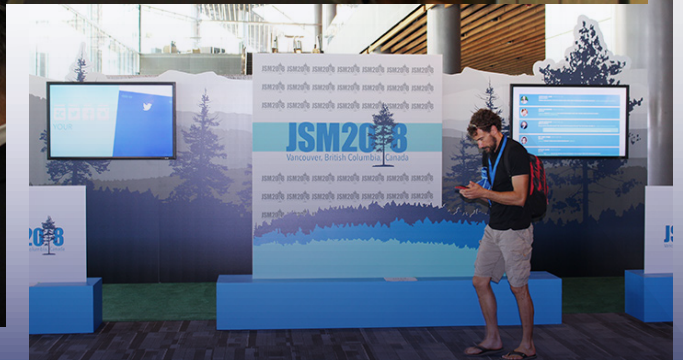# NISS

Parameters

Greetings from the NISS Director!

The following pages of this Newsletter highlight the many activities that NISS was involved with at JSM in Vancouver. We began Sunday morning with the 2018 Writing Workshop for Junior Researchers, an important activity that NISS has been leading since 2007. Eighteen young researchers, mostly non-native English speakers, participated in this two-day event, with presentations and meetings with writing mentors. Support was provided by NSF and seven statistical societies.

At noon on Sunday the annual NISS affiliate luncheon was held in the Fairmont Waterfront Hotel Princess Louisa Suite, where five speakers discussed the important role of statistics in data science. They spoke from both an industry and academic perspective, stressing that statisticians must find their critical role in this exploding discipline.

NISS had organized or co-sponsored many sessions, including the Sacks award session on bio-informatics featuring the 2017 Jerome Sacks awardee, Professor Jun Liu (Harvard), featured in a session with Professors Wing Wong (Stanford), Lingzhou Xue (Penn State) and discussant Hongzhe Li (U Penn), which was chaired by Rebecca Doerge (CMU). NISS also organized another, standing room only, session on the Big Challenges and Opportunities in Industry, which featured speakers from the insurance, banking and software industries including AIG, Google, and Wells Fargo. Other sessions on transportation, survey sampling, and combining data from administrative data and surveys featured speakers from NISS research staff and affiliates.

A highlight of the week – the NISS annual reception – was held jointly with SAMSI and MBI this year, highlighting the importance of NISS working together with other NSF funded institutes, and symbolizing the restoration of the long-term relationship between NISS and SAMSI, which was interrupted in the past two years. Many friends of NISS dropped by and heard an update on NISS activities and celebrated the recipients of the Sacks Award and the Distinguished NISS Alumni Award.

In an effort to further serve our affiliates, NISS has co-sponsored numerous regional activities for our affiliate members to participate and utilize their affiliate award funds. NISS affiliation represents a commitment to outreach with other academic institutions and across government and industry sectors. Since half of the cost of an academic affiliate can be utilized as travel and registration at NISS-sponsored events, faculty and graduate student participants can build their career network through engaging in these activities. See the current list in the Newsletter, and continuously updated at www.niss.org/events.

The Washington DC office of NISS has moved just two blocks to a new location at 1150 K Street, NW, a convenient location for staff and post docs, just one block from a metro stop. See our location on the website. In North Carolina, we have now leased the original wing of our building to Teledyne Scientific Company, and we continue to seek projects and tenants for the new wing built for SAMSI in 2002. If you are aware, or know of any projects seeking space in a beautiful campus like setting please let me know.

James L. Rosenberger

ABOUT NISS

NISS is a national institute that delivers high-impact research in science and in public policy by leveraging the rich expertise of its staff with that of its base of affiliated organizations in academia, industry, and government. NISS works on issues where information and quantitative analysis are keys to solutions and decisions. NISS functions in three ways: as an expert advisor, as a basic researcher, and as a collaborator.

OUR MISSION

The National Institute of Statistical Sciences (NISS) is an independent research organization that serves as a neutral, objective expert in delivering research in science and public policy to its affiliates in academia, industry and government. NISS identifies, catalyzes and fosters high-impact cross-disciplinary and cross-sector research involving the statistical sciences.

The Jerome Sacks Award is given for statistical leadership in cross-disciplinary research.

G. Jogesh Babu is this year's award recipient.

Mary presented Jogesh's contributions to research as part of the NISS – SAMSI – MBI reception held at JSM in Vancouver.

