International Indian Statistical Association Conference

Frontiers of Probability and Statistical Science

May 22-25, 2008

The Program

Hosted By

The Department of Statistics

University of Connecticut-Storrs

Chair:

Malay Ghosh, President, IISA
University of Florida-Gainesville   ghoshm@stat.ufl.edu

Co-Chair:

Subir Ghosh, President Elect, IISA
University of California-Riverside   subir.ghosh@ucr.edu

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Nitis Mukhopadhyay (Chair)	nitis.mukhopadhyay@uconn.edu
Nalini Ravishanker	nalini@stat.uconn.edu

Pre-Banquet Cultural Committee:

Balaji Raman, Rohini Sen, and Jeffrey Stratton, three statistics graduate students
from the University of Connecticut-Storrs, and Nitis Mukhopadhyay.

May 6, 2008

Dear IISA Meeting Participants:

It is my pleasure to welcome you to the University of Connecticut.

It is very appropriate that our Statistics Department hosts such a meeting. The Department has woven itself into the fabric of the community and thus made itself extremely valuable to the larger enterprise.

This is a very strong department, one that had made valuable contributions to statistics in both its theoretical and applied manifestations. It has made great advances in curriculum and in serving the broader university community in such varied fields as biology, health sciences, business, economics, agriculture and many others. And of course members of the department continue to make strong contributions to the profession in terms of their publications, book chapters and hosting of conferences.

Many of our faculty members have origins in India; so you should feel at home, even though far from your native country.

The Statistics Department has hosted several regional, national and international meetings here. All have been successful. I wish you well in your deliberations.

Welcome to UConn and Storrs!

With best wishes,

Ross D. MacKinnon,
Dean

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COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES
CITRUS RESEARCH CENTER AND AGRICULTURAL EXPERIMENT STATION

On behalf of the International Indian Statistical Association (IISA), it is my pleasure and privilege to welcome all participants in the Connecticut Conference at Storrs during May 22-25, 2008. Your participation and involvement at this conference will contribute to the advancement of the field of Statistics and Probability. We thank all participants, members of the Program Committee and the Local Organization Committee for making this conference possible. We are grateful to Cytel Inc., Eli Lilly and Co., Novartis Pharmaceuticals Co., and Vislation for their support. We would also like to thank the University of Connecticut at Storrs for being the host of this conference.

Your continual support is important to us and we encourage you to be a member of the IISA by the end of this conference.

Thanks and best regards,

Subir Ghosh
President-Elect, IISA

University of Connecticut
Department of Statistics

College of Liberal Arts and
Sciences

Dear Participants: May 9, 2008

On behalf of the Department of Statistics at the University of Connecticut, I am pleased to give you the warmest welcome to our department and campus. It is a total delight to welcome the delegates of the IISA conference. This is the largest conference so far, our department has ever hosted. My sincere thanks go to the leadership of Professors Nitis Mukhopadhyay and Nalini Ravishanker.

I truly believe that this conference will be of very high quality level developing exchanges and interactions between the statisticians throughout the word and the UConn community.

Let me now tell you few facts about our department. Our department was founded in 1963, with first Ph.D.graduated in 1966. Being one of the major Statistics Department in New England, we have so far produced more than 90 Ph.D.'s, 195 Masters and 200 Bachelors. Our graduates are placed in high positions within academics, government and industries within US and abroad. Currently, we have 14-fulltime faculty, 6 part time teaching faculties and 5 joint faculties from other departments within UConn. Many of our faculties also serve as a joint faculty with other departments. Our faculty research virtually encompass all areas of statistics, which includes in particular Applied Probability, Bayesian Analysis, Bioinformatics and Biostatistics, Financial statistics and various aspects of Mathematical Statistics. I am proud to mention that 8 of our current faculty and one emeritus professor are fellows of the ASA and 6 of our current faculty and one emeritus faculty are fellows of the IMS. Many of our faculty received intramural and extramural awards in research excellence. Most of our faculties are editors or editorial board members of major journals. Currently we have more than 50 graduate students and 25 undergraduate students. We have started masters program with concentration in Biostatistics and are planning to start similar programs in Environmental and Business and financial statistics.

The research initiatives and the quality of output of the department continue to soar. We enjoy research funding from a variety of sources including NSF, NIH, AOFSR, ONR and private companies. International and national visibility of the department also continues to grow with our faculty's participation and visits at conferences and other universities all over the world. Last year we became University affiliates of the National Institute of Statistical Science.

Welcome to UConn and Storrs!

With best wishes,

Dipak Kumar Dey

Dipak K. Dey
Board of Trustees Distinguished Professor
and Head

University of Connecticut
Department of Statistics

May 9th, 2008

College of Liberal Arts and
Sciences

Frontiers of Probability and Statistical Science
IISA Conference, May 22-25, 2008

Dear Participants:

On behalf of the local organizing committee (consisting of Dipak K. Dey, Nalini Ravishanker, and I), I welcome you to the University of Connecticut, the site of the international conference, *Frontiers of Probability and Statistical Science*, under the auspices of the International Indian Statistical Association (IISA). I am delighted that you are here and earnestly look forward to sharing ideas with you and learning from you during the three days at this conference.

I take this opportunity to heartily thank all sponsoring agencies and individuals. While you will find all their names acknowledged more properly elsewhere in this program, let me especially mention that the American Statistical Association is one of the sponsors of this IISA conference.

I am particularly thrilled to welcome colleagues from Brunei, Canada, France, Germany, India, Italy, Japan, Russia, Spain, Sweden, and from all corners of the United States.

I hope that you will find the technical program in this conference both rich and fulfilling. You will hear from two wonderful plenary speakers and five top-notch presenters of specially named lectures. Also, you will have a choice to make to attend as many of the 45 invited paper sessions as possible. These invited paper sessions are filled with distinguished speakers of all ages coming from academia, industries, and businesses from both near and far. You will see and hear scholarly presentations from senior to new researchers to graduate as well as undergraduate students. It is my belief that every conference participant will find some interesting session to go to at any point of time. Thanks to the members of the Program Committee for doing such a fantastic job.

I personally thank Malay Ghosh (President, IISA) and Subir Ghosh (President-Elect, IISA) for their continued help and advice. It has been a thrill to work with them on this project.

Those who have prepaid for the cultural show (starts at 5:45 PM) and the banquet on Friday, they are in for a real treat, fun-filled evening and good food. There is an award ceremony (followed by refreshments) scheduled on Saturday 4:30-5:30PM that no one should miss.

If the local organizing committee can help in any way to make your visit more productive and enjoyable, please do not hesitate to directly contact me or Dipak or Nalini.

Thanks for coming to Storrs. Thanks for gathering under the big umbrella of the IISA. Make a new friend and enjoy. Wish you all happy networking with friends and colleagues from all over the scholarly world without any border. Best regards,

Nitis Mukhopadhyay,
Chair, Local Organizing Committee

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What Does the Registration Fee Cover?

A registration fee in all categories except for a "companion" includes the reception (May 22 evening), 3 boxed lunches (May 23-25), all morning (May 23-25) and afternoon (May 23) breaks, the refreshments following the awards ceremony (May 24), a simple registration packet, and an abstract booklet.

A companion registration also includes a reception (May 22 evening), 3 boxed lunches (May 23-25), all morning (May 23-25) and afternoon (May 23) breaks, and the refreshments following the awards ceremony (May 24). A companion registration will **not** entitle one (i) to receive a separate registration packet and abstract booklet, (ii) to present a paper, (iii) to chair a session, or (iv) to participate as a panelist during a panel discussion.

