

## General Information

Housing Map and Hotel Listing .....	2
Convention Center and Hotel Floor Plans .....	3
Registration Area Floor Plan .....	5
Committee and Society Tables .....	5
While at JSM .....	6
Meetings and Sessions .....	7
Before Leaving JSM .....	8
Hours of Operation .....	9
Keynote Speakers .....	11
IMS Special Lectures .....	12
2007 Program Committee .....	14
Local Area Committee .....	14
Advisory Committee on Continuing Education .....	14

## Association Officers

ASA .....	15
ENAR .....	16
WNAR .....	17
SSC .....	17
IMS .....	18

## Continuing Education

Continuing Education at a Glance .....	19
Computer Technology Workshops at a Glance .....	21

## Career Placement Service

Floor Plan .....	23
Employer Listing .....	23

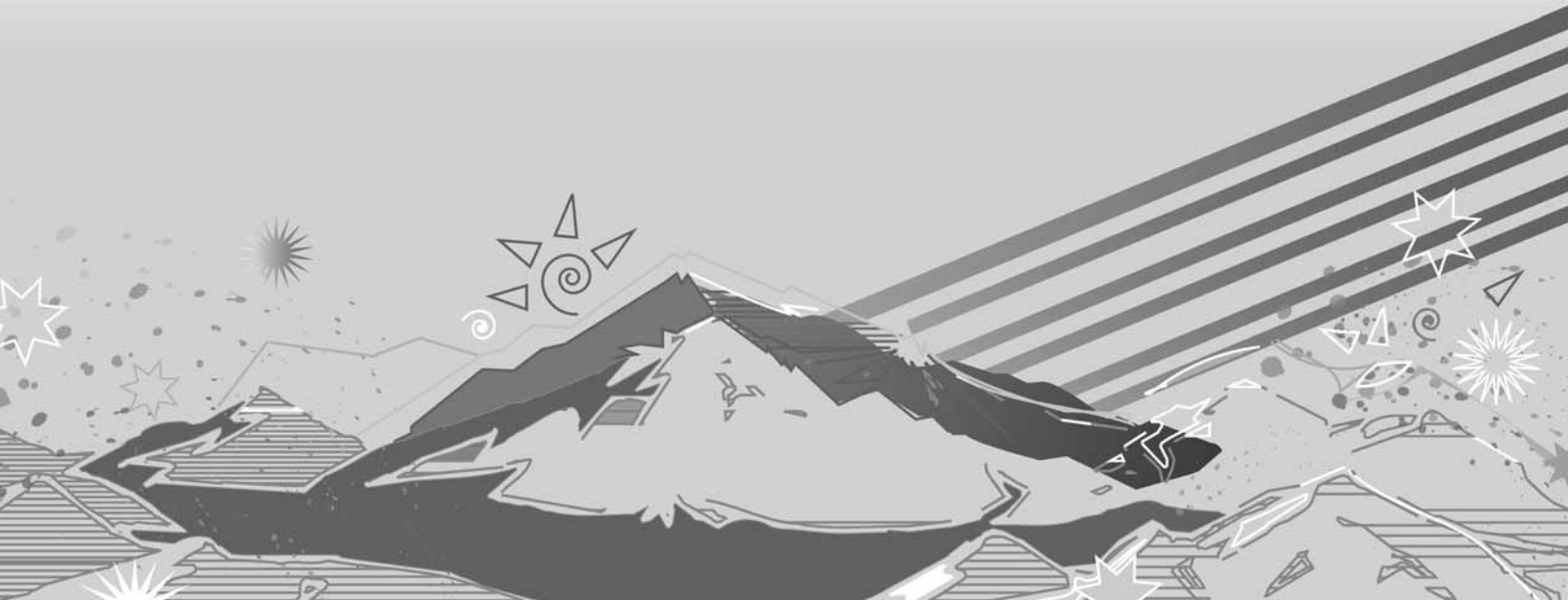
## Exhibitors

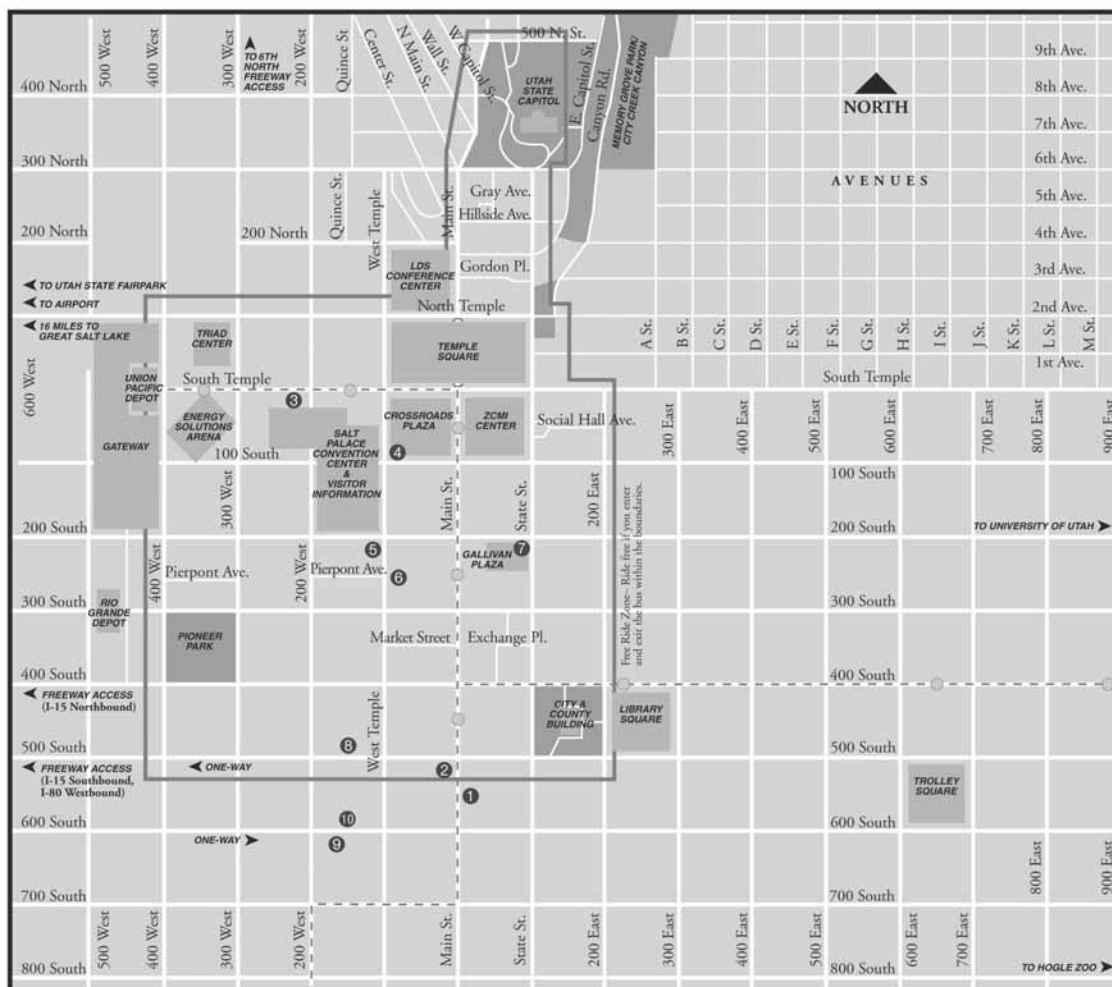
EXPO 2007 Floor Plan .....	24
Exhibitors by Booth Number .....	25
Who's Who in the Exhibit Hall .....	26

## General Program Schedule

Thursday, July 26 .....	33
Friday, July 27 .....	33
Saturday, July 28 .....	35
Sunday, July 29 .....	37
Monday, July 30 .....	65
Tuesday, July 31 .....	113
Wednesday, August 1 .....	161
Thursday, August 2 .....	209