Mary's presentation listed some of the specific contributions Jogesh has made to the field of astrostatistics including:

- a long list of quality papers in statistics, astronomical and astrophysical journals, going back to 1992, and seven edited books on astrostatistics;

- leadership in the SAMSI programs on astrostatistics in 2006 and in 2012-2013;

- organization of 14 summer schools on statistics for astronomers, in the U.S. and India, and seven major conferences on astrostatistics;

- field-building through funding procurement, based on what I count as an astonishing 39 grants from the NSF and other agencies to support astrostatistics projects;

- program organization for numerous conferences and special topic sessions;

- a new partnership with the Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST) project in China, an international Big Data science initiative that will use significant statistical methodology to find large-scale structure;

- leadership of an interdisciplinary team of astronomers, computer scientists and statisticians to develop methodology for the National Virtual Observatory, and leadership contributions in the Grid Data Mining for Astronomy program, the Large Synoptic Survey Telescope program, the Atacama Large Millimeter/Submillimeter Array (ALMA), and the VOStat project within the Virtual Astronomical Observatory program.

His work has indeed created a new hybrid discipline.

As a part of this work, besides doing the science, he has importantly built essential relationships with astronomers. His summer schools have taught statistical skills to more than 420 astronomers, he has established a valued biennial astrostatistics conference, he has secured large amounts of funding from the NSF and various foundations, and he has recruited some of the best young statisticians to work in this field.

In addition, Jogesh's long record of outstanding productivity and service to our profession shows no sign of slowing. He continues to publish on resampling theory, quantiles, statistical models with Bernstein polynomials, the probabilistic number theory associated with Ewens' sampling formula, and goodness-of-fit tests. Many of these papers, especially those undertaken in the last 15 years, are motivated by or specifically relevant to applied problems in astrostatistics.

Jogesh Babu joins a long list of exceptional researchers that have won the Jerome Sacks Award for Cross-Disciplinary Research. He is an outstanding statistician whose interdisciplinary work has created a new scientific field.

His citation reads:

"For his vision and dedication in helping to build the astrostatistics community for more than two decades, his commitment to young researchers in the field, and his research contributions to the analysis of astronomical data."

Congratulations Jogesh!

"His vision and effort in building the field of astrostatistics is outstanding!"

Mary Batcher, Chair, NISS Board of Trustees

Mary Batcher presents Jogesh Babu with the 2018 Jerome Sacks Award for Outstanding Cross-Disciplinary Research at the JSM NISS - SAMSI - MBI Reception.

At the NISS – SAMSI – MBI reception that was held during JSM Jim Rosenberger, Director of NISS, presented the **NISS Distinguished Alumni Award to Matthias Schonlau,** Professor of Statistics at the University of Waterloo in Canada.

Prior to his appointment as full professor at the University of Waterloo in 2011, Matthias worked at the RAND Corporation in Pittsburgh, PA and in Santa Monica, CA for 12 years. At RAND he worked as a research and consulting statistician whose focus was on survey methods, especially web surveys. He had also spent a year at the Max Planck Institute for Human Development and the German Institute for Economic Research in Berlin.

Administratively Matthias served as head of the RAND Statistical Consulting service for 7 years and as Co-director of the Survey Research Center at the University of Waterloo for 4 years.

Matthias is currently serving as president of the Survey Methods Section of the Statistical Society of Canada, 2015-18, as a board member of European Survey Research Association (ESRA) for 6 years, 2011-17, and is currently associate editor of the journal Survey Research Methods (2015-present).

Matthias has more than 70 peer reviewed research publications that have received over 10,000 citations.
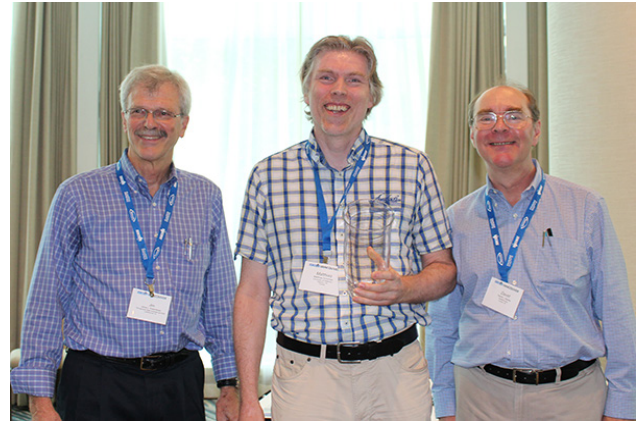
His postdoctoral experience with NISS occurred from 1997-1999 at the AT&T Laboratory in Florham Park, NJ, under the supervision of Daryl Pregibon, where he worked on computer intrusion detection. While it might not seem like that long ago, Mathias has certainly come a long way since his involvement with NISS!