Conference Is Open Only to Registered and Authorized Individuals:

No event or function within this conference is open to any non-registered or non-authorized individual.

Pre-Banquet Cultural Show and the Banquet:

This is scheduled at **5:45PM** on **Friday, May 23** in Rome Ballroom that is one floor up as one enters the Lewis B. Rome Building. It is very close to Nathan Hale Inn and the South Dorm.

This is a fee-event and it is open only to those participants (and accompanied persons) who have pre-paid tickets.

Everyone should be seated before the cultural program begins at **5:45 PM**. One may get a glass of wine or soda or water before one settles down. If you enjoy poetry readings (mathematical or not) and have a taste for live Indian music (including vocals with violin, clarinet, tabla and other percussion accompaniments), this evening is made for you.

The banquet will follow the cultural show in the same location.

Award Ceremony:

This is scheduled at **4:30PM** on **Saturday, May 24** in the Information Technology Engineering (**ITE**) building, ITE-C-80 Foyer.

Thanks to Our Sponsors

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American Statistical Association

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University of Connecticut-Storrs

- The Dean's Office, College of Liberal Arts & Sciences
- The Department of Statistics
- The Graduate School

Session Chairs with Day/Time-Slot/Session#
At-A-Glance

AbouEl-Makarim Aboueissa	Saturday 1:30 PM – 3:00 PM: Session #41
Makoto Aoshima	Sunday 8:00 AM – 9:30 AM: Session #33
Sudipto Banerjee	Sunday 8:00 AM – 9:30 AM: Session #30
Anil Kumar Bera	Saturday 9:00 AM – 10:30 AM: Session #28
Jaya Bishwal	Friday 1:15 PM – 2:45 PM: Session #3
Mark Carpenter	Friday 1:15 PM – 2:45 PM: Session #8
Joe Cappelleri	Sunday 10:00 AM – 11:30 AM: Session #45
N. Rao Chaganty	Friday 11:00 AM – 11:45 AM: **R. R. Bahadur Lecture**
Gabe Chandler	Saturday 6:00 PM – 7:30 PM: Session #2
Ming-Hui Chen	Saturday 1:30 PM – 3:00 PM: Session #4
Zhiyi Chi	Sunday 8:00 AM – 9:30 AM: Session #31
Hokwon Cho	Friday 3:15 PM – 4:45 PM: Session #24
Bertrand Clarke	Saturday 6:00 PM – 7:30 PM: Session #5
Erin Conlon	Saturday 6:00 PM – 7:30 PM: Session #6
Susmita Datta	Friday 3:15 PM – 4:45 PM: Session #13
Dipak K. Dey	Saturday11:15 AM – 12:00 Noon: **P. R. Krishnaiah Lecture**
Varghese George	Friday 1:15 PM – 2:45 PM: Session #10
Daniel Gervini	Friday 3:15 PM – 4:45 PM: Session #40
Malay Ghosh	Friday 9:15 AM - 10:15 AM: **Plenary Lecture-I**
Kalyan Ghosh	Sunday 10:00 AM – 11:30 AM: Session #11
Samiran Ghosh	Saturday 1:30 PM – 3:00 PM: Session #44
Subir Ghosh	Saturday 3:15 PM - 4:15 PM: **Plenary Lecture-II**
Joseph Glaz	Sunday 10:00 AM – 11:30 AM: Session #17
Edit Gombay	Sunday 10:00 AM – 11:30 AM: Session #18
Ramesh Gupta	Sunday 11:30 AM – 1:00 PM: Session #19
Pushpa L. Gupta	Friday 1:15 PM – 2:45 PM: Session #22
S. Rao Jammalamadaka	Saturday 9:00 AM – 10:30 AM: Session #21
Nandini Kannan	Saturday 6:00 PM – 7:30 PM: Session #26
Amarjot Kaur	Friday 3:15 PM – 4:45 PM: Session #23
Partha Lahiri	Saturday 1:30 PM – 3:00 PM: Session #25
Vasudevan Mangalam	Saturday 9:00 AM – 10:30 AM: Session #37
Viatcheslav Melas	Saturday 6:00 PM – 7:30 PM: Session #16
Nitis Mukhopadhyay	Friday 1:15 PM – 2:45 PM: Session #29
Balgobin Nandram	Saturday 9:00 AM – 10:30 AM: Session #39
Kannan Natarajan	Saturday 6:00 PM – 7:30 PM: Session #12
Sastry Pantula	Saturday 11:15 AM – 12:00 Noon: **V. S. Huzurbazar Lecture**
Bo Ranneby	Sunday 11:30 AM – 1:00 PM: Session #42
M. B. Rao	Saturday 9:00 AM – 10:30 AM: Session #7
Poduri S. R. S. Rao	Saturday 11:15 AM – 12:00 Noon: **D. Basu Lecture**

Ana Rappold	Friday 1:15 PM – 2:45 PM: Session #27
Nalini Ravishanker	Friday 11:00 AM – 11:45 AM: **P. V. Sukhatme Lecture**
Rituparna Sen	Sunday 8:00 AM – 9:30 AM: Session #32
Ramkaran Singh	Saturday 1:30 PM – 3:00 PM: Session #38
Debajyoti Sinha	Sunday 8:00 AM – 9:30 AM: Session #35
Dongchu Sun	Saturday 1:30 PM – 3:00 PM: Session #34
Tumulesh K. S. Solanky	Saturday 1:30 PM – 3:00 PM: Session #1
Mun S. Son	Friday 3:15 PM – 4:45 PM: Session #20
Hrishikesh (Rick) D. Vinod	Sunday 11:30 AM – 1:00 PM: Session #43
Vasant B. Waikar	Friday 3:15 PM – 4:45 PM: Session #36
Ronald L. Wasserstein	Sunday 11:30 AM – 1:00 PM: Session #9
Linda Young	Saturday 9:00 AM – 10:30 AM: Session #14
Yichuan Zhao	Sunday 8:00 AM – 9:30 AM: Session #15

Suggested Guidelines for All Chairs

A Chair assumes an enormous responsibility. We thank all our Chairs for helping us out so that each session may run as smoothly as possible.

Since the conference schedule is tight, the Chairs are requested to follow assigned time-slots of all paper sessions. Chairs should arrive in an assigned room early and follow the guidelines.

Plenary Lectures:

- A Chair would start an assigned session on time.
- A Chair would not wait for a "larger" audience to arrive.
- A plenary lecture would run 50 minutes (or under) followed by 10 minutes Q&A.
- A Chair should show signs (prepare your own) to indicate to a speaker when 10-5-1-0 minutes of presentation time are left out of 50 minutes. When presentation time has all but expired, a Chair should not hesitate to stand up and draw a speaker's attention quickly.
- A Chair would finish an assigned session on time.

Specially Named Lectures:

- A Chair would start an assigned session on time.
- A Chair would not wait for a "larger" audience to arrive.
- A specially named lecture would run 40 minutes (or under) followed by 5 minutes Q&A.
- A Chair should show signs (prepare your own) to indicate to a speaker when 5-1-0 minutes of presentation time are left out of 40 minutes. When presentation time has all but expired, a Chair should not hesitate to stand up and draw a speaker's attention quickly.
- A Chair would finish an assigned session on time.