Index of Participants .....	241
Index of Continuing Education Instructors .....	272
Advertising Index .....	272



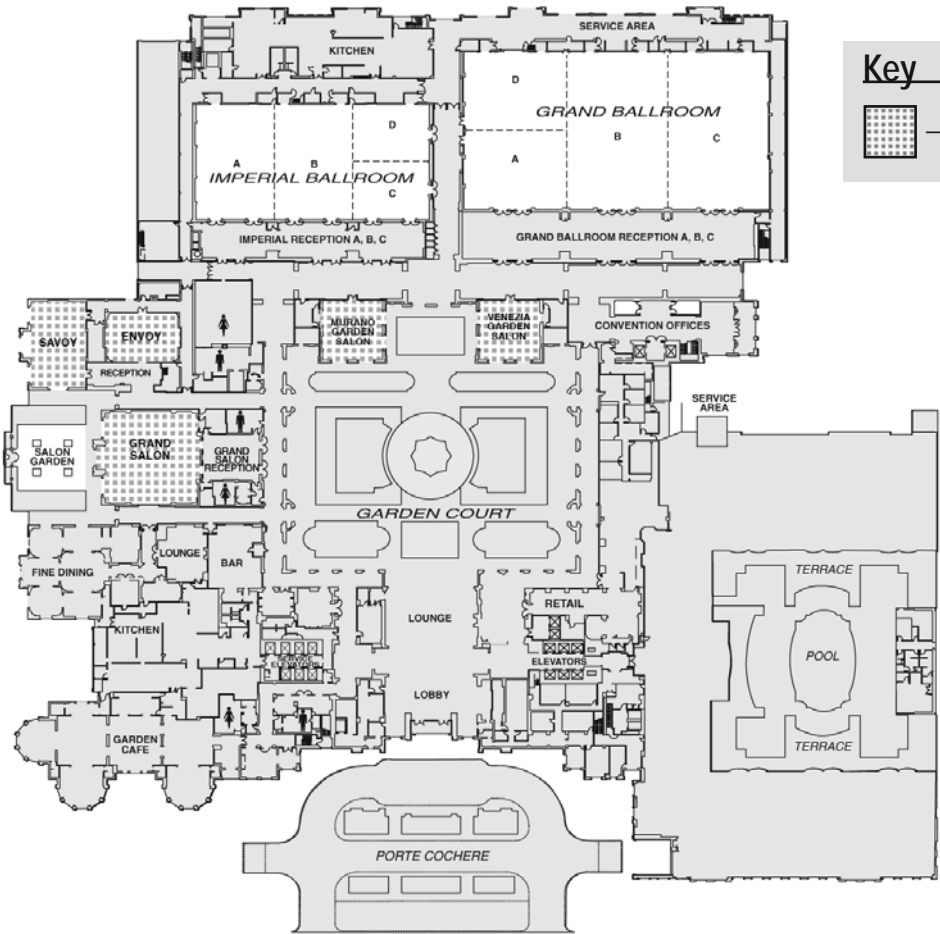


- 1 **The Grand America Hotel**  
555 South Main Street  
COC/COS, business/committee, and social activities

## No Scheduled Activities

- |  |  |
|--|--|
| 2 <b>Little America Hotel</b><br>500 South Main Street                   | 7 <b>Salt Lake City Marriott City Center</b><br>220 South State Street |
| 3 <b>Radisson Hotel Salt Lake City Downtown</b><br>215 West South Temple | 8 <b>Sheraton City Centre Salt Lake City</b><br>150 West 500 South     |
| 4 <b>Salt Lake City Marriott Downtown</b><br>75 South West Temple        | 9 <b>Red Lion Salt Lake Downtown</b><br>161 West 600 South             |
| 5 <b>Shilo Inn Suites Hotel</b><br>206 South West Temple                 | 10 <b>Best Western Garden Inn</b><br>154 West 600 South                |
| 6 <b>Hilton Salt Lake City Center</b><br>255 South West Temple           |  |

The Grand America Hotel (GA)  
First Level

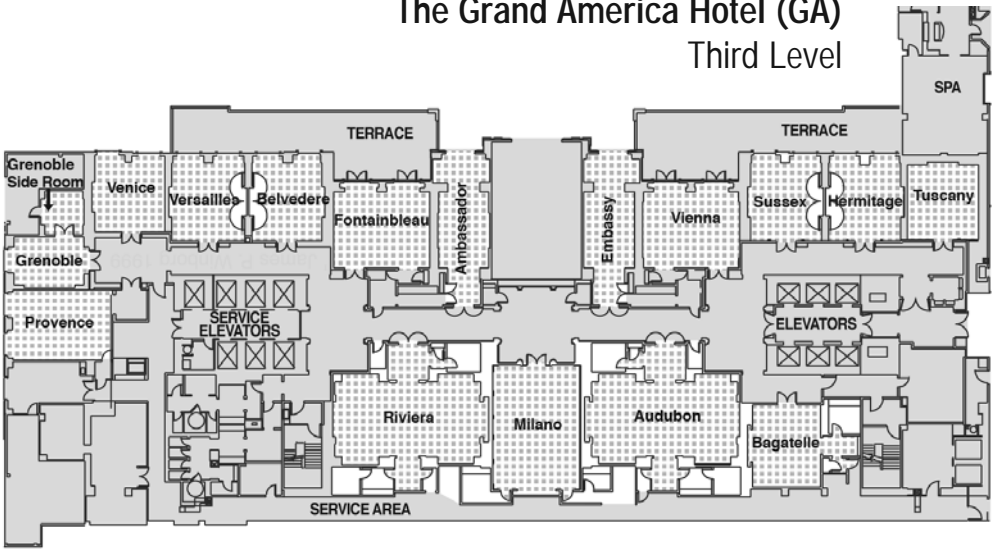


Key



—Business and Committee Meetings

The Grand America Hotel (GA)  
Third Level





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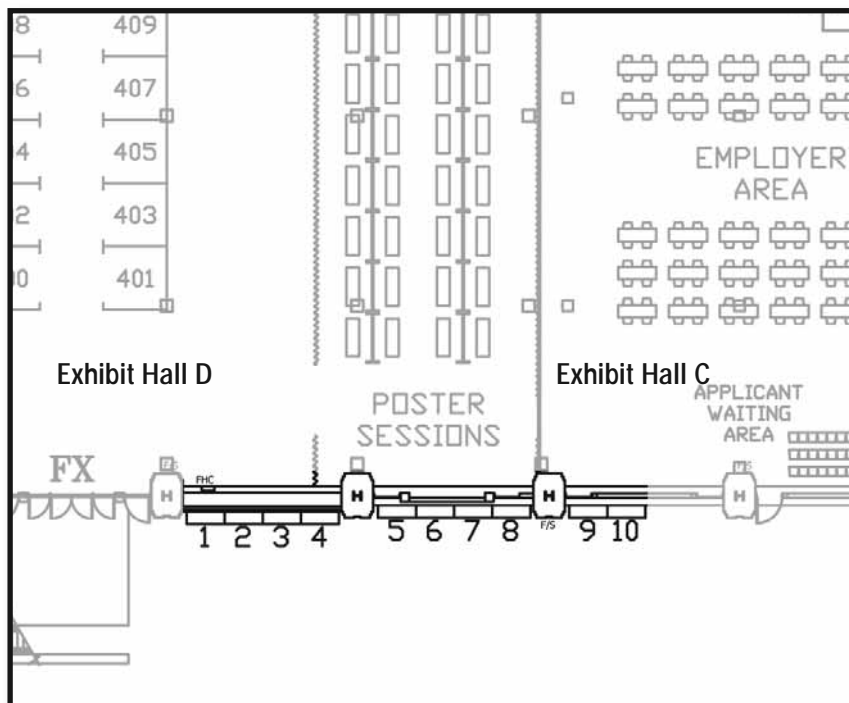
## Key