The citation for this award reads:

"Honoring his distinguished career as a research statistician in both industry and academia, especially his contributions in the area of survey methodology."

Congratulations Matthias!

Matthias Schonlau with Jim Rosenberger, Director NISS (left) and David Banks, Director SAMSI (right)

NISS WELCOMES NEW BOARD MEMBERS!

The direction of any organization is significantly influenced by the experience, fresh ideas and energy of its board. For this reason NISS is very excited to welcome Bhramar Mukherjee, Kate Crespi and Alyson Wilson as new members of the NISS Board of Trustees. They bring a wealth of experience both as statisticians but more importantly as directors and managers of statisticians.

Bhramar Mukherjee, Kate Crespi and Alyson Wilson

Dr. Bhramar Mukherjee is the John D Kalbfleisch Collegiate Professor and Chair of the Department of Biostatistics at the University of Michigan School of Public Health. She is also a Professor of Epidemiology and Global Public Health. She is the Associate Director for Cancer Control and Population Sciences at the University of Michigan Rogel Cancer Center. Administratively she has held positions in the ASA, ENAR, IISA and COPSS including serving as the overall program chair for the Joint Statistical Meetings. She is currently the Chair elect for COPSS for a three-year term starting 2019.

Dr. Kate Crespi is Professor of Biostatistics at the Fielding School of Public Health at University of California Los Angeles, where she is also affiliated with the UCLA Jonsson Comprehensive Cancer Center. She has published widely in the areas of cancer, obesity and chronic disease. Dr. Crespi brings experience as past president of the Western North American Region (WNAR) of the International Biometric Society.

Dr. Alyson Wilson is a Professor in the Department of Statistics and Principal Investigator for the Laboratory for Analytic Sciences at North Carolina State University. She is a Fellow of the American Statistical Association and the American Association for the Advancement of Science. Her research interests include statistical reliability, Bayesian methods, and the application of statistics to problems in defense and national security. She is a founder and past-chair of the American Statistical Association's Section on Statistics in Defense and National Security.

NISS looks forward to the active role that these leaders will play in the coming years as they help define ways to bring together statisticians and data scientists to address current issues in ways that an organization like NISS can make possible.

NISS would also like to thank Rebecca Doerge (Carnegie Mellon University) and Joel Dubin (University of Waterloo) for their service on the board. They have recently rotated off of the NISS Board of Trustees.

Panel Speakers: How is Data Science Organized?

Each year at JSM the NISS Affiliates gather for facilitated discussion and conversation over lunch and a chance to meet new colleagues, talk and catch up. This year's luncheon was very well attended. The general topic of the luncheon was how data science groups are organized within industry as well as within institutes of data science in academia. Affiliates from all three sectors, academic, industry, and government got a chance to hear from a number of dynamic speakers.

> *"Statisticians need to stand up for our important contribution to data science, and not allow, if at all possible, for computer science to define what data science is, or control committees that establish data science programs."*
>
> *Joel Dubin, Affiliate Luncheon Moderator*

James Rosenberger, NISS Director, welcomed everyone and introduced Joel Dubin, the session organizer and moderator for the event. Joel first introduced the industry panel speakers, Ming Li from Amazon and Souvik Ghosh from LinkedIn. The speakers focused on their training needs in terms of data science. Ming Li's talk focused on data science in technology companies where he looked at the differences between a statistician and a data scientist and the differences between a generalist and a specialist. Souvik Ghosh talked about the role of statisticians at LinkedIn, noting that some problems can have solutions using tools that are not statistical in nature.

They were followed by a panel of academic speakers that included Tian Zheng from Columbia University, Roy Welsch from MIT, and Bhramar Mukherjee from University of Michigan. Tian Zheng described how they prepare students for a career in data science at Columbia. She introduced perhaps the most memorable concept of the session, the ultimate data scientist as the 'mythical unicorn!' Her point being that while many curricula in Statistics prepare students for some of skills needed to create the data science workflow, data science job descriptions often list many other skills

that no single person possesses.   Roy Welsch talked about the MIT Institute for Data, Systems, and Society and the wide array of skills that are required to solve the current data problems in retail, technology, power systems, and social media settings as examples. Lastly Bhramar Mukherjee talked about the 'Battle of Two Cultures: Statistics vs Computer Science.' She argued for expanding the boundaries for how statisticians work to solve problems. Her challenge included the words of Gertrude Cox:

> *"With our scientific backgrounds, we should spend most of our time seeking out the new, the underdeveloped, the unexplored or even the dangerous areas. It is one of the challenges of the statistical universe that, as new regions are discovered and developed, the horizon moves further away."*
>
> *- Gertrude M Cox (1957)*

Lively discussion after each of these panel presentations ensued. Participants acknowledged that this distinction between statistician and data scientist is something that will be debated and discussed for some time to come.

