co-authored with S. S. Gupta, and published in 1979 (SIAM Reprint, 2002). In all, he had over 80 research papers in journals, edited volumes and as technical reports. He also co-edited, with N. Balakrishnan, a volume entitled *Advances in Statistical Decision Theory and Applications* (Birkhauser, 1997). Kesan's collaborators and fellow researchers celebrated his work with an International Conference held in his honor during December 2002 in Chennai, and later with a research volume entitled, *Advances in Ranking and Selection, Multiple Comparisons, and Reliability* (N. Balakrishnan, N. Kannan, and H. N. Nagaraja, Ed., Birkhauser, 2005).

Kesan was extremely generous with his time in the service of the statistical community and provided mentorship for many young researchers. He served as a referee for several journals and as an associate editor for long periods, and wrote many book reviews. In addition to his devotion to Statistics, Kesan had a great passion for Indian music and celebrated it with an outstanding collection of reel-to-reel audiotapes, compact cassettes, and CDs, and periodic travel to Chennai to listen to maestros of Carnatic music. He also loved to travel and explore different cultures and societies. Kesan leaves behind numerous friends earned through his kindness and genuine interest in the people around him.

Project competition for M.Sc. Students from Indian Universities:

By Monohar Rajarshi, University of Pune

The India Chapter of IISA has organized a project competition for M.Sc. Statistics Students from Indian Universities and Institutes. The topic for the project is: Forecasting medal winners' performance for athletics events in Rio Olympics (August 2016).

In this project, students are expected to predict performance (as measured in time) of gold, silver and bronze medal winners in the Rio Olympics, to be held in August 2016. Forecasts for competitions for men and women both need to be made. The following events are to be included in the project: 100 meters, 200 meters, 400 meters, 800 meters, 1,500 meters, 5,000 meters, and 10,000 meters.

Forecasting methods, which are normally included in the M.Sc. Syllabi of Statistics courses are expected to be employed. One may need to apply their simple extensions.

An exciting part of the competition is that students and teachers will come to know efficiency of the forecasts made within a few weeks! There are in all 42 forecasts, so we may expect about 35 or more forecasts to be reasonably accurate!

The first competition for M.Sc. students from Indian universities was organized by IISA(IC) during the International Year of Statistics. The topic for 2014-15 was "Efficiency of weather and rainfall forecasts: the Indian Scenario."

Upcoming Conferences and Workshops

International Conference on Design of Experiments
May 10-13, 2016
University of Memphis, USA
http://www.memphis.edu/msci/news/icodoe2016.php

International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications—A Festschrift in Honor of Prof. Dr. Hamparsum Bozdoğan
May 18-21, 2016
Nevşehir, Turkey
http://www.ic-smhd2016.com

International Workshop on Mathematics and Statistics
May 28-29, 2016
Istanbul, Turkey
http://conf-scoop.org/science/iwmst/

4th Institute of Mathematical Statistics Asia Pacific Rim Meeting
June 27-30, 2016
The Chinese University of Hong Kong, Hong Kong
http://ims-aprm2016.sta.cuhk.edu.hk

Tenth Statistics Day Celebrations
June 29, 2016
C.R. Rao Advanced Institute of Mathematics, Statistics, and Computer Science, University of Hyderabad, India
http://www.crraoaimscs.org

International Conference on Applied Statistics 2016
July 13-15, 2016
Phuket Graceland Resort & Spa, Thailand
http://icas2016.org/index.php

Upcoming Conferences and Workshops (continued)

Joint Statistical Meetings
(See IISA sponsored sessions on page 5)
July 30-August 4, 2016
Chicago, USA
https://www.amstat.org/meetings/jsm/2016/

Ordered Data and Their Applications in Reliability and Survival Analysis: An International Conference in Honour of N. Balakrishnan for his 60th Birthday
August 7-10, 2016
McMaster University, Canada
http://mathandstats.mcmaster.ca/odreliabilityandsurvival/

2016 International Indian Statistical Association Conference
(See page 6 for more details)
Oregon State University, USA
August 18-21, 2016
http://iisaconference.org/

37th Annual Conference of the International Society for Clinical Biostatistics
August 21-25, 2016
Birmingham, UK
http://www.birmingham.ac.uk/facilities/mds-cpd/conferences/iscb-2016/index.aspx

International Conference on Advances in Interdisciplinary Statistics and Combinatorics
September 30-October 2, 2016
University of North Carolina, Chapel Hill, USA
http://www.uncg.edu/mat/aisc/2016/index.html

Statistical Methods in Finance
December 18-22, 2016
Chennai Mathematical Institute, India
http://www.cmi.ac.in/%7Esourish/StatFin2016/

SAMSI Programs & Workshops

Programs

2016-2017 Program on Statistical, Mathematical, and Computational Methods for Astronomy

2016-2017 Program on Optimization

2017-2018 Program on Mathematical and Statistical Methods for Climate and the Earth System (CLIM)

Workshops

Games and Decisions in Reliability and Risk Workshop
May 16-20, 2016

SAMSI-SAVI Workshop on Statistical Methods and Analysis of Environmental Health Data
May 30-June 3, 2016

Mathematical Problems in Industry
June 13-17, 2016

For more information on these workshops and other upcoming SAMSI events, please visit
http://www.samsi.info/activities/research-workshops.