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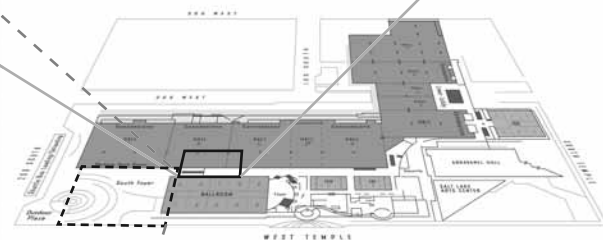
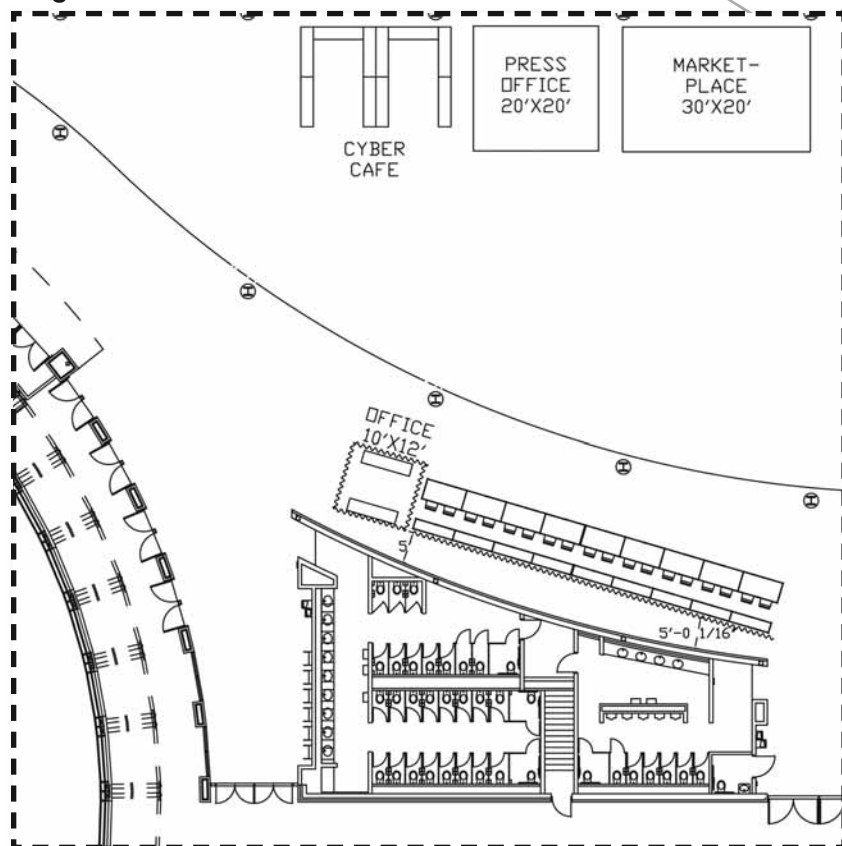
-  —Business and Committee Meetings
-  —Technical Sessions
-  —Technical Sessions and Business and Committee Meetings
-  —Technical Sessions, Business and Committee Meetings and CE Course Rooms
-  —Speaker Workrooms
-  —Opening Mixer and Plenary Sessions
-  —Roundtables with Coffee and Speaker with Lunch
-  —Roundtables with Lunch, Business and Committee Meetings, and Informal Dance Party
-  —Roundtables with Lunch, Business and Committee Meetings, Informal Dance Party, and Opening Mixer

## Committee and Society Tables

1. ASA Career Development Committee
2. ASA Council of Chapters
3. ASA Statistical Education
4. Caucus for Women in Statistics
5. Federal Committee on Statistical Methodology (FCSM)
6. Gay and Lesbian Concerns in Statistics
7. International Chinese Statistical Association (ICSA)
8. International Indian Statistical Association (IISA)
9. Christian Statisticians
10. International Statistical Institute (ISI)



## Registration Area



Salt Palace Convention Center  
First Level





### Emergency Telephone Messages

The general conference telephone number is **(801) 534-4750**. This will connect you to the JSM Special Assistance Desk and should only be used for emergency purposes. Emergency messages will be posted in the Cyber Center, located in the registration area. All other calls or messages should be left in the attendee's guestroom on his/her voice mail.

### Convention Hotels

The main phone numbers for the convention hotels are:

The Grand America Hotel	(801) 258-6000
Little America Hotel	(801) 596-5700
Radisson Hotel Salt Lake City Downtown	(801) 531-7500
Salt Lake City Marriott Downtown	(801) 531-0800
Shilo Inn Hotel	(801) 521-9500
Hilton Salt Lake City Center	(801) 328-2000
Salt Lake City Marriott City Center	(801) 961-8700
Sheraton City Centre Hotel Salt Lake City	(801) 401-2000
Red Lion Salt Lake Downtown	(801) 521-7373
Best Western Garden Inn	(801) 521-2930

### Assistance for Those with Disabilities

If you have a disability that may impede your participation, please contact a staff member at the Special Assistance Desk in the registration area of the Salt Palace Convention Center.

### Child Care

Child care services may be organized through Guardian Angels. Providers will come to your hotel room. The rate is \$60 for a minimum of four hours of service for the first child, with an additional \$1 per hour for each additional child. The fee for

families that want to share a sitter is \$2 more per hour for each family, or \$5 more per hour for each family when children in diapers are involved. A \$10 transportation fee is added to the total each time a sitter is called. For more information, call **(206) 325-2327** or visit [www.guardianangelbaby.com](http://www.guardianangelbaby.com).

The Caucus for Women in Statistics will provide a subsidy toward four hours of babysitting per family for up to 14 families. If you are interested, contact Tena I. Katsaounis at [katsaounis.1@osu.edu](mailto:katsaounis.1@osu.edu).

### Electronic Devices

All cell phones, pagers, and other electronic devices must be turned off before attending any JSM session. These devices cause interference with the audiovisual equipment and are a distraction to the session speaker and attendees.

### Smoking Policy

Smoking is not permitted at any JSM function, unless the event is outside.

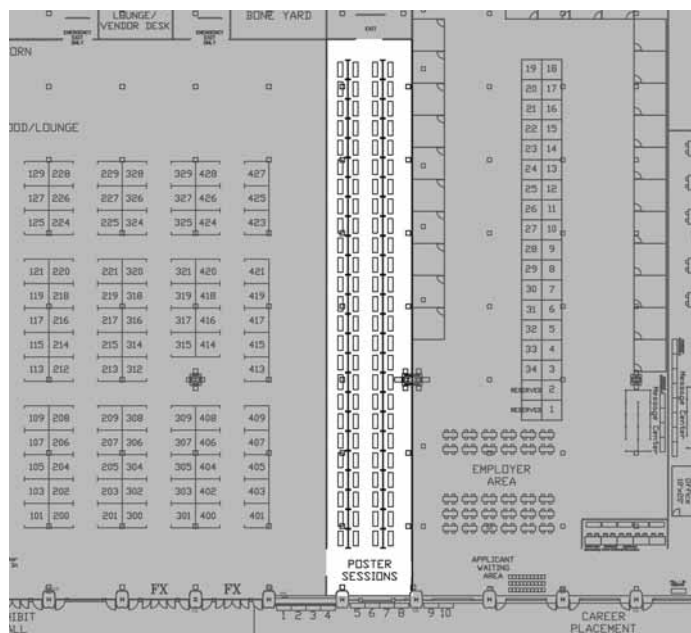
### Photographs and Videotaping

Taking photographs or using video equipment in any session or at any JSM event is prohibited, and violators will be asked to leave. Only the official JSM photographer will be authorized to take photographs.

### Recycling

You can help by making use of the paper, plastic, and aluminum trash containers located throughout the Salt Palace Convention Center. Also, participating in the towel and linen programs at area hotels significantly reduces the amount of energy and water used. You also can print sparingly and use the paper recycling containers available at the Cyber Center.