> *"Listening to the industry and academic representatives discuss data science confirmed my view that data science requires statisticians, computer scientists, and data base specialists to work together. The unusual data scientist with all of these skills embodied in one person, we learned, is like the mythical unicorn."*
>
> *James Rosenberger, NISS Director*

Affiliate Certificates

During the event Jim Rosenberger also handed out Affiliate Certificates for each of the institutions that have signed on as affiliates of NISS. This is something new that NISS is doing and participants appreciated this acknowledgement, the idea being to bring something back home and display for colleagues to recognize their institution's involvement with NISS.

Affiliate liaisons catch up over lunch.

Tian Zheng from Columbia University speaks at the NISS Affiliate Luncheon

The annual NISS reception established a new beginning. Although held a few blocks from the convention center, and on a Monday night when there were many other receptions, these were not deterrents for conference participants to attend the combined NISS – SAMSI – MBI Reception in Vancouver.   A good-sized crowd was on hand for this memorable occasion.

James Rosenberger, NISS Director welcomed everyone and introduced David Banks, SAMSI Director and Catherine Calder, MBI (Mathematical Biosciences Institute) Co-Director, who also gave some introductory and welcoming remarks.

Catherine Calder, MBI Co-Director, James Rosenberger, NISS Director and David Banks, SAMSI Director

 While MBI is a new addition to the reception, NISS and SAMSI have had a long history of working together, however the more recent past has shown these two institutions moving in different directions. These differences were symbolically erased as Rosenberger and Banks publicly and ceremoniously shook hands as a sign of future collaboration.

Rosenberger and Banks, NISS - SAMSI handshake

After welcoming the gathering of friends, Rosenberger took advantage of everyone's attention and presented the first of the two NISS prestigious awards. He recognized and paid tribute to Matthias Schonlau, the recipient of the NISS Distinguished Alumni Award. Now a full professor of statistics at the University of Waterloo,

Matthias had worked as a NISS postdoc at the AT&T Laboratory in Florham Park, NJ from 1997 to 1999. Since then he worked at the RAND Corporation both in Pittsburgh, PA and Santa Monica, CA for 12 years. His research has focused on survey methods, especially web surveys. (See story above …)

Following this presentation, Mary Batcher, Chair of the NISS Board of Trustees, presented G. Jogesh Babu with the Jerome Sacks Award for Outstanding Cross-Disciplinary Research. Babu's work has been central to the development and advancement of a new hybrid field of study in Astrostatistics. Not only has Babu's research contributed to the analysis of astronomical data, he has also shown a deep commitment to young researchers in the field through conferences and summer schools, through which these and other activities have established a unique and valued collaboration between astronomy and statistics. (See story above …)

The reception buzzed with the excitement of these announcements, and also provided the chance to catch up with colleagues over drinks and good food.

ACADEMIC AFFILIATE MEET-UPS PLANNED

The first meet up for academic affiliates has been scheduled for Wednesday, October 10th, 2018 from 12 – 1 pm ET.   This is a first in a series of virtual meet-ups for the NISS Academic Affiliates and this time the target audience is graduate students.

The focus of this first program is **"Landing Your First Job as a Statistician"**. Speakers/panelists include members from academia, industry and government, either senior individuals who have been regularly involved in hiring statisticians, or were recently hired as a statistician. Each panelist will talk about their hiring process, the qualities and skills they look for in candidates, and the do's and don'ts during the interview. If you are now, or will soon be on the job market, this conversation is one that you will want to join!

Confirmed Speakers for this meet-up are **Tim Hesterberg** (Google), **David Hunter** (Penn State University), **Esra Kurum** (University California, Riverside), and **Tommy Wright** (US Census Bureau).

The following topics are being planned for future meet-up programs for academic affiliates.

Early December 2018: "Strategies for Career Advancement in Academia". This program will focus on guidance on career development in the academic setting including what you might want to consider doing to prepare for leadership opportunities.

Early February 2019: "The Pros and Cons of Getting Degrees in Statistics, Computer Science, or Data Science". This program will focus on how the different curricula differ, how employers of data scientists/analysts view candidates from the different majors and the skills they are looking for. The panel will include both employers and directors of data science training programs.