All Other Invited Paper Sessions:

- A Chair would start an assigned session on time.
- A Chair would not wait for a "larger" audience to arrive.
- If a first speaker is absent, Chair would wait for him/her to arrive during his/her assigned time-slot. If the second and/or third speaker is absent, but the first speaker is present, the session will begin on time with the first presentation.
- If a speaker happens to be absent, other presentations in the same session will not be moved forward under any circumstances. A speaker arriving late is entitled to whatever time that may be left during his/her assigned time-slot. Chair will not allow "make up" time.
- An invited paper presentation would run 25 minutes (or under) followed by a maximum of 5 minutes Q&A.
- A Chair should show signs (prepare your own) to indicate to a speaker when 2-1-0 minutes of presentation time are left out of 25 minutes. When presentation time has all but expired, a Chair should not hesitate to stand up and draw a speaker's attention quickly.
- A Chair should not allow more or less time to any speaker.
- A Chair should finish an assigned session on time.

Summary of Technical Sessions
At-A-Glance

   All technical sessions, daytime breaks-lunches-socials will take place in the School of Business (**BUSN**) building and Information Technology Engineering (**ITE**) building combined. These two buildings are next to each other.
   Either building (**BUSN** or **ITE**) is within 10 minutes of walking distance from Nathan Hale Inn or South Campus Dorm.

Thursday, May 22

7:00 PM - 9:00 PM	**Reception and Registration:** Nathan Hale Inn
	Sponsored by Elsevier, New York City

Friday, May 23

8:00 AM - 5:00 PM	**Registration:** ITE-C-80 Foyer
8:30 - 9:10 AM	**Inauguration:** Room ITE-C-80
9:15- 10:15 AM	**Plenary Lecture-I:** Room ITE-C-80
Includes 10 minutes Q&A	Chair: Malay Ghosh
	Speaker: Jayaram Sethuraman

10:20 - 10:50 AM	**Break:** ITE-C-80 Foyer *Sponsored in part by Taylor & Francis Group,* *Philadelphia, Pennsylvania*
11:00 - 11:45 AM Two Parallel Sessions Each Lecture Includes 5 minutes Q&A	Special Named Lecture-I: Room BUSN 211 **R. R. Bahadur Lecture** Chair: N. Rao Chaganty Speaker: Evarist Gine Special Named Lecture-II: Room ITE-C-80 **P. V. Sukhatme Lecture** Chair: Nalini Ravishanker Speaker: Sanat Sarkar
11:50 AM - 1:10 PM	**Boxed Lunch:** BUSN Café *Sponsored in part by Boehringer-Ingelheim* *Pharmaceuticals, Ridgefield, Connecticut*
1:15 - 2:45 PM (FriPM-TimeSlot-1) Each Lecture Includes 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 3, 8, 10, 22, 27, 29
2:45 - 3:15 PM	**Break:** ITE-C-80 Foyer *Sponsored in part by Taylor & Francis Group,* *Philadelphia, Pennsylvania*
3:15 - 4:45 PM (FriPM-TimeSlot-2) Each Lecture Includes 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 13, 20, 23, 24, 36, 40
5:45 - 9:15 PM	**Cultural Program and the Banquet** Prepaid Ticketed Event Lewis B. Rome Ballroom

Saturday, May 24

8:30 AM – 5:00 PM	**Registration:** ITE-C-80 Foyer
9:00 - 10:30 AM (SatAM-TimeSlot-1) Each Lecture Includes 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 7, 14, 21, 28, 37, 39
10:30 - 11:10 AM	**Break:** ITE-C-80 Foyer *Sponsored in part by Boehringer-Ingelheim* *Pharmaceuticals, Ridgefield, Connecticut*
11:15AM - 12:00 Noon (SatAM-Time Slot-2) Three Parallel Sessions Each Lecture Includes 5 minutes Q&A	Special Named Lecture-III: Room BUSN 106 **D. Basu Lecture** Chair: Poduri S. R. S. Rao Speaker: Glen Meeden Special Named Lecture-IV: Room ITE-C-80 **V. S. Huzurbazar Lecture** Chair: Sastry Pantula Speaker: Lee-Jen Wei Special Named Lecture-V: Room BUSN 211 **P. R. Krishnaiah Lecture** Chair: Dipak K. Dey

	Speaker: Barry C. Arnold
12:00 Noon - 1:20 PM	**Boxed Lunch:** BUSN Café *Sponsored by Thomson/Cengage Learning, Belmont, California*
1:30 - 3:00 PM (SatPM-TimeSlot-1) Each Lecture Includes 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 1, 4, 25, 34, 38, 41, 44
3:15 - 4:15 PM Includes 10 minutes Q&A	**Plenary Lecture-II:** Room ITE-C-80 Chair: Subir Ghosh Speaker: Marvin Zelen
4:30 - 5:30 PM	**Awards Ceremony and Refreshment** ITE-C-80 Foyer *Student-paper competition is partly sponsored by IBM T. J. Watson Research Center, Yorktown Heights, New York*
6:00 - 7:30 PM (SatPM-TimeSlot-2) Each Lecture Includes 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters. Sessions # 2, 5, 6, 12, 16, 26

Sunday, May 25

8:00 AM - 1:00 PM	Registration: BUSN Cafe
8:00 - 9:30 AM (SunAM-TimeSlot-1) Each Lecture Includes: 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 15, 30, 31, 32, 33, 35
9:30 - 9:50 AM	**Break:** BUSN Café *Sponsored in part by Taylor & Francis Group, Philadelphia, Pennsylvania*
10:00 - 11:30 AM (SunAM-TimeSlot -2) Each Lecture Includes: 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 11, 17, 18, 45** **This is a one-hour session with two speakers
11:30 AM - 1:00 PM (SunAM-Time Slot-3) Each Lecture Includes: 5 minutes Q&A	**Invited Lectures:** Parallel Sessions Each session will have 3 presenters Sessions # 9, 19, 42**, 43 **This is a one-hour session with two speakers

1:00 PM - 2:00 PM	**Boxed Lunch:** BUSN Café
	Sponsored in part by Boehringer-Ingelheim
	Pharmaceuticals, Ridgefield, Connecticut

A Detailed Listing of All Technical Sessions with Assigned Room Numbers Follow

An Asterisk (*) Identifies a Student-Presenter

Friday, May 23

Friday 8:00 AM - 5:00 PM

Registration: **ITE-C-80 Foyer**

Friday 8:30 - 9:10 AM

Inauguration   **Room: ITE-C-80**

Friday 9:15 - 10:15 AM
50 Minutes Presentation + 10 Minutes Q&A

Plenary Lecture-I   **Room: ITE-C-80**
Chair: Malay Ghosh, University of Florida-Gainesville, USA
Speaker: Jayaram Sethuraman, Robert O. Lawton Distinguished Professor/Professor Emeritus, Department of Statistics, Florida State University-Tallahassee, USA
Topic: Nonparametric Bayes Methods for Some Dependent Data, Including Failure and Censored Data.

Friday 10:20 – 10:50 AM:
Break: ITE-C80 Foyer
Sponsored in part by Taylor & Francis Group, Philadelphia, Pennsylvania

Friday 11:00 - 11:45 AM: Parallel Sessions
40 Minutes Presentation + 5 Minutes Q&A

Special Named Lecture-I   **Room: BUSN 211**
R. R. Bahadur Lecture
Chair: N. Rao Chaganty, Old Dominion University-Norfolk, USA
Speaker: Evarist Gine, Professor, Department of Mathematics, University of Connecticut-Storrs, USA
Topic: Uniform Limit Theorems for Wavelet Density Estimators. **Co-Author:** Richard Nickl.