## Poster Sessions – New Format This Year!



CC – Exhibit Hall D

Designed for the display of graphic materials, rather than the text of a paper, these sessions provide authors an assigned poster board that corresponds with the number listed in this program. Though speakers will only be present at their posters during their allotted session time, the posters will be displayed on Monday and Tuesday from 8:00 a.m. to 6:00 p.m., allowing attendees to view them throughout the day.

## Introductory Overview Lectures

Introductory Overview Lectures make up a series of talks on a variety of topics. No preregistration is necessary, and they are open to all registrants.

Sunday, July 29, 4:00 p.m.–5:50 p.m. CC – 255E  
**Session 37: Adaptive Designs and Other Emerging Issues in Clinical Trials**

Monday, July 30, 8:30 a.m.–10:20 a.m. CC – Ballroom B  
**Session 80: Statistical Machine Learning and Its Applications in Bioinformatics**

Tuesday, July 31, 8:30 a.m.–10:20 a.m. CC – Ballroom B  
**Session 219: Improving Statistical Presentations and Posters**

Wednesday, August 1, 8:30 a.m.–10:20 a.m. CC – Ballroom B  
**Session 353: How Scientists Can Work Effectively with the Media**

## Late-Breaking Sessions

Two additional sessions for invited Late-Breaking Sessions were approved to cover important topics emerging close in time to JSM. These are exciting additions to the JSM program, most of which is organized well in advance.

Monday, July 30, 2:00 p.m.–3:50 p.m. CC – Ballroom B  
**Session 171: Statistical Analysis of an Archeological Find**

Wednesday, August 1, 2:00 p.m.–3:50 p.m. CC – Ballroom B  
**Session 443: War and Death in Iraq**

## Business and Committee Meetings

All meetings are open unless shown as “closed” or “by invitation only.” Section business meetings provide the opportunity to give suggestions on Section business, and members are urged to attend.

**Opening Mixer** CC – Ballrooms C–J  
 Don’t miss your chance to get JSM 2007 off to a great start and enjoy refreshments with your colleagues. Attend the Opening Mixer Sunday, July 29, from 8:00 p.m. to 10:30 p.m.

**Student Mixer** GA – Venezia Garden Salon  
 Student registrants can enjoy refreshments, meet their peers, and make plans for local events and outings at the Student Mixer, Monday, July 30, from 6:00 p.m. to 7:30 p.m. The mixer is sponsored by the ASA Committee on Membership Retention and Recruitment, and a number of door prizes will be given.

## Society Business Meetings

You are encouraged to attend your society business meetings, if held during JSM. This is your chance to give input to officers and other members of your society.

**American Statistical Association**  
 Sunday, July 29, 6:00 p.m.–7:30 p.m. CC – 251 D

**Statistical Society of Canada Reception**  
 Monday, July 30, 5:00 p.m.–7:00 p.m. GA – Fontainebleau

**IMS Presidential Address Reception**  
 Monday, July 30, 9:30 p.m.–11:00 p.m. CC – Ballroom A

**IMS Business Meeting**  
 Tuesday, July 31, 12:30 p.m.–1:30 p.m. CC – 250 A

**International Biometric Society, ENAR Business Meeting**  
 Tuesday, July 31, 5:30 p.m.–6:30 p.m. CC – 250 A

**IMS New Member and Student Reception**  
 Tuesday, July 31, 5:30 p.m.–7:00 p.m. GA – Audubon



### Recycling Badge Holders

Please place JSM badges and badge holders that you will not reuse in a designated bin in the registration area.

### 2007 JSM Proceedings

Instructions for JSM 2007 presenters are available at [www.amstat.org/meetings/jsm/2007](http://www.amstat.org/meetings/jsm/2007); click the “**Program**” tab and select “**Proceedings**.” The submission site will open August 1, 2007.

### JSM 2008

The 2008 Joint Statistical Meetings will be held in Denver, Colorado, August 3–7, at the Denver Convention Center. Preliminary information about JSM 2008 can be found at Booth #107 in the exhibit hall. The complete listing of the 2008 Program Committee and instructions for submitting contributed papers is at [www.amstat.org/meetings/jsm/2008](http://www.amstat.org/meetings/jsm/2008).

### If You Are Not a Member...

Information about the ASA, ENAR, WNAR, IMS, and SSC is available at the society booths located in the registration area and exhibit hall of the Salt Palace Convention Center. Each society provides a variety of publications and activities, and student membership is offered at substantially reduced rates.

If you are not a member of the ASA, join now and receive a discount on your first year. Join at the ASA Membership Booth in the registration area by Thursday, August 2, at 10:00 a.m. to receive this special JSM discount. The discount is valid for regular membership only. Ask about other memberships for students, postgraduates, retirees, and developing country residents.



## Registration

Everyone attending JSM, including participants in the program, is required to register. Materials for those who registered in advance are available at the JSM Registration Desk, located on the lower level, South Foyer, of the Salt Palace Convention Center. At the Registration Desk, you also may add Continuing Education courses, the Career Placement Service, tours, guest badges, luncheons, and roundtables. Hours of operation:

Saturday, July 28	7:00 a.m.–6:00 p.m.
Sunday, July 29	7:00 a.m.–8:30 p.m.
Monday, July 30	7:30 a.m.–6:00 p.m.
Tuesday, July 31	7:30 a.m.–4:30 p.m.
Wednesday, August 1	7:30 a.m.–4:30 p.m.
Thursday, August 2	7:30 a.m.–10:30 a.m.

JSM registration includes the Program Book and Abstract Book or CD-ROM; access to EXPO 2007; and admission to the Sunday night Opening Mixer, the Monday evening Student Mixer (students only), and the Informal Dance Party on Tuesday evening.

If you did not purchase speaker with lunch or roundtable tickets with your advance registration, ask at the JSM Registration Desk for availability. Limited seating is still available for some luncheons and roundtables. Tickets will be sold until 2 p.m. on the day prior to the event. NOTE: No onsite kosher or heart healthy meal tickets are available.

## ASA Continuing Education Courses

Courses will be held in rooms on Level 1 of the Salt Palace Convention Center. For room assignments, review the general program or visit the Special Assistance Desk in the South Foyer of the Salt Palace Convention Center. To register onsite for a course, visit the JSM Registration Desk, also located in the South Foyer. Availability may be limited, and text books are not available.

## Speaker Work Rooms

CC – 252 A&B

The speaker work rooms are available for all presenters. There will be practice equipment available consisting of an overhead projector and screen and a data projector and screen. To accommodate more than 3,200 presenters, **each speaker will be limited to 10 minutes to test the equipment.** Rehearse your verbal presentation in your hotel room to ensure everyone has a chance to test the equipment.

Presenters using laptops are encouraged to report to the speaker work room for training on how to connect to the data projector. Audiovisual technicians will be available to assist with questions or problems.

Hours of operation:

Saturday, July 28	7:00 a.m.–6:00 p.m.
Sunday, July 29	7:00 a.m.–6:00 p.m.
Monday, July 30	7:00 a.m.–6:00 p.m.
Tuesday, July 31	7:00 a.m.–6:00 p.m.
Wednesday, August 1	7:00 a.m.–6:00 p.m.
Thursday, August 2	7:00 a.m.–10:30 a.m.

# Do You Need a Break?

GfK

Have a cup of coffee courtesy of GfK. Coffee will be available outside technical sessions rooms on all convention center levels **Monday** between 10:15 a.m. and 10:45 a.m. Enjoy a refreshing cup of coffee between your morning sessions.

Thank you GfK!

## Career Placement Service

CC – Exhibit Hall C

Hours of operation:

Saturday, July 28 (job posting and résumé submission only)	9:00 a.m.–5:00 p.m.
Sunday, July 29	1:00 p.m.–6:00 p.m.
Monday, July 30	8:00 a.m.–6:00 p.m.
Tuesday, July 31	8:00 a.m.–6:00 p.m.
Wednesday, August 1 (onsite registration closes at noon)	8:00 a.m.–4:30 p.m.