Some time in April 2019: "Effective Collaboration". This program will focus on how to develop successful collaborations in academia.

You will find additional information about these and all the other events that NISS hosts or sponsors on the NISS Events page.

2018 NISS WRITING WORKSHOP FOR JUNIOR RESEARCHERS A SUCCESS!   AGAIN!

Knowing how to write well for a technical publication is an important skill for all researchers, but it is especially important for those just beginning what they hope to be a successful career. This workshop, offered since 2007, provides young researchers, those with less than three years since defending their dissertation, valuable insights into the writing process.

The two-day 2018 NISS Writing Workshop for Junior Researchers in Statistics and Data Science took place in the Fairmont Waterfront Hotel in Vancouver. A grant from the NSF provided partial support for the workshop participants. Contributions from seven statistical societies including ASA, IMS, ENAR, SSC, KISS, ICSA, and IISA provided the balance needed to conduct the workshop. These contributed funds guaranteed that some members from each supporting society were admitted.

The workshop opened Sunday morning with breakfast and then Keith Crank (formerly at NSF and ASA) welcomed the other organizers Jim Rosenberger, Nell Sedransk and Lingzhou Xue from NISS. The morning technical session began with presentations by Nell Sedransk on the organization and content of technical writing, followed by discussion on the writing requirements and style involved. Edsel Pena (University of South Carolina), spoke to participants about important considerations in choosing where to publish.

Workshop organizer and mentor Keith Crank speaking with participants.

Sedransk then introduced four experienced writers and editors who focused on journal-specific topics for publication in statistics and data science. First, Xuming He (Michigan), a past co-editor of the Journal of the American Statistic Association's Theory and Methods sections talked about various journals that focus on theory and methods. Then, Hal Stern (UC Irvine), a past editor of the Journal of the American Statistic Association's Applications and Case Studies section shared his experience concerning statistical applications journals. David Rocke (UC Davis) focused on biostatistics and bioscience related journals having served on editorial board of Bioinformatics and other journals. Leland Wilkinson (H2O) provided advice based on his experience on the editorial boards of ISI and TAS concerning machine learning and computation related journals and proceedings.

Lunch time provided participants and their experienced writing mentors their first opportunity to get together and talk about the participants' goals and hopes for publishing their work.

Leland Wilkinson and his mentee reviewing a manuscript.

The 12 mentors who volunteered their time to review and provide advice regarding the manuscripts that workshop participants were working on included Marco Carone (U Washington), Keith Crank, Susan Ellenberg (Penn), Xuming He (U Michigan), Peter Imrey (Cleveland Clinic), Nicole Lazar (U Georgia), Edsel Pena (Un South Carolina), David Rocke (UC Davis), Nell Sedransk (NISS), Hal Stern (UCI), Leland Wilkinson (H2O), and Heping Zhang (Yale). Participants and mentors used the next couple of days at JSM to find times to meet to discuss the particular issues each participant found challenging in writing the manuscript or grant proposal that the mentor had reviewed prior to the workshop.

After lunch Peter Imrey talked about reproducibility and ethical issues such as deciding on inclusions and author order for   joint authorship, the dynamics of discussions with co-authors, giving credit to authors of earlier work and other topics. Keith Crank then shared his many years of experience as an NSF program officer and grant reviewer for those who were interested in improving their grant proposal writing.

On Tuesday morning, participants and several mentors reconvened as a group. Nell Sedransk discussed the writing process and presented strategies for writing, especially planning for multiple drafts and setting goals for revisions. Following this Jim Rosenberger led a panel of individuals, whose native language is not English, telling stories from their successful careers writing and publishing their research in English. They shared experiences and provided tips from their technical writing successes. Panel members were Ali Shojaie (U Washington) whose native language is Farsi; Limin Peng (Emory U), Chinese; Gabriel Huerta (Sandia National Laboratories) Spanish and Nicoleta Serban (Georgia Tech), Serbian.

Panel of successful non-native English speakers, moderated by James Rosenberger.

After a wrap-up of the workshop, Certificates of Completion were presented to all the participants.