Food and Drug Administration
Center for Drug Evaluation and Research
Office of Biostatistics

FDA

Do you seek a challenging, career-enhancing position?

This is your chance to make a difference!

The Office of Biostatistics (OB) in the Office of Translational Sciences, Center for Drug Evaluation and Research (CDER), FDA, is recruiting **Mathematical Statisticians** with strong skills in statistical methodology and communication and interest in biomedical applications.

You will work with multidisciplinary teams of review scientists in a dynamic, highly challenging, and innovative atmosphere of development, evaluation, and research of drug and therapeutic biologics. OB is responsible for reviews in diverse therapeutic areas such as cardio-renal, oncology, and antimicrobial products among others. You will have the opportunity to employ a broad variety of statistical procedures relevant to pre-clinical and clinical evaluation decisions for new and generic drugs as well as new and biosimilar biologics and the emerging fields of quantitative risk assessment and pharmacogenomics. While applying your skills to address unique and precedent setting problems, you will be refining your consulting, communication, and presentation skills. You will evaluate and advise on protocols for clinical studies and assess the evidence for safety and efficacy from clinical studies submitted in drug and biologics applications. Our active regulatory research program will allow you to advance your skills and professional development. In addition, you will have the opportunity to interact with national, international, public, and private organizations on statistical issues, and help develop guidance for the pharmaceutical industry.

QUALIFICATIONS: Candidates should possess professional experience and an advanced degree with specific coursework in an appropriate field of study. This should include 24 semester hours of mathematics and statistics, with any of the following: (a) at least 12 semester hours are in mathematics and 6 semester hours are in statistics (b) or a combination of education and experience with at least 24 semester hours of mathematics and statistics, including at least 12 hours in mathematics and 6 hours in statistics, plus appropriate experience or additional education. Candidates with a Doctorate Degree and associated experience are highly desirable. In addition to a background in Statistics, applicants should have an interest in clinical trials, epidemiology, genomics or risk assessment. Candidates should also possess excellent oral and written communication skills. Since work is conducted in interdisciplinary groups, the ability to communicate statistical issues to non-statisticians is important. Candidates for Civil Service or USPHS Commissioned Corps must be U.S. citizens. Permanent U.S. residents and non-citizens may be eligible for term appointments.

SALARY/BENEFITS: Civil Service Salary ranges from $77,490 to $119, 794. The FDA is a family friendly workplace offering excellent benefits with flexible work hours and location. CDER's Office of Biostatistics is located in Silver Spring, Maryland, just outside the Washington, D.C. beltway. The FDA is an Equal Opportunity Employer and has a smoke-free environment. We particularly welcome applications from women and minority candidates.

HOW TO APPLY: If you are interested in considering employment with CDER's Office of Biostatistics, please submit your resume to the OB Search Committee or more specifically to:

OB Search Committee, Office of Biostatistics
Bldg. 21, Room 3550, 10903 New Hampshire Ave., Silver Spring, MD 20993-0002
Telephone: (301) 796-1200 E-mail: CDER-OTS-OB-Recruitment@fda.hhs.gov
For more information, please visit the Office of Biostatistics website:
http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDER/ucm166250.htm

Do you seek a challenging, career-enhancing position?
This is your chance to make a difference!

The Office of Biostatistics (OB) in the Office of Translational Sciences, Center for Drug Evaluation and Research (CDER), FDA, is recruiting **Statisticians (Statistical Analysts)** with strong skills in statistical methodology and communication and interest in biomedical applications.

You will work with multidisciplinary teams of review scientists in a dynamic, highly challenging, and innovative atmosphere of development, evaluation, and research of drug and therapeutic biologics. You will have the opportunity to employ a broad variety of statistical procedures relevant to pre-clinical and clinical evaluation of efficacy and safety for new and generic drugs and biologics. You will be working with the review team to provide statistical programming and data management support; assess the quality and completeness of submissions; prepare clinical trial analysis datasets; interpret the applicant's programs; assist with communication with applicants regarding specifications for regulatory information requests; validate sponsor results; produce required tables, listings, and figures; assist in modeling and simulation; suggest possible additional statistical analyses required to fully evaluate the evidence in the submission. While applying your skills to address unique and precedent setting problems, you will be refining your consulting, communication, and presentation skills.

QUALIFICATIONS: Candidates should possess professional experience and an advanced degree with specific coursework in an appropriate field of study. This should include 24 semester hours of mathematics and statistics, with any of the following: (a) at least 12 semester hours are in mathematics and 6 semester hours are in statistics (b) or a combination of education and experience with at least 24 semester hours of mathematics and statistics, including at least 12 hours in mathematics and 6 hours in statistics, plus appropriate experience or additional education. Candidates with a Master's Degree in Statistics or Biostatistics and associated experience are highly desirable. In addition to a background in Statistics, applicants should have an interest in clinical trials, epidemiology, genomics or risk assessment. Candidates should also possess excellent oral and written communication and project management skills. Since work is conducted in interdisciplinary groups, the ability to communicate statistical issues to non-statisticians is important. Candidates must be U.S. citizens.

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For more information, please visit the Office of Biostatistics website:
http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDER/ucm166250.htm