## EXPO 2007

CC – Exhibit Hall D

Visit publishers, software companies, and recruiters, and see state-of-the-art products designed for the statistical community. Also, stop by the **ASA Booth, #101**, open during the show hours listed below.

### Exhibitor Move In and Out

Saturday, July 28 (move in only)	8:00 a.m.–5:00 p.m.
Sunday, July 29 (move in only)	8:00 a.m.–12:00 p.m.
Wednesday, August 1 (move out only)	2:00 p.m.–8:00 p.m.

### Show Hours

Sunday, July 29	1:00 p.m.–6:00 p.m.
Monday, July 30	9:00 a.m.–6:00 p.m.
Tuesday, July 31	9:00 a.m.–6:00 p.m.
Wednesday, August 1	9:00 a.m.–2:00 p.m.

## Cyber Center

CC – Level 1, South Foyer

There are 20 terminals with internet access and three printers available in the Cyber Center for registered JSM attendees. Hours of operation:

Saturday, July 28	7:00 a.m.–7:00 p.m.
Sunday, July 29	7:00 a.m.–10:30 p.m.
Monday, July 30	7:00 a.m.–11:00 p.m.
Tuesday, July 31	7:00 a.m.–11:00 p.m.
Wednesday, August 1	7:00 a.m.–9:00 p.m.
Thursday, August 2	7:00 a.m.–10:30 a.m.

## Wireless Internet Access

The Salt Palace Convention Center has wireless internet access throughout the building for \$15 per day.

## ASA Marketplace

CC – Level 1, South Foyer

The ASA Marketplace is the place for JSM and ASA souvenirs. Purchase your official JSM 2007 T-shirt, new shirt designs, great new gifts, and clearance items. Hours of operation:

Saturday, July 28	12:00 p.m.–5:00 p.m.
Sunday, July 29	9:00 a.m.–5:00 p.m.
Monday, July 30	9:00 a.m.–5:00 p.m.
Tuesday, July 31	9:00 a.m.–5:00 p.m.
Wednesday, August 1	9:00 a.m.–5:00 p.m.
Thursday, August 2	8:00 a.m.–10:30 a.m.

## ASA Membership/ Special Assistance Desk

CC – Level 1, South Foyer

Information about Salt Lake City activities, restaurants, attractions, and organized tours, as well as a local map, is available at the Special Assistance Desk. Hours of operation:

Saturday, July 28	7:00 a.m.–6:00 p.m.
Sunday, July 29	7:00 a.m.–8:30 p.m.
Monday, July 30	7:30 a.m.–6:00 p.m.
Tuesday, July 31	7:30 a.m.–4:30 p.m.
Wednesday, August 1	7:30 a.m.–4:30 p.m.
Thursday, August 2	7:30 a.m.–10:30 a.m.

## Salt Lake City Visitors Information Center

CC – Level 1

The Salt Lake City Visitors Information Center is operated by the Salt Palace Convention Bureau and provides extensive information and referrals for restaurants, tours, and sightseeing, along with up-to-date maps and travel information. The center is located in the main lobby area on Level 2 of the convention center. Hours of operation:

Saturday, July 28	9:00 a.m.–5:00 p.m.
Sunday, July 29	9:00 a.m.–5:00 p.m.
Monday, July 30	8:00 a.m.–6:00 p.m.
Tuesday, July 31	8:00 a.m.–6:00 p.m.
Wednesday, August 1	8:00 a.m.–6:00 p.m.
Thursday, August 2	8:00 a.m.–6:00 p.m.



### President's Invited Address Monday, July 30, 4:00 p.m.

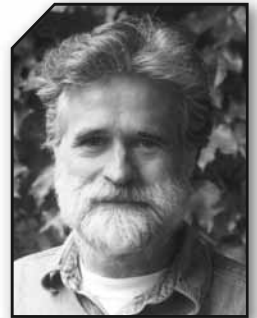
#### "Regularization Methods in Statistical Model-Building: Statisticians, Computer Scientists, Classification, and Machine Learning"

**Grace Wahba** is the I. J. Schoenberg-Hilldale Professor of Statistics at the University of Wisconsin-Madison as well as a member of the Computer Sciences Department and Department of Biostatistics and Medical Informatics. She is a member of the National Academy of Sciences and American Academy of Arts and Sciences. She also is a Fellow of the IMS, ASA, and American Association for the Advancement of Science. Since the early 70s, beginning with smoothing splines, she has been interested in regularization methods for nonparametric statistical model building. Her recent research involves analysis of datasets where only noisy, incomplete dissimilarity information is available and looking for important patterns or clusters of interacting variables.

### IMS Presidential Address Monday, July 30, 8:00 p.m.

#### "Open Access to Professional Information"

**Jim Pitman** is IMS president and professor of statistics and mathematics at the University of California, Berkeley. He has worked toward improving the quality and quantity of open-access content in the mathematical sciences by promoting and launching open-access journals for expository and survey material and developing open-source bibliographic software to encourage distributed alternatives to centrally controlled indexing systems. Recent projects include launching open-access expository journals *Probability Surveys* and *Statistics Surveys* and constructing open systems for navigation of online resources in the mathematical sciences.



### Deming Lecture Tuesday, July 31, 4:00 p.m.

#### "A Modern Framework for Enterprise Excellence"

**Douglas C. Montgomery** is professor of industrial and management systems engineering at Arizona State University. He is a Fellow of the American Society for Quality Control, ASA, and Institute of Industrial Engineers. He is a member of the honorary societies Phi Kappa Phi, Sigma Xi, Mu Sigma Rho, and Alpha Pi Mu. Montgomery's professional interests include design of experiments, time series analysis and forecasting, and applications of linear models. He also is interested in operations research and statistical methods applied to modeling and analyzing manufacturing systems.

### Wald Lecture I Tuesday, July 31, 4:00 p.m.

#### "A Review of Some Surprises Encountered in Bayesian Model Selection"

### Wald Lecture II Wednesday, August 1, 10:30 a.m.

#### "Model Selection: Approximations and Multiplicities"

### Wald Lecture III Thursday, August 2, 10:30 a.m.

#### "Working with Inexact Models: The World of Computer Modeling"

**Jim Berger** earned his PhD from Cornell University in 1974. He has served as president of the IMS, chair of the ASA's Section on Bayesian Statistical Science, and president of the International Society for Bayesian Analysis. He also was awarded Guggenheim and Sloan Fellowships, the COPSS Presidents' Award, and the Sigma Xi Research Award. Berger's research has been in primarily Bayesian statistics, foundations of statistics, statistical decision theory, simulation, and model selection.





## **ASA Presidential Address** Tuesday, July 31, 8:00 p.m.

### **“Statistics: Harnessing the Power of Information”**

**Mary Ellen Bock** is professor and head of the Department of Statistics at Purdue University in West Lafayette, Indiana. She is Fellow and president of the ASA and Fellow of the American Association for the Advancement of Science and IMS. Her areas of statistical research include applications in computational biology, bioinformatics, econometrics, and mathematical statistics.

## **COPSS Fisher Lecture** Wednesday, August 1, 4:00 p.m.

### **“R. A. Fisher, Randomization, and Current Practice in Multicenter Clinical Trials”**

**Marvin Zelen**, dubbed “Father of Biostatistics,” is professor of statistical science at Harvard School of Public Health. He is recognized as one of the pioneers of using Kronecker products and orthogonal projection operators in experimental design problems involving factorial and unbalanced designs. He also is known for his “play the winner rule” in randomized clinical trials, and his methods are still used in designing cutting-edge, multicenter clinical trials. Zelen is a Fellow of the ASA, American Association for the Advancement of Science, IMS, and International Statistical Institute and an elected member of the International Statistical Institute and American Academy of Arts and Sciences.