On a special note, there were three individuals who were singled out for their contributions to this NISS workshop through the years. James Rosenberger (NISS Director) and Nell Sedransk (NISS Director-DC) presented Keith Crank, Xuming He and Peter Imrey with certificates of appreciation that read:
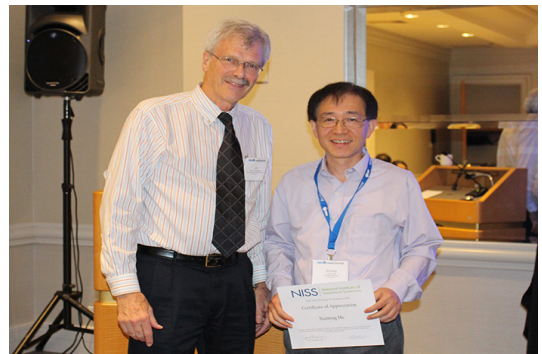
"In appreciation for ten years of involvement and participation in the development and presentation of this workshop, and whose mentoring of junior researchers made this a successful annual event."

Certificate of Appreciation presented to Peter Imrey.

Certificate of Appreciation presented to Keith Crank.

Certificate of Appreciation presented to Xuming He.

SPONSORED JSM SESSION ON BIG DATA – STANDING ROOM ONLY!

Session Chair and Organizer, Lingzhou Xue, NISS Assistant Director, opened the NISS Sponsored session entitled, "Big Data Statistical Challenges and Opportunities in Industry" by welcoming speakers and attendees. The session certainly generated much interest. Attendees stood in the back of the hall three deep, while many hardy souls took seats on the floor down the aisle!

Four invited speakers discussed emerging statistical challenges and opportunities in several major industries: insurance, banking, information technology, internet, and pharmaceutical industry.
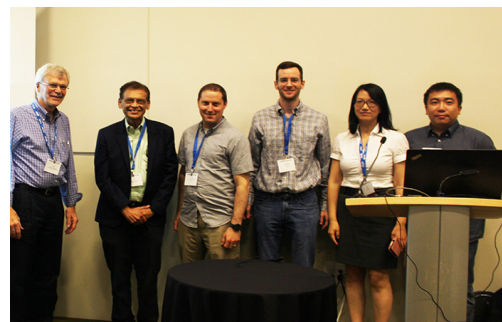
The first speaker was Dr. Siddhartha (Sid) Dalal, whose talk was titled, "Deep Analytics for Risk Analysis & Mitigation: From NLP, Computer Vision to Sensors." Sid is a Professor of Professional Practice at Columbia University. Before joining Columbia, he was Chief Data Scientist and Senior Vice President at American International Group and the CTO at RAND Corporation. He described a broad array of Big Data examples and challenges in assessing risks from his experiences in AIG and RAND, which can be addressed by AI and statistical learning methods.

The second speaker was Dr. Jie Chen, who, with Dr. Vijayan (Vijay) Nair, talked about "Machine Learning Techniques for Risk Analysis in Banking." At Wells Fargo & Company, Vijay is Head of the Statistical Learning and Advanced Computing Group, and Jie is Managing Director in Corporate Model Risk. Jie presented the applications of statistics and machine learning for managing risks in consumer or retail banking, wholesale banking, investment banking and wealth management.

Jie was followed by Dr. Christopher Holloman, the Chief Data Scientist at Information Control Company. who commented on "Sound Statistical Inference from Big Data in the Insurance Industry." Chris pointed out that the use of new high-resolution data for individualized pricing is one of the most exciting areas for innovation in insurance. In particular, he showed how automobiles containing sensors provide a rich source of information about driver behavior.

The final speaker was Dr. Andrew Smith from Google. In his talk titled "Feature Engineering From Scratch" Andrew emphasized the fundamental importance of feature engineering to the application of statistics and machine learning and discussed its current challenges. The challenge now was to find new ways to uncover important features, what statisticians usually call variables, among the numerous possibilities in big data sets.

James Rosenberger, NISS Director, served as discussant for this popular session, then helped field questions for the speakers from the floor before the session ended.

SEPTEMBER

Workshop on Higher-Order Asymptotics and Post-Selection Inference

Event Date: September 8 - 10, 2018

Event Location: Campus of Washington University in St. Louis
St. Louis, Missouri

The Third Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI)^{3} seeks to build upon the success of the first workshop and second workshop, by presenting the latest developments in post-selection inference, and discussing how tools from higher-order asymptotics can both... (see Events page)

MBI Workshop 1: Family Based Genomic Studies

Event Date: September 17 - 19, 2018

Event Location: Columbus, Ohio

The field of Genetic Epidemiology has historically focused on the inheritance of genetic factors and phenotypes within families. However, the increase in ever improving technologies brought a shift from familial study designs to genome wide association studies (GWAS) utilizing samples of unrelated... (see Events page)