Special Named Lecture-II   **Room: ITE-C-80**
P. V. Sukhatme Lecture
Chair: Nalini Ravishanker, University of Connecticut-Storrs, USA
Speaker: Sanat Sarkar, Professor, Temple University-Philadelphia, USA
Topic: Some New Results on Controlling False Discoveries in Multiple Testing.

Friday 11:50 AM – 1:10 PM:
Lunch: BUSN Café
Sponsored in part by Boehringer-Ingelheim Pharmaceuticals, Ridgefield, Connecticut

Friday 1:15 PM – 2:45 PM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #3: Financial Statistics Data   **Room: BUSN 202**
Organizer & Chair: Jaya Bishwal, University of North Carolina-Charlotte, USA

1. Anna Chernobai, Syracuse University-New York, USA: The Determinants of Operational Losses. **Co-Authors:** Philippe Jorion and Fan Yu.
2. Jaya Bishwal, University of North Carolina-Charlotte, USA: Fractional Levy-Ornstein-Uhlenbeck Stochastic Volatility Models.
3. Snigdhansu Chatterjee, University of Minnesota-Minneapolis, USA: A Resampling Based Study of Value at Risk.

Session #8: Statistics in Biomedical Research   **Room: BUSN 203**
Organizer: Dipak K. Dey, University of Connecticut-Storrs, USA
Chair: Mark Carpenter, Auburn University-Alabama, USA

1. Rajeshwari Sundaram, National Institute of Child Health and Human Development, NIH, USA: Statistical Modeling of Human Conception. **Co-Authors:** Sung Duk Kim, Kirsten J. Lum, and Germaine Buck Louis.
2. Anindya Roy, University of Maryland at Baltimore County, USA: Sample Size Determination for Hierarchical Longitudinal Designs with Differential Attrition Rates. **Co-Authors:** Dulal K. Bhaumik, Subhash Aryal, and Robert D. Gibbons.
3. Subhashis Ghoshal, North Carolina State University-Raleigh, USA: Convergence of Sequential Bayesian D-optimal Designs in Phase-I Clinical Trials. **Co-Authors:** Anindya Roy and William Rosenberger.

Session #10: Recent Advances in Statistical Genomics   **Room: BUSN 204**
Organizer & Chair: Varghese George, Medical College of Georgia-Augusta, USA

1. Nitai D. Mukhopadhyay, Virginia Commonwealth University, USA: Semi Parametric Modeling and Inference of Gene Dependence Using Copulas. **Co-Author:** Sarat C. Dass.
2. Sanjay S. Shete, University of Texas M.D. Anderson Cancer Center, Houston, USA: Approaches to Identify Ancestry Informative Markers Using SNPs.
3. Hongyan Xu, Medical College of Georgia, Augusta, USA: A Systematic Assessment of Population Structure and Its Effects on Genome-Wide Association Studies. **Co-Author:** Varghese George.

Session #22: Some Problems in Life-Testing and Reliability   **Room: BUSN 211**
Organizer: Nandini Kannan, University of Texas-San Antonio, USA
Chair: Pushpa L. Gupta, University of Maine-Orono, USA

1. Ananda Sen, University of Michigan-Ann Arbor, USA: Properties of Graphical Estimators from Q-Q Plots.
2. Debasis Kundu, Indian Institute of Technology Kanpur, India: Bayesian Inference and Life Testing Plan for Weibull Distribution in Presence of Progressive Censoring.
3. Nandini Kannan, University of Texas-San Antonio, USA: Precedence Tests for Progressively Censored Samples. **Co-Authors:** N. Balakrishnan and Ram C. Tripathi.

Session #27: Bayesian Bioinfomatics   **Room: BUSN 214**
Organizer: Bani K. Mallick, Texas A&M University-College Station, USA
Chair: Ana Rappold, Environmental Protection Agency-Research Triangle Park, USA

1. Bani K. Mallick, Texas A&M University-College Station, USA: Bayesian Semiparametric Modeling of MPSS Data: Gene Expression Analysis of Bovine *Salmonella* Infection.
2. Veera Baladandayuthapani, University of Texas MD Anderson Cancer Center, USA: Bayesian Methods for Copy Number Data.
3. Dipak K. Dey, University of Connecticut-Storrs, USA: Model Selection and Diagnostics to Identify Genetic Markers for Single-Nucleotide Polymorphisms.

Session #29: Editorial Forum - A Panel Discussion   **Room: ITE-C-80**
Organizer & Chair: Nitis Mukhopadhyay, University of Connecticut-Storrs, USA

1. Makoto Aoshima, Institute of Mathematics, University of Tsukuba, Japan
2. Subir Ghosh, University of California-Riverside, USA
3. Joseph Glaz, University of Connecticut-Storrs, USA
4. Nitis Mukhopadhyay, University of Connecticut-Storrs, USA
5. Linda Young, University of Florida-Gainesville, USA

Friday 3:15 PM – 4:45 PM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #13: Machine Learning   **Room: BUSN 202**
Organizer: Malay Ghosh, University of Florida-Gainesville, USA
Chair: Susmita Datta, University of Louisville, USA

1. Lingsong Zhang, Harvard University-Boston, USA: Sparse Discriminant and Classification Methods for Genetic Pathways. **Co-Author:** Xihong Lin.
2. Dawei Liu, Brown University, USA: Estimation and Testing for the Effect of a Genetic Pathway on a Disease Outcome Using Logistic Kernel Machine Regression via Logistic Mixed Models. **Co-Authors:** Debashis Ghosh and Xihong Lin.
3. Shibasish Dasgupta*, University of Florida-Gainesville, USA: Support Vector Machines: A Useful Tool for Classification.

Session #20: Selected Topics in Inference-I   **Room: BUSN 203**
Organizer: S. Rao Jammalamadaka, University of California-Santa Barbara, USA
Chair: Mun S. Son, University of Vermont-Burlington, USA

1. Bo Ranneby, Center for Biostochastics-Umea, Sweden: Maximum Spacing Estimation for Dependent Variables. **Co-Author:** Jun Yu.
2. S. Rao Jammalamadaka, University of California-Santa Barbara, USA: Middle Censoring for Circular Data. **Co-Author:** Mangalam Vasudevan.
3. Emanuele Taufer, University of Trento, Italy: Characteristic Function Estimation of Non-Gaussian Ornstein-Uhlenbeck Processes. **Co-Author:** Nikolai N. Leonenko.

Session #23: Emerging Issues in Drug Development   **Room: BUSN 204**
Organizers: Amarjot Kaur and Mani Lakshminarayanan, Merck Research Laboratories, New Jersey, USA
Chair: Amarjot Kaur, Merck Research Laboratories, New Jersey, USA

1. Alan Hartford, Merck Research Laboratories-North Wales, Pennsylvania, USA: A Statistician's Perspective of Pharmacokinetic/Pharmacodynamic Modeling.
2. Mark Chang, Millennium Pharmaceuticals, USA: Adaptive Trial Optimization, Re-Optimization, and Analysis.
3. David Madigan, Columbia University-New York, USA: Data Mining Issues in Drug Development.

Session #24: Model Diagnostics Development   **Room: BUSN 211**
Organizer: Hira L. Koul, Michigan State University, East Lansing, USA
Chair: Hokwon Cho, University of Nevada, Las Vegas, USA

1. Winfrid Stute, Mathematisches Institut, ArndtstraBe 2, Germany: Statistical Analysis of Survival-Sacrifice Data. **Co-Author:** Brandon H. Greene.
2. Weixing Song, Kansas State University, USA: Model Checking in Partial Linear Regression Models with Berkson Measurement Errors. **Co-Author:** Hira L. Koul.
3. Masanobu Taniguchi, Waseda University-Tokyo, Japan: Generalized Information Criterion. **Co-Author:** J. Hirukawa.