## **IMS Special Lectures**



## **Medallion Lecture I** Sunday, July 29, 2:00 p.m.

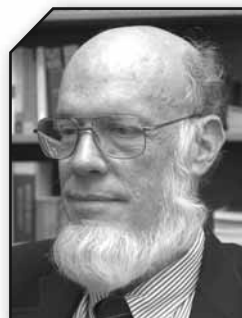
### **“Modeling Genes: Statistical Challenges in Modern Genetics”**

**Peter Donnelly** is professor of statistical science at the University of Oxford. He is a Fellow of the IMS and Royal Statistical Society, a member of the International Statistical Institute, and an Honorary Fellow of the Institute of Actuaries. He has been awarded the Mitchell Prize of the ASA and International Society for Bayesian Analysis and the Guy Medal in Silver of the Royal Statistical Society. Donnelly’s early work was in applied probability, particularly stochastic models in genetics, but, for some years, his research has focused on genetics. He played a major role in the HapMap project, an international collaboration that followed the Human Genome Project in studying genetic diversity in worldwide populations. He currently chairs a collaboration of 25 UK research groups studying 12 common human diseases.

## **Rietz Lecture** Sunday, July 29, 4:00 p.m.

### **“Statistical Problems of Gene Mapping”**

For the last 10 years, **David Siegmund** has concentrated on statistical aspects of gene mapping. As a statistician also interested in probability theory, his research concentrates on statistical problems that arise in scientific applications and require novel probability theory for their resolution. Before 1985, his research concentrated on sequential analysis, with a primary focus on the design and analysis of sequential clinical trials.



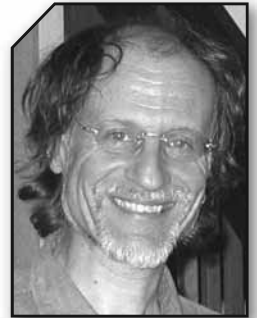


## Medallion Lecture II Monday, July 30, 10:30 a.m. “Understanding Ecological Communities”

**Claudia Neuhauser** is HHMI professor and head of the Department of Ecology, Evolution, and Behavior at the University of Minnesota, Twin Cities. Her work is at the interface of ecology and evolution, as she investigates effects of spatial structure on community dynamics, in particular, the effect of competition on the spatial structure of competitors and the effect of symbionts on the spatial distribution of their hosts. In addition, her research in population genetics has resulted in the development of statistical tools for random samples of genes. She is currently director of an NSF-funded grant on nonequilibrium dynamics across space and time, which provides interdisciplinary education and training to graduate students from ecology, geology, civil engineering, and computer science.

## Medallion Lecture III Tuesday, July 31, 8:30 a.m. “Functional Regression Analysis: Models, Methods, and Applications”

**Hans-Georg Müller** is professor of statistics at the University of California, Davis. Among his current research interests are the theory and methodology of high-dimensional and functional data analysis and applications in biodemography, genomics, and finance. He is a member of the International Statistical Institute and a Fellow of the ASA, IMS, and American Association for the Advancement of Science.



## Medallion Lecture IV Wednesday, August 1, 8:30 a.m. “Quantile Regression under Censorship”

**Xuming He** is professor of statistics at the University of Illinois, Urbana-Champaign. He is a Fellow of the ASA and IMS. His primary research interests in statistics include robust methods, semi/nonparametric modeling, large-sample theory, quantile regression, dimension reduction, and resampling methods. His interdisciplinary research spans genomics, epidemiology, educational testing, dysphagia research, and atmospheric studies. He is currently the *IMS Bulletin* editor and serves on the editorial boards of *Annals of Statistics* and *JASA*.

## Medallion Lecture V Wednesday, August 1, 2:00 p.m. “Joint Modeling of Longitudinal and Survival Data”

**Jane-Ling Wang** is professor of statistics and graduate adviser of the biostatistics program at the University of California, Davis. She has served on various committees for the ASA, International Chinese Statistical Association, IMS, and the Bernoulli Society. She is currently president-elect of the International Chinese Statistical Association. Wang’s research areas include aging and longevity, biodemography, dimension reduction methods, functional and longitudinal data analysis, joint modeling of longitudinal and survival data, and survival analysis. She is a Fellow of the ASA and IMS and an Elected Member of the International Statistical Institute.





## Local Area Committee

### Scott Grimshaw, Chair

Brigham Young University

### Gretchen Moisen

U.S. Forest Service

### Gil Fellingham

Brigham Young University

### Shane Reese

Brigham Young University

## Advisory Committee on Continuing Education

### Katherine T. Halvorsen, Chair

Smith College

### Eileen C. King, Vice Chair

Procter & Gamble

### Gordon J. Johnston

SAS Institute, Inc.

### Nandini Kannan

The University of Texas at San Antonio

### Ronald McRoberts

North Central Research Station

### Andy Mauromoustakos

University of Arkansas

### Leonard Oppenheimer

Johnson & Johnson Pharmaceutical R&D

### Xiaoming Sheng

University of Utah

### Charles Yun Tan

Merck & Co., Inc.

### Clyde Tucker

Bureau of Labor Statistics

## ASA Continuing Education

### Rick Peterson

Education Programs Associate

## ASA Meetings

### Elaine L. Powell, CMP

Assistant Director of Meetings

### Kathleen Wert

Meetings Planner

### Donna-Renee Arrington

Meetings Planner

### Kristen Campbell

Meetings Coordinator

American Statistical Association

732 North Washington Street

Alexandria, VA 22314-1943

Email: [jsm@amstat.org](mailto:jsm@amstat.org)

Web: [www.amstat.org](http://www.amstat.org)

# 2007 Program Committee



JSM 2007 Program Chair  
Allan Rossman  
California Polytechnic State  
University



International Biometric Society  
(ENAR)  
Christopher S. Coffey  
University of Alabama at  
Birmingham



International Biometric Society  
(WVAR)  
Weng Kee Wong  
University of Los Angeles



Institute of Mathematical  
Statistics (Invited)  
Mark Low  
The Wharton School  
University of Pennsylvania



Institute of Mathematical  
Statistics (Invited)  
Tony Cai  
The Wharton School  
University of Pennsylvania



Institute of Mathematical Statistics  
(Contributed)  
Jiashun Jin  
Purdue University



Statistical Society of Canada (SSC)  
X. Joan Hu  
Simon Fraser University



Council of Chapters, ASA  
V. A. Samaranyake  
University of Missouri-Rolla



Committee on Committees, ASA  
Patrick J. Cantwell  
U.S. Census Bureau



General Methodology, ASA  
Thomas H. Short  
Indiana University of  
Pennsylvania



General Methodology, ASA  
Elizabeth H. Slate  
Medical University of South  
Carolina



Invited and Contributed Posters  
Dongseok Choi  
Oregon Health & Science  
University



Section on Bayesian Statistics,  
ASA  
Merlise A. Clyde  
Duke University



Biometrics Section, ASA  
Runze Li  
The Pennsylvania State University



Biopharmaceutical Section, ASA  
Amit Bhattacharyya  
GlaxoSmithKline



Business & Economic Statistics  
Section, ASA  
David A. Dickey  
North Carolina State University



Statistical Computing Section, ASA  
Edward J. Wegman  
George Mason University



Section on Statistical Consulting,  
ASA  
Phillip L. Chapman  
Colorado State University



Section on Statistics in Defense  
and National Security, ASA  
Lara S. Schmidt  
RAND Corporation



Section on Statistical Education,  
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Patti Collings  
Brigham Young University



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Environment, ASA  
Peter Guttorp  
University of Washington



Section on Epidemiology, ASA  
Jennifer Clark Nelson  
Group Health Cooperative



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ASA  
Roberta L. Sangster  
Bureau of Labor Statistics



Section on Statistical Graphics,  
ASA  
Simon Urbanek  
AT&T Labs - Research



Section on Health Policy Statistics,  
ASA  
Bonnie Ghosh-Dastidar  
RAND Corporation



Section on Statistics in Marketing,  
ASA  
Peter Boatwright  
Carnegie Mellon University



Section on Nonparametric  
Statistics, ASA  
Soumendra N. Lahiri  
Iowa State University



Section on Physical & Engineering  
Sciences, ASA  
Winson Taam  
Boeing



Section on Quality & Productivity,  
ASA  
William R. Myers  
Procter & Gamble



Section on Risk Analysis, ASA  
Duane Steffey  
Exponent, Inc.