Workshop on R & Spark: Tools for Data Science Workflows

Event Date: Friday and Saturday, September 21-22, 2018

Event Location: SAMSI Offices, 79 T. W. Alexander Drive
Research Triangle Park, North Carolina, 27709

COURSE OUTLINE R is a flexible, extensible statistical computing environment, but it is limited to single-core execution. Spark is a distributed computing environment which treats R as a first-class programming language. This course introduces data structures in R and their use in functional... (see Events page)

StatFest 2018: A One Day Conference for Undergraduate Students

Event Date: Saturday, September 22, 2018 - 9:30am to 5:00pm

Event Location: Amherst College, Amherst, Massachusetts

Learn about statistics and data science careers in industry, government, and academia. Underrepresented students (African American, Hispanic, Native Americans) with analytical interests are particularly encouraged to attend and learn about exciting career and graduate study opportunities in... (see Events page)

Workshop on Point Process Models

Event Date: Friday and Saturday, September 28-29, 2018

Event Location: Stephen Hawking Auditorium, Mitchell Institute
Texas A&M University, College Station, Texas, 77843

Sponsored by the Department of Statistics, Institute for Applied Mathematics and Computer Science (IAMCS), Statistical Methods for Atmospheric and Oceanic Sciences (STATMOS) and the National Institute of Statistical Sciences, the Workshop on Point Process Models will offer a series of speakers, a... (see Events page)

OCTOBER

NISS-Merck Virtual Meet-up: "Real World Data and its Applications in the Pharmaceutical Industry"

Event Date: October 4, 2018; 11 am - 12:15 pm ET (DATE MAY CHANGE!)

Event Location: Online - see NISS website for connection info.

Just Announced - THIS DATE MAY CHANGE! More information coming soon! Randomized controlled trials (RCTs) have long been the gold standard for providing evidence to support the safety and efficacy of a new drug, vaccine, or biologic. Most pre-marketing product development programs are divided into... (see Events page)

International Conference on Advances in Interdisciplinary Statistics and Combinatorics

Event Date: October 5-7, 2018

Event Location: Elliot University Center, 507 Stirling Street, University of North Carolina at Greensboro, Greensboro, North Carolina, 27412

A conference to promote interdisciplinary research involving statistical techniques. These techniques are becoming increasingly important in all fields of scientific discovery. A unique feature of the conference is to bring together nationally and internationally recognized researchers from many... (see Events page)

MBI Workshop 2: Math and the Microbiome

Event Date: October 10 - 12, 2018

Event Location: Columbus, Ohio

From the bacteria in our guts, to microbes involved in biodegradation and crop growth, to viruses in the ocean, some of Earth's tiniest organisms play some of the most important roles in global health, food production, and climate change. Advances in metagenomic sequencing technology including 16S... (see Events page)

NISS Academic Virtual Meet-Up: How to Land Your First Job as a Statistician!

Event Date: Wednesday, October 10 from 12 – 1pm (EDT)

Event Location: Online - see NISS website for connection info.

Anxious about landing that first job after graduation? Here is a easy way to join a conversation that will help walk through the ins and outs of the job hunting experience. Target Audience: Graduate Students This video conference will be led by individuals who have either been regularly involved... (see Events page)

Georgia Statistics Day 2018

Event Date: October 26, 2018

Event Location: Center for Continuing Education & Hotel, University of Georgia, 1197 South Lumpkin Street, Athens, Georgia, 30602

Georgia Statistics Day is an annual event, designed to promote interdisciplinary statistics research among the flagship academic institutions of the state of Georgia, namely the University of Georgia, Georgia Institute of Technology and Emory University. ... (see Events page)

MBI Workshop 3: Modeling and Analysis of Dynamic Social Networks

Event Date: November 7 - 9, 2018

Event Location: Columbus, Ohio

In recent years, the focus of social network theory in behavioral ecology and the social sciences has shifted to understanding the dynamics of social networks. Data analytical methods such as relational state models and others have been used to address patterns of network change over time as agents... (see Events page)

The 7th Workshop on Biostatistics and Bioinformatics

Event Date: May 10-12, 2019

Event Location: Dean's Meeting Center, College of Arts and Sciences Event Center, 26th Floor, 25 Park Place, Atlanta, Georgia

Biostatistics and Bioinformatics have been playing a key and important role in statistics and other scientific research fields in recent years. The goal of this workshop is to stimulate research and to foster the interaction of researchers in Biostatistics & Bioinformatics research areas. The... (see Events page)

MINITAB AND ALBERT EINSTEIN COLLEGE OF MEDICINE - NEW NISS AFFILIATES!