Session #36: Starting and Running SUMSRI in Math/Stat at Miami University   **Room: BUSN 214**
Organizer & Chair: Vasant B. Waikar, Miami University, Oxford, Ohio, USA

1. Dennis Davenport, Miami University-Oxford, Ohio, USA: Starting and Running an REU for Minorities and Women. **Co-Authors:** Bonita Porter.
2. Vasant B. Waikar, Miami University-Oxford, Ohio, USA: REU (Research Experience for Undergraduates) in Statistics (SUMSRI) at Miami University.
3. Andrea Austin*, St Michaels College, Vermont, USA and Christina McIntosh*, Spelman College, Atlanta, USA: SUMSRI (Summer Undergraduate Mathematical Sciences Research Institute) Projects in Multivariate Statistics.

Session #40: Order-Statistics and Censoring   **Room: BUSN 215**
Organizer: Nitis Mukhopadhyay, University of Connecticut-Storrs, USA
Chair: Daniel Gervini, University of Wisconsin-Milwaukee, USA

1. AbouEI-Makarim Aboueissa, University of Southern Maine-Portland, USA: Estimations of Population Parameters from Censored and Truncated Samples.
2. Arabin Dey*, Indian Institute of Technology Kanpur, India: Discriminating Between Log-Normal and Weibull Distribution Under Type-I and Type-II Censoring. **Co-Author:** Debasis Kundu.
3. Vasudevan Mangalam, Universiti Brunei Darussalam, Brunei: Asymptotic Properties of Functions of Order Statistics. **Co-Authors:** G. Jogesh Babu, Zhidong Bai, and Kwok P. Choi.

Friday 5:45 – 9:15 PM
Cultural Program and the Banquet
Lewis B. Rome Ballroom
Only Prepaid Ticket Holders:
Please be Seated Before Program Begins at 5:45PM

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Saturday, May 24
** ***** ***** ***** **

Saturday 8:30 AM - 4:30 PM

Registration   **ITE-C-80 Foyer**

Saturday 9:00 - 10:30 AM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #7: Statistical Analysis of High Dimensional Genomic Data   **Room: BUSN 202**
Organizer: Susmita Datta, University of Louisville, USA
Chair: M. B. Rao, Center for Genome Information, University of Cincinnati, USA

1. Hongyu Zhao, Yale University, USA: Hierarchical Models for Signal Transduction Pathway Analysis from Single Cell Measurements. **Co-Author:** Ruiyan Luo.
2. Susmita Datta, University of Louisville, Kentucky, USA: Reconstruction of Genetic Association Network. **Co-Authors:** Vasyl Pihur and Somnath Datta.
3. Venkatraman E. Seshan, Columbia University, USA: Some Issues in the Analysis of Array CGHData. **Co-Author:** Adam Olshen.

Session #14: Bayesian Applications in Wildlife Ecology   **Room: BUSN 203**
Organizer: Malay Ghosh, University of Florida-Gainesville, USA
Chair: Linda Young, University of Florida-Gainesville, USA

1. Robert Dorazio, University of Florida-Gainesville, USA: Hierarchical Models for the Estimation of Manatee Abundance from Aerial Surveys.

2. Chong He, University of Missouri-Columbia, USA: Modeling Age and Nest-specific Survival Using a Hierarchical Bayesian Approach. **Co-Author:** Jing Cao.
3. Devin Johnson, National Marine Mammal Laboratory-Seattle, USA: Bayesian Inference for Marine Mammal Telemetry Data: A Continuous-Time Approach. **Co-Authors:** Joshua M. London, Mary-Anne Lea, John W. Durban, and Carey E. Kuhn.

Session #21: Selected Topics in Inference-II   **Room: BUSN 204**
Organizer & Chair: S. Rao Jammalamadaka, University of California-Santa Barbara, USA

1. Kasing Man, Western Illinois University, USA: Aggregation Effect and Forecasting Temporal Aggregates of Seasonal Long Memory Processes. **Co-Author:** Anna Valeva.
2. K. Thammi Reddy, Vignan's Institute of Information Technology, Visakhapatnam, India: A Rough Set Based Approach to Detect Plagiarism. **Co-Authors:** M. Shashi and L. Pratap Reddy.
3. Magnus Ekstrom, Center for Biostochastics, Umea, Sweden: Subsampling the Mean of Spatial Lattice Data with Varying Expected Values.

Session #28: Bayesian Analysis: New Directions and Novel Applications   **Room: BUSN 211**
Organizer: Bhramar Mukherjee, University of Michigan-Ann Arbor, USA
Chair: Anil Kumar Bera, University of Illinois-Champaign, USA

1. Samiran Sinha, Texas A&M University-College Station, USA: Semiparametric Bayesian Analysis of Nutritional Epidemiology Data in Presence of Measurement Error. **Co-Authors:** Bani K. Mallick, Raymond J. Carroll, and Victor Kipnis.
2. Debajyoti Sinha, Florida State University-Tallahassee, USA: Association Models for Clustered Data with Binary and Continuous Responses. **Co-Authors:** Lanjia Lin, Stuart R. Lipsitz, and Dipankar Bandyopadhyay.
3. Tim Johnson, University of Michigan-Ann Arbor, USA: Bayesian Semiparametric Modeling of fMRI Data at the Population Level.

Session #37: Bayes, Empirical Bayes, and Information   **Room: BUSN 214**
Organizer: Nitis Mukhopadhyay, University of Connecticut-Storrs, USA
Chair: Vasudevan Mangalam, Universiti Brunei Darussalam, Brunei

1. Poduri S. R. S. Rao, University of Rochester, USA: Performance of the Empirical Bayes Estimator for Fixed Parameters.
2. Mark Carpenter, Auburn University-Alabama, USA: Empirical Bayes Threshold Estimation in High Throughput Proteomics.
3. Ramkaran Singh, University of Lucknow, India: Role of Information Measures in Bayesian Sequential Estimation.

Session #39: Generalized Linear and Time Series Models   **Room: BUSN 215**
Organizer: Nalini Ravishanker, University of Connecticut-Storrs, USA
Chair: Balgobin Nandram, Worcester Polytechnic Institute, USA

1. Sourish Das*, University of Connecticut-Storrs, USA: On Some New Bayesian Model Diagnostics for Generalized Linear Models. **Co-Author:** Dipak K. Dey.
2. Gabe Chandler, Connecticut College-New London, USA: A Robust Test of Order Restrictions for the Variance Function of Non-stationary Autoregressive Processes. **Co-Author:** Wolfgang Polonik.
3. Hrishikesh (Rick) D. Vinod, Institute for Ethics and Economic Policy, Fordham University-Bronx, USA: The R Package Implementing Maximum Entropy Bootstrap for Dependent Time Series. **Co-Author:** Javier Lopez-de-Lacalle.

Saturday 10:30 – 11:10 AM:
Break: ITE-C80 Foyer
Sponsored in part by Boehringer-Ingelheim Pharmaceuticals, Ridgefield, Connecticut

Special Named Lecture-III   **Room: BUSN 106**
D. Basu Lecture
Chair: Poduri S. R. S. Rao, University of Rochester-New York, USA
Speaker: Glen Meeden, Professor, School of Statistics, University of Minnesota-Minneapolis, USA
Topic: A Noninformative Bayesian Approach to Finite Population Sampling Using Auxiliary Variables.

Special Named Lecture-IV   **Room: ITE-C-80**
V. S. Huzurbazar Lecture
Chair: Sastry Pantula, North Carolina State University-Raleigh, USA
Speaker: Lee-Jen Wei, Professor, Department of Biostatistics, Harvard University-Cambridge, USA
Topic: Model Evaluation and Selection via Prediction Approach.

Special Named Lecture-V   **Room: BUSN 211**
P. R. Krishnaiah Lecture
Chair: Dipak K. Dey, University of Connecticut-Storrs, USA
Speaker: Barry C. Arnold, Distinguished Professor, Department of Statistics, University of California-Riverside, USA
Topic: Flexible Augmentations of Multivariate Models.

Saturday 12:00 Noon – 1:20 PM:
Lunch: BUSN Café
Sponsored by Thomson/Cengage Learning, Belmont, California

Saturday 1:30 PM – 3:00 PM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #1: Adaptive Sample Size Determination   **Room: BUSN 202**
Organizer: Makoto Aoshima, University of Tsukuba, Japan
Chair: Tumulesh K. S. Solanky, University of New Orleans, USA

1. Makoto Aoshima, University of Tsukuba, Japan: Intrinsic Dimensionality Estimation of High Dimension, Low Sample Size Data with Geometric Representation.
2. Kazuyoshi Yata*, University of Tsukuba, Japan: Two-Stage Equivalence Tests that Control Both the Size and Power.
3. Nitis Mukhopadhyay, University of Connecticut-Storrs, USA: On Fixed-Width Confidence Intervals.

Session #4: Bayesian Modeling and Inference   **Room: BUSN 203**
Organizer & Chair: Ming-Hui Chen, University of Connecticut-Storrs, USA

1. Sudip Bose, George Washington University, USA: An Optimal Credible Set for a Class of Priors.
2. Keying Ye, University of Texas-San Antonio, USA: A Bayesian Modeling in Dual Response Surface Methodology. **Co-Author:** Younan Chen.
3. Ming-Hui Chen, University of Connecticut-Storrs, USA: Bayes Factor versus Other Model Selection Criteria for the Selection of Constrained Models. **Co-Author:** Sungduk Kim.

Session #25: Small Area Estimation   **Room: BUSN 204**
Organizer & Chair: Partha Lahiri, University of Maryland, College Park, USA

1. Balgobin Nandram, Worcester Polytechnic Institute, USA: A Bayesian Benchmarking for Small Areas.

2. Jai W. Choi, National Center for Health Statistics, USA: A Bayesian Prediction for Undecided Voters. **Co-Author:** Balgobin Nandram.
3. Partha Lahiri, University of Maryland, USA: Hierarchical Bayes Modeling of Small Area Proportions from Complex Survey Data. **Co-Authors:** Benmei Liu and Graham Kalton.

Session #34: Recent Development of Spatial-Temporal Models   **Room: BUSN 211**
Organizer & Chair: Dongchu Sun, University of Missouri-Columbia, USA

1. Sudipto Banerjee, University of Minnesota-Minneapolis, USA: Modeling Large Spatial and Spatiotemporal Datasets: Advancing Methods and Applications in Forestry, Ecology and Environmental Sciences. **Co-Author:** Andrew O. Finley.
2. Victor De Oliveira, University of Texas-San Antonio, USA: Jeffreys Priors for CAR Models.
3. Cuirong Ren, South Dakota State University-Brookings, USA: Objective Bayesian Analysis for a Spatial Model with Nugget Effects. **Co-Authors:** Dongchu Sun and Zhuoqiong He.

Session #38: Statistical Tests and Competing Risks   **Room: BUSN 214**
Organizer: Tumulesh K. S. Solanky, University of New Orleans, USA
Chair: Ramkaran Singh, University of Lucknow, India

1. Yichuan Zhao, Georgia State University-Atlanta, USA: Omnibus Tests for Comparison of Competing Risks with Covariate Effects via Additive Risk Model. **Co-Author:** Duytrac Nguyen.
2. Anil Kumar Bera, University of Illinois-Urbana Champaign, USA: General Specification Testing with Locally Misspecified Models. **Co-Authors:** Gabriel Montes-Rojas and Walter Sosa-Escudero.
3. Krishna K. Saha, Central Connecticut State University-New Britain, USA: Testing the Equality of the Means of Several Groups of Count Data in the Presence of Unequal Dispersions.

Session #41: Order Statistics, Associations, and Approximations Censoring   **Room: BUSN 215**
Organizer: Nalini Ravishanker, University of Connecticut-Storrs, USA
Chair: AbouEI-Makarim Aboueissa, University of Southern Maine-Portland, USA

1. Pushpa L. Gupta, University of Maine-Orono, USA: Distribution of Linear Function of Correlated Ordered Variables. **Co-Author:** Ramesh C.Gupta.
2. N. Rao Chaganty, Old Dominion University, USA: Ranges of Measures of Association for Familial and Pedigree Binary Variables. **Co-Author:** Yihao Deng.
3. Debanjan Bhattacharjee*, University of Connecticut-Storrs, USA: Stirling's Formula and Its Extensions: Heuristic Approaches. **Co-Author:** Nitis Mukhopadhyay.

Session #44: Applications of Spatial and Spatio-Temporal Models   **Room: BUSN 218**
Organizer: Nalini Ravishanker, University of Connecticut-Storrs, USA
Chair: Samiran Ghosh, IUPUI-Indianapolis, USA

1. Wanli Min, IBM T. J. Watson Research Center-Yorktown Heights, USA: Inference on Multi-Resolution Spatial-Temporal Process with Application.
2. Hongfei Li, IBM T. J. Watson Research Center-Yorktown Heights, USA: A Multivariate Spatial Model for Prediction of Storm Outages. **Co-Author:** Jonathan R. M. Hosking.
3. Alejandro Veen, IBM T. J. Watson Research Center-Yorktown Heights, USA: Assessment of Spatial Point Process Models by Thinning and Augmenting.

Saturday 3:15 - 4:15 PM
50 Minutes Presentation + 10 Minutes Q&A

Plenary Lecture-II   **Room: ITE-C-80**

Chair: Subir Ghosh, University of California-Riverside, USA

Speaker: Marvin Zelen, Lemuel Shattuck Research Professor of Statistical Science and Member of the Faculty of Arts and Sciences, Biostatistics, Harvard University, USA

Topic: So I Missed My Bus! - What Has This Got to Do with Anything?

Saturday 4:30 – 5:30 PM
Awards Ceremony and Refreshment: ITE-C-80 Foyer
Sponsored in part by IBM T. J. Watson Research Center, Yorktown Heights, New York

Saturday 6:00 PM – 7:30 PM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #2: Hierarchical Modeling for Spatial and Spatio-Temporal Data   **Room: BUSN 202**
Organizer: Sudipto Banerjee, University of Minnesota-Minneapolis, USA
Chair: Gabe Chandler, Connecticut College New London, USA

1. Marco Ferreira, Department of Statistics, University of Missouri-Columbia, USA: Gaussian Multiscale Spatio-Temporal Models. **Co-Authors:** Scott Holan and Adelmo I. Bertolde.
2. Hedibert Lopes, Graduate School of Business, University of Chicago USA: On Mixture of Kalman Filtering and Learning. **Co-Authors:** Carlos Carvalho, Michael Johannes, and Nicholas Polson.
3. Jason Duan, Yale University-New Haven, USA: Modeling Space-Time Data Using Stochastic Differential Equations. **Co-Authors:** Alan E. Gelfand and C. F. Sirmans.

Session #5: Stability Concepts in Statistics   **Room: BUSN 203**
Organizer & Chair: Bertrand Clarke, University of British Columbia-Vancouver, Canada

1. Chi Wai Yu*, University of British Columbia-Vancouver, Canada: Median Loss Analysis and Median Cross Validation. **Co-Author:** Bertrand Clarke.
2. Matias Salibian-Barrera, University of British Columbia-Vancouver, Canada: Uniform Asymptotics for Robust Estimators.
3. Xiaodong Lin, University of Cincinnati, USA: Information Conversion and Bayesian Effective Sample Size.

Session #6: Statistical Methods for Biological Data   **Room: BUSN 204**
Organizer & Chair: Erin Conlon, University of Massachusetts-Amherst, USA

1. Rongheng Lin, Biostatistics, University of Massachusetts-Amherst, USA: Gene Set Enrichment Analysis for Non-Monotone Association and Multiple Experimental Categories. **Co-Authors:** Shuangshuang Dai, Richard D. Irwin, Alexandra N. Heinloth, Gary A. Boorman, and Leping Li.
2. Anna Liu, Statistics, University of Massachusetts-Amherst, USA: Generalized Spline Mixed-Effects Models with Applications in AIDS Clinical Trials. **Co-Author:** Hua Liang.
3. Erin Conlon, Statistics, University of Massachusetts-Amherst, USA: Bayesian Meta-Analysis Models for Microarray Studies. **Co-Authors:** Joon Jin Song and Jun S. Liu.

Session #12: Recent Advances in Bayesian Methods for Biomedical Research   **Room: BUSN 211**
Organizer: Kaushik Ghosh, University of Nevada-Las Vegas, USA
Chair: Kannan Natarajan, Novartis, USA

1. Sanjib Basu, Northern Illinois University, USA: Bayesian Joint Modeling of Multivariate Longitudinal Data with Dropout. **Co-Author:** Pulak Ghosh.
2. Pulak Ghosh, Georgia State University, USA: Bayesian Analysis for Longitudinal Semicontinuous Data.
3. Kaushik Ghosh, University of Nevada-Las Vegas, USA: Joint Modeling of Longitudinal Data and Informative Dropout in the Presence of Multiple Changepoints with an Application to HIV-AIDS. **Co-Authors:** Pulak Ghosh and Ram C. Tiwari.

Session #16: Statistical Modeling and Optimal Designs   **Room: BUSN 214**
Organizer: Subir Ghosh, University of California, Riverside, USA
Chair: Viatcheslav Melas, St. Petersburg State University, Russia

1. Sadanori Konishi, Kyushu University, Japan: Recent Development in Nonlinear Statistical Modeling and Model Selection.

2. Jesus Lopez Fidalgo, Universidad de Castilla-La Mancha, Spain: Optimal Designs for Models with Potential Censoring. **Co-Authors:** Maria Jesus Rivas-Lopez and Sandra Garcet-Rodriguez.
3. Ming-Hung Kao*, Department of Statistics, University of Georgia, USA: Multi-Objective Optimal Experimental Designs for Event-Related fMRI Studies. **Co-Authors:** Abhyuday MandaI, Nicole Lazar, and John Stufken.

Session #26: Spatial Process Modeling and Analysis   **Room: BUSN 215**
Organizer: Anandamayee Majumdar, Arizona State University-Tempe, USA
Chair: Nandini Kannan, University of Texas-San Antonio, USA

1. Avishek Chakraborty*, Duke University, USA: Measurement Error Modeling for Noisy Point Patterns. **Co-Author:** Alan E. Gelfand.
2. Michele Guindani, University of New Mexico, USA: Hybrid Dirichlet Process Models for the Analysis of Spatial Data. **Co-Authors:** Alan E. Gelfand and Sonia Petrone
3. Ana Rappold, National Research Council Associate, Environmental Protection Agency, Research Triangle Park, USA: Modeling Mercury Deposition Through Latent Space-Time Processes. **Co-Authors:** Alan E. Gelfand and David M. Holland.

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Sunday, May 25
** ***** ***** ***** **

Sunday 8:00 AM - 1:30 PM
Registration: BUSN Café

Sunday 8:00AM – 9:30AM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #15: Design of Experiments and Model Selection   **Room: BUSN 202**
Organizer: Subir Ghosh, University of California-Riverside, USA
Chair: Yichuan Zhao, Georgia State University-Atlanta, USA

1. Subir Ghosh, University of California-Riverside, USA: Optimal Designs for Model Identification and Discrimination.
2. Viatcheslav Melas, St. Petersburg State University, Russia: Optimal Design for Nonlinear Regression Models.
3. David Causeur, IRMAR, UMR CNRS 6625, Agrocampus Rennes, Renes cedex, France: Impact of Dependence on the Stability of Model Selection in Supervised Classification for High-Throughput Data. **Co-Authors:** M. Kloareg and C. Friguet*.

Session #30: Spatial and Spatio-Temporal Statistics   **Room: BUSN 203**
Organizer: Sujit K. Sahu, University of Southampton, UK
Chair: Sudipto Banerjee, University of Minnesota-Minneapolis, USA

1. Huiyan Sang, Duke University-Durham, USA: Bayesian Analysis of Microscale Spatial Variations. **Co-Author:** Alan E. Gelfand.
2. Veronica Beroccal, Duke University-Durham, USA: Bayesian Downscaling of Outputs from Numerical Models. **Co-Author:** Alan E. Gelfand.
3. Anandamayee Majumdar, Arizona State University-Tempe, USA: Generalized Convolution Models for Multivariate Nonstationary Spatial Processes. **Co-Authors:** D. Paul and D. Bautista.

Session #31: Applied Statistics: Spatial and Medical   **Room: BUSN 204**
Organizer: Sujit K. Sahu, University of Southampton, UK
Chair: Zhiyi Chi, University of Connecticut-Storrs, USA

1. Brian Reich, North Carolina State University-Raleigh, USA: Bayesian Variable Selection for Spatially-Varying Coefficient Regression: Application to Physical Activity in Prenatal Women.
2. Mayetri Gupta, University of North Carolina-Chapel Hill, USA: Detecting Patterns of Gene Regulation Through Joint Bayesian Modeling of Genomic Sequence and ChIP-chip Data. **Co-Authors:** Jonathan A. L. Gelfond and Joseph G. Ibrahim.
3. Samiran Ghosh, IUPUI-Indianapolis, USA: Dimension Augmenting Vector Machine: A New General Classifier System for Large *p* Small *n* Problem. **Co-Authors:** Dipak K. Dey and Yazhen Wang

Session #32: Applications of Statistics in Finance   **Room: BUSN 211**
Organizer & Chair: Ritupama Sen, University of California-Davis, USA

1. Ritupama Sen, University of California, Davis, USA: Jumps and Microstructure Noise in Stock Price Volatility: An FDA Approach. **Co-Authors:** Hans-Georg Muller and Ulrich Stadtmuller.
2. Yazhen Wang, National Science Foundation and University of Connecticut-Storrs, USA: High Dimensional Volatility Modeling and Analysis for High-Frequency Financial Data.
3. Yoonjung Lee, Harvard University-Cambridge, USA: Network Modeling with Applications to Hedge Fund Returns.

Session #33: Recent Methodologies in Selection and Sequential Estimation   **Room: BUSN 214**
Organizer: Tumulesh K. S. Solanky, University of New Orleans, USA
Chair: Makoto Aoshima, University of Tsukuba, Japan

1. Elena Buzaianu, University of North Florida-Jacksonville, USA: On Selecting Among Binomial Populations. **Co-Author:** Pinyuen Chen.
2. Hokwon Cho, University of Nevada-Las Vegas, USA: Sequential Risk-Efficient Estimation for the Ratio of Two Binomial Proportions.
3. Tumulesh K. S. Solanky, University of New Orleans, USA: On Approximate Optimality of the Unbalanced Sequential Procedure for the Partition Problem. **Co-Author:** Yuefeng Wu*.

Session #35: Topic: Objective Bayesian Methods   **Room: BUSN 215**
Organizer: Dongchu Sun, University of Missouri-Columbia, USA
Chair: Debajyoti Sinha, Florida State University-Tallahassee, USA

1. Malay Ghosh, University of Florida-Gainesville, USA: Objective Priors: A Selective Review.
2. Dongchu Sun, University of Missouri-Columbia, USA: The Formal Definition of Reference Priors. **Co-Authors:** J. O. Berger and J. M. Bernardo.
3. Bertrand Clarke, University of British Columbia-Vancouver, Canada: A Review and Some New Ideas for Objective Priors in the Non-Parametric Context. **Co-Author:** S. Ghoshal.

Sunday 9:30- 9:50 AM:
Break: BUSN Café
Sponsored in part by Taylor & Francis Group, Philadelphia, Pennsylvania

Sunday 10:00 AM – 11:30 AM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #11: Information-Pharmaceutical Statistics   **Room: BUSN 202**
Organizer & Chair: Kalyan Ghosh, Vislation, Inc., USA

1. Nitin Patel, Cytel, USA: A Simulation Tool for Design of Adaptive Dose Finding Trials. **Co-Authors:** Jim Bolognese and Inna Perevoszkaya.
2. Joseph Heyse, Merck, USA: False Discovery Rates for Discrete Data.
3. Kannan Natarajan, Novartis, USA: Statistical Challenges in Late Stage Drug Development.

Session #17: Run and Scan-Type Statistics   **Room: BUSN 203**
Organizer & Chair: Joseph Glaz, University of Connecticut-Storrs, USA

1. Jie Chen, University of Massachusetts-Boston, USA: Variable Window Scan Statistics. **Co-Author:** Joseph Glaz.
2. Vladimir Pozdnyakov, University of Connecticut-Storrs, USA: Martingale Methods for Patterns and Scan Statistics. **Co-Author:** J. Michael Steele.
3. Joseph Glaz, University of Connecticut-Storrs, USA: Variable Window Bayesian Scan Statistics.

Session #18: Time Series Analysis   **Room: BUSN 204**
Organizer & Chair: Edit Gombay, University of Alberta-Calgary, Canada

1. Alex Aue, University of California-Davis, USA: Discriminating Between Level Shifts and Unit Roots. **Co-Authors:** Lajos Horvath, Marie Huskova, and Shiqing Ling.
2. Siegfried Hormann, University of Utah-Salt Lake City, USA: Break Detection in the Covariance Structure of Multivariate Time Series Models. **Co-Authors:** Alexander Aue, Lajos Horvath, and Matthew Reimherr.
3. Edit Gombay, University of Alberta-Edmonton, Canada: Change Detection in the Distribution of Data Described by Time Series.

Session #45: Statistical Estimation**   **Room: BUSN 211**
Organizer: Dipak Dey, University of Connecticut-Storrs, USA
Chair: Joe Cappelleri, Pfizer Global Research and Development-Groton, USA

1. Tyler H. McCormick*, Columbia University-New York, USA: How Many People do you Know? Efficiently Estimating Personal Network Size. **Co-Authors:** Matthew J. Salganik and Tian Zheng.
2. Xinlei (Sherry) Wang, Southern Methodist University-Dallas, USA: An Efficient Nonparametric Estimator for Judgment Post-Stratified Data. **Co-Authors:** Johan Lim and Lynne Stokes.

**This is a one-hour session (Sunday 10:00AM – 11:00AM) with two speakers

Sunday 11:30 AM – 1:00 PM: Parallel Invited Paper Sessions
25 Minutes Presentation + 5 Minutes Q&A After Each Presentation

Session #9: Applied Pharmaceutical Statistics   **Room: BUSN 202**
Organizer: William T. Duggan, Pfizer Global Research and Development-Groton, USA
Chair: Ronald L. Wasserstein, American Statistical Association-Alexandria, Virginia, USA

1. Joe Cappelleri, Pfizer Global Research and Development, Groton, Connecticut, USA: Statistical Considerations for Patient-Reported Outcomes.
2. Robb Muirhead, Pfizer Global Research and Development, Groton, Connecticut, USA: On a Multivariate Bayesian Prediction Problem, with Applications. **Co-Authors:** Morris L. Eaton and Eve Pickering.
3. William T. Duggan, Pfizer Global Research and Development, Groton, Connecticut, USA: Effect of Torcetrapib on the Progression of Coronary Atherosclerosis. **Co-Authors:** Steven E. Nissen, Jean-Claude Tardif, Stephen J. Nicholls, James H. Revkin, Charles L. Shear, P. H., Witold Ruzyllo, William B. Bachinsky, Gregory P. Lasala, and E. Murat Tuzcu.

Session #19: Reliability, Stochastic Ordering, and Applied Probability   **Room: BUSN 203**
Organizer & Chair: Ramesh C. Gupta, University of Maine-Orono, USA

1. Cheng Peng, University of Southern Maine-Portland, USA: Estimating Reliability in Proportional Odds Ratio Models. **Co-Author:** Ramesh C. Gupta.
2. Karthik Bharath*, SUNY Binghamton-Binghamton, USA: Geometrical Domain of Spin-1/2 Probability Mass Function. **Co-Authors:** Swarnamala Sirsi and A. R. Usha Devi.
3. Ramesh C. Gupta, University of Maine-Orono, USA: General Frailty Model and Stochastic Orderings. **Co-Author:** Rameshwar D. Gupta.

Session #42: Semi-Parametric Estimation**   **Room: BUSN 204**
Organizer: Dipak Dey, University of Connecticut-Storrs, USA
Chair: Bo Ranneby, Center for Biostochastics-Umea, Sweden

1. Daniel Gervini, University of Wisconsin-Milwaukee, USA: Robust Semi-Parametric Estimators for Longitudinal Data.
2. Arnab Maity*, Texas A&M University-College Station, USA: Efficient Estimation of Population-Level Summaries in General Semiparametric Regression Models. **Co-Authors:** Yanyuan Ma and Raymond J. Carroll.

    This is a **one-hour session (**Sunday 11:30 AM – 12:30 PM**) with two speakers

Session #43: Statistical Patterns   **Room: BUSN 211**
Organizer: Mun Son, University of Vermont-Burlington, USA
Chair: Hrishikesh (Rick) D. Vinod, Fordham University-Bronx, USA

1. Madhavi Dabbiru, Nagarjuna University, Vijayawada, A.P., India: An Efficient Algorithm to Mine Prodigious Frequent Patterns. **Co-Author:** Mogalla Shashi.
2. Mariano Amo Salas*, Universidad de Castilla-La Mancha, Spain: Random Design Space for Lung's Retention Model. **Co-Authors:** J. Lopez-Fidalgo and J. M. Rodriguez-Diaz.
3. M. Bhaskara Rao, Center for Genome Information, University of Cincinnati, USA: A Discrete Probability Problem in Chemical Bonding. **Co-Authors:** Fu-Chih Cheng and Subramanyam Kasala.

- Identifies a Student

<div align="center">

Sunday 1:00 – 2:00 PM
Lunch: BUSN Café

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Conference Ends: Have a Safe Return Trip