Social Statistics Section, ASA  
Allen L. Schirm  
Mathematica Policy Research, Inc.



Section on Statistics in Sports,  
ASA  
Mark E. Glickman  
Edith Nourse Rogers  
Memorial Hospital



Section on Survey Research  
Methods, ASA  
Steven G. Heeringa  
University of Michigan Institute  
for Social Research



Section on Teaching Statistics in  
the Health Sciences, ASA  
Patrick Tarwater  
The University of Texas Health  
Science Center at Houston

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Theory and Methods:

**Stephen Portnoy** and **Walter Piegorsch**

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**Robert Lund**

Editor, *The American Statistician*

**Peter Westfall**

Editor, *CHANCE*

**Michael Lavine**



Editor, Current Index to Statistics

Abstracting Editor: **George Styan**

Editor, *Journal of Agricultural, Biological, and Environmental Statistics*

**Byron J. T. Morgan**

Editors, *Journal of Business & Economic Statistics*

**Serena Ng**

**Arthur Lewbell**

Editor, *Journal of Computational and Graphical Statistics*

**David van Dyk**

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Editors, *Amstat Online*

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**William B. Smith**

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**William Notz**

Editor, ASA-SIAM Book Series

**Martin T. Wells**

Editor, *Statistics in Biopharmaceutical Research*

**Joseph Heyse**

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**J. Lynn Palmer**

Council of Sections Chair

**S. Lynne Stokes**

**Business Office**

William B. Smith, Executive Director

American Statistical Association

732 North Washington Street

Alexandria, VA 22314-1943

Phone: (703) 684-1221

Fax: (703) 684-2037

Email: [asainfo@amstat.org](mailto:asainfo@amstat.org)

Web: [www.amstat.org](http://www.amstat.org)

# International Biometric Society—Eastern North American Region

January – December 2007

President  
**Lisa LaVange**

Past-President  
**Jane Pendergast**

President-Elect  
**Eric (Rocky) Feuer**

Secretary (2007–2008)  
**José Pinheiro**

Treasurer (2006–2007)  
**Oliver Schabenberger**

Regional Committee (RECOM)  
President (Chair): **Lisa LaVange**

Members elected to three-year terms:

2005–2007	2006–2008	2007–2009
<b>Gregory Campbell</b>	<b>John Bailor</b>	<b>Karen Bandeen- Roche</b>
<b>Naisyin Wang</b>	<b>Stacy Linborg</b>	<b>F. Dubois Bowman</b>
	<b>Tom TenHave</b>	<b>Raul Rathouz</b>

Regional Members of the Council of the  
International Biometric Society  
**Ron Brookmeyer, Marie Davidian, Susan Ellenberg, Louise Ryan, Janet Wittes, Roderick Little**

Appointed Members of the Regional Advisory Board  
(three-year terms)  
Chair: **Scarlett Bellamy**  
Chair-Elect: **Amy Herring**

2005–2007	2006–2007	2007–2009
<b>Barbara Bailey</b>	<b>Michael Hardin</b>	<b>Christopher S. Coffey</b>
<b>Sudipto Banerjee</b>	<b>Eileen King</b>	<b>Hormuzd A. Katki</b>
<b>Jason Conner</b>	<b>Carol Lin</b>	<b>Lan Kong</b>
<b>Todd Durham</b>	<b>Keith Muller</b>	<b>Yi Li</b>
<b>Kirk Easley</b>	<b>Soomin Park</b>	<b>Lillian Lin</b>
<b>Abie Ekangaki</b>	<b>Shyamal Paddada</b>	<b>Laura Meyersen</b>
<b>Deborah Ingram</b>	<b>Melanie Wall</b>	<b>Tamara Pinkett</b>
<b>Xuejen Peng</b>	<b>Lloyd Edwards</b>	<b>Douglas E. Schaubel</b>
<b>James Rosenberger</b>	<b>Jeremy Taylor</b>	<b>Gene Pennello</b>
<b>Maura Stokes</b>	<b>Melanie Wall</b>	<b>John Preisser</b>

## Programs

2007 Joint Statistical Meetings  
**Christopher S. Coffey**

2008 Spring Meeting  
**Avital Cnann**

*Biometrics* Executive Editor  
**Marie Davidian**

*Biometric Bulletin* Editor  
**Ranny Dafni**

ENAR Correspondent for the *Biometric Bulletin*  
**Rosalyn Stone**

ENAR Executive Director  
**Kathy Hoskins**

International Biometric Society Business Manager  
**Claire Shanley**

Committee of Presidents of Statistical Societies (COPSS) ENAR  
Representatives  
**Lisa LaVange (president), Jane Pendergast (past-president), Eric Feuer (president-elect)**

ENAR Standing/Continuing Committee Chairs  
Nominating 2007: **Jane Pendergast**  
Sponsorship 2007: **B. Christine Clark**

American Association for the Advancement of Science (Joint  
with WNAAR) terms through February 22, 2008  
Section E, Geology and Geography **Stephen Rathbun**  
Section G, Biological Sciences **Geof Givens**  
Section N, Medical Sciences **Joan Hilton**  
Section O, Agriculture **Kenneth Porter**  
Section U, Statistics **Mary Foulkes**

National Institute of Statistical Sciences (ENAR president is also  
an ex-officio member) Board of Trustees Member: **Lisa LaVange**

## Business Office

Eastern North American Region  
International Biometric Society  
12100 Sunset Hills Road, Suite 130  
Reston, VA 20190  
Phone: (703) 437-4377  
Fax: (703) 435-4390  
Email: [enar@enar.org](mailto:enar@enar.org)  
Web: [www.enar.org](http://www.enar.org)

## International Biometric Society— Western North American Region

President  
**Ken Burnham**

President-Elect  
**John Neuhaus**

Past-President  
**Christine McLaren**

Secretary  
**Antje Hoering**

Treasurer  
**Kenneth Kopecky**

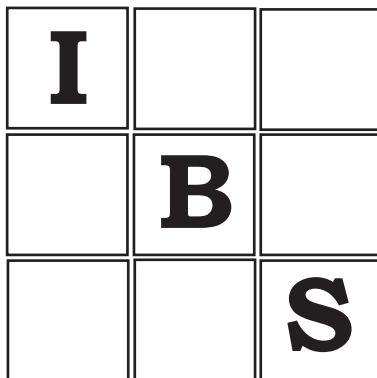
Program Coordinator  
**Weng Kee Wong**

Representatives At-Large  
2006–2008: **Jennifer Hoeting and Rhonda Rosychuk**  
2005–2007: **Todd Alonzo and Barbara Richardson**  
2007–2009: **Ying Lu and Kathy Prewitt**

IBS Council Representatives  
2004–2007: **Christine McLaren**  
2006–2009: **John Neuhaus**  
2006–2009: **Elizabeth Thompson**

### Business Office

WNAR Membership Services  
Cancer Research and Biostatistics  
1730 Minor Avenue, Suite 1900  
Seattle, WA 98101-1468  
Email: [wnar@crab.org](mailto:wnar@crab.org)  
Web: [www.wnar.org](http://www.wnar.org)



## Statistical Society of Canada Executive 2007–2008

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President-Elect  
**Román Viveros-Aguilera**

Past-President  
**Charmaine B. Dean**

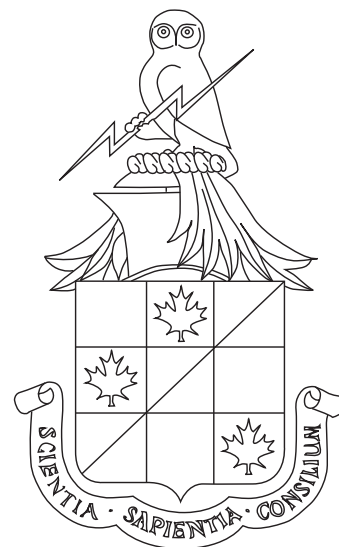
Secretary  
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**Angelo Canty**

### Business Office

Statistical Society of Canada  
577 King Edward Avenue  
Ottawa, ON, Canada K1N 6N5  
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Web: [www.ssc.ca](http://www.ssc.ca)



# Institute of Mathematical Statistics



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Editor, *The Annals of Probability*

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**Bradley Efron**

Editors, *The Annals of Statistics*

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**Xuming He**

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**Karen Kafadar** 2009

**Xiao-Li Meng** 2009

## Business Office

Elyse R. Gustafson, Executive Director

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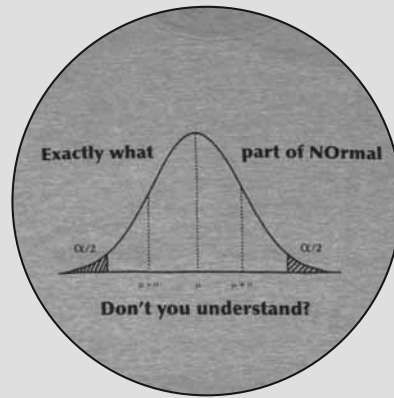
Email: [ims@imstat.org](mailto:ims@imstat.org)

Web: [www.imstat.org](http://www.imstat.org)



**Continuing Education at a Glance**

TIME	COURSE	INSTRUCTOR(S)	COURSE TITLE
<b>Saturday, July 28</b>			
8:30 a.m.–5:00 p.m.	CE_01C	David Spiegelhalter	Bayesian Modeling in Practice
8:30 a.m.–5:00 p.m.	CE_02C	Garrett Fitzmaurice	Applied Longitudinal Analysis %
8:30 a.m.–5:00 p.m.	CE_03C	Dallas E. Johnson	Design and Analysis of Crossover Experiments
8:30 a.m.–5:00 p.m.	CE_04C	Paul Biemer	Latent Class Analysis of Survey Error
8:30 a.m.–5:00 p.m.	CE_05C	Richard Cook/Jerry Lawless	Statistical Methods for the Analysis of Recurrent Events
8:30 a.m.–5:00 p.m.	CE_06C	Kimberly Crimin/Thomas Vidmar	Nonclinical Statistics for Drug Discovery
8:30 a.m.–5:00 p.m.	CE_07C	Antony Unwin/Heike Hofmann	Graphics of Large Datasets
<b>Sunday, July 29</b>			
8:30 a.m.–5:00 p.m.	CE_01C	David Spiegelhalter	Bayesian Modeling in Practice
8:00 a.m.–12:00 p.m.	CE_08C	Naitee Ting/James MacDougall	Dose-Finding in Drug Development
8:30 a.m.–5:00 p.m.	CE_09C	Oliver Schabenberger	Generalized Linear Mixed Models: Theory and Applications
8:30 a.m.–5:00 p.m.	CE_10C	Margaret S. Pepe/Holly Janes/ Todd Alonzo	Statistical Evaluation of Medical Tests and Biomarkers for Classification
8:30 a.m.–5:00 p.m.	CE_11C	Jay Breidt/Jean Opsomer	Modeling and Data Analysis for Complex Surveys
8:30 a.m.–5:00 p.m.	CE_12C	Jerome Sacks/William J. Welch	A Practical Guide for the Design and Analysis of Virtual (Computer Model) Experiments
8:30 a.m.–5:00 p.m.	CE_13C	Thomas Herzog/Fritz Scheuren/ William Winkler	Data Quality and Record Linkage Techniques
1:00 p.m.–5:00 p.m.	CE_14C	Christopher S. Coffey/Brenda Gaydos/José Pinheiro	Adaptive Dose-Response Studies
<b>Monday, July 30</b>			
8:00 a.m.–12:00 p.m.	CE_15C	Charles S. Davis	Categorical Data Analysis
8:30 a.m.–5:00 p.m.	CE_16C	Peter H. Westfall	Multiple Comparisons and Multiple Tests
8:30 a.m.–5:00 p.m.	CE_17C	Christy Chuang-Stein/Alex Dmitrienko/Geert Molenberghs	Analysis of Clinical Trials: Theory and Applications
8:30 a.m.–5:00 p.m.	CE_18C	Howard S. Burkorn/David Banks	Temporal Alerting Algorithms for Biosurveillance
8:30 a.m.–5:00 p.m.	CE_19C	Peter F. Thall	Practical Bayesian Clinical Trial Design
8:30 a.m.–5:00 p.m.	CE_20C	Wei-Yin Loh	Classification and Regression Trees
1:00 p.m.–5:00 p.m.	CE_21C	Ingram Olkin	Meta-analysis: Statistical Methods for Combining the Results of Independent Studies
<b>Tuesday, July 31</b>			
8:00 a.m.–12:00 p.m.	CE_22C	Tamraparni Dasu/Simon Urbanek	Harnessing Data Streams through Statistical Computing
8:30 a.m.–5:00 p.m.	CE_23C	Michael Proschan	Statistical Monitoring of Clinical Trials: a Unified Approach
8:30 a.m.–5:00 p.m.	CE_24C	Michael J. Daniels/Joe Hogan	Dropout in Longitudinal Studies: Strategies for Bayesian Modeling and Sensitivity
8:30 a.m.–5:00 p.m.	CE_25C	Kenneth Lange/Janet Sinsheimer/ Eric Sobel	Statistical Genetics
8:30 a.m.–5:00 p.m.	CE_26C	Marina Vanucci/Brani Vidakovic	Wavelets and Statistical Applications
8:30 a.m.–5:00 p.m.	CE_27C	Danyu Lin	Analysis of Censored Data
1:00 p.m.–5:00 p.m.	CE_28C	Tim Hesterberg	Bootstrap Methods and Permutation Tests for Doing and Teaching Statistics



*American Statistical Association*

# MARKET PLACE

LOCATED IN THE MAIN  
REGISTRATION AREA

**Saturday, July 28**  
noon–5:00 p.m.

**Sunday – Wednesday**  
July 29–August 1  
9:00 a.m.–5:00 p.m.

**Thursday, August 2**  
8:00 a.m.–10:30 a.m.

Mugs, hats, ASA apparel, children's shirts, JSM shirts, pens,  
and more!



**Wednesday, August 1**

Fee: \$50 each

### Computer Technology Workshops *at a Glance*

TIME	COURSE	INSTRUCTOR(S)	TITLE
8:00 a.m.–9:45 a.m.	CE_29T	Mikhail Golovnya	Introduction to CART: Data Mining with Decision Trees
8:00 a.m.–9:45 a.m.	CE_30T	Angela Pitts/ G. Gordon Brown	New Features for Clustered and Survey Data Analysis in SUDAAN® Release 9.0.3
8:00 a.m.–9:45 a.m.	CE_31T	Robert Cohen	Modern Regression Analysis in SAS Software
8:00 a.m.–9:45 a.m.	CE_32T	Michael Borenstein/ Hannah Rothstein	Power Analysis: a Simple and Effective Approach
8:00 a.m.–9:45 a.m.	CE_33T	Cyrus R. Mehta	East® 5: a Comprehensive Package for Adaptive and Group Sequential Design, Interim Monitoring, and Simulation
10:00 a.m.–11:45 a.m.	CE_34T	Mikhail Golovnya	Introduction to MARS: Predictive Modeling with Nonlinear Automated