NISS recently welcomed two new affiliates Minitab, Inc. and the Albert Einstein College of Medicine!

Minitab, Inc

Located in State College, Pennsylvania, Minitab helps companies and institutions to spot trends, solve problems and discover valuable insights in data by delivering a comprehensive and best-in-class suite of data analysis and process improvement tools. One of the leaders in the field of those companies that offer statistical software tools and support, Minitab has helped organizations drive cost containment, enhance quality, boost customer satisfaction and increase effectiveness for over 40 years. Thousands of businesses and institutions worldwide use Minitab Statistical Software, Companion, and Quality Trainer to uncover flaws in their processes and improve them.

Minitab Headquarters in State College, PA

Albert Einstein College of Medicine

The Division of Biostatistics in the Department of Epidemiology and Population Health at the Albert Einstein College of Medicine was established in 2003 in the Bronx, New York and includes over 20 doctoral and masters level statisticians. Biostatistics faculty receive grants from the National Institutes of Health, National Science Foundation, Centers for Disease Controls, and other federal funding agencies to conduct methodological research in clinical trials, epidemiology, experimental design, survival analysis, diagnostic test evaluation, imaging studies, and statistical genetics and genomics. Other areas of interest include missing data methods, casual inference, and comparative effectiveness research. The department's goals include, 1) to develop and apply innovative statistical and computational approaches to advance biomedical research, 2) to collaborate with investigators in a broad range of fields including cancer, cardiovascular disease, neurology, and infectious diseases, and 3) to provide educational and training opportunities in quantitative methods to the next generation of physicians and scientists.
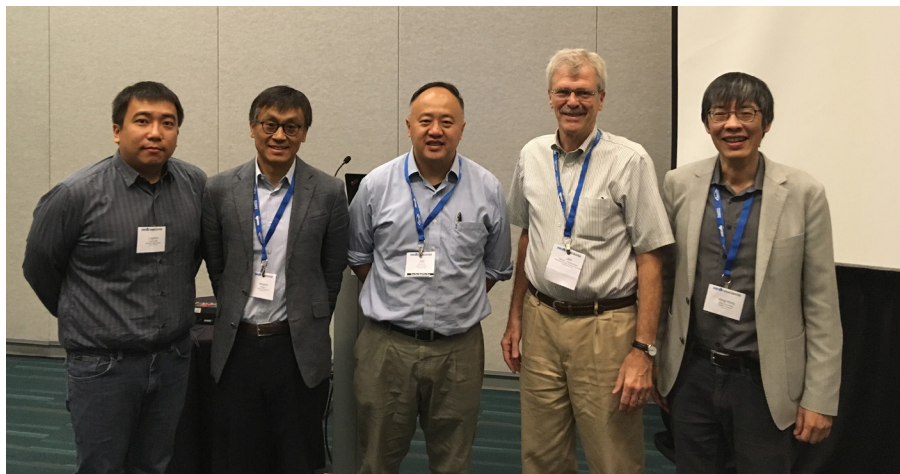

The Albert Einstein College of Medicine, Bronx, NY

NISS is very excited that both of these institutions will be joining other NISS Affiliate colleagues to help define the direction of programs, events and future collaboration!

AFFILIATES! SEND YOUR JOB ANNOUNCEMENTS TO NISS!

A link to the Job Announcements page can be found at the bottom of of every page of the NISS website! It can't hurt to share your announcement with other organizations associated with NISS or other visitors to our website.

www.niss.org/careers

Cross-Disciplinary Research on Statistical Genomics and Bioinformatics

The Jerome Sacks Award Session

(from left to right) Lingzhou Xue, (Presenter & NISS Assistant Director), Hongzhe Li (U Penn), Jun Liu (Harvard & 2017 Jerome Sacks Award Recipient), James Rosenberger (Session Organizer & NISS Director), Wing Hung Wong, (Stanford).

Statistical Challenges in Combining Survey and Administrative Data

Survey Research Methods Section

(from left to right) Andreea Erciulescu, (NISS Research Associate), Phil Kott, (NISS Board Member), Maura Bardos (Energy Information Administration), Mauricio Sadinle (University of Washington), Michael Robbins (RAND Corporation), Joel Dubin (Session Chair, University of Waterloo), Lingzhou Xue (Session Organizer, NISS Assistant Director).

Gabriel Huerta (NISS Board Member) and James Rosenberger take a turn at the NISS Booth at the Expo!

Susan Ellenberg (UPenn) speaks with her mentees during the JSM Writers Workshop n Vancouver.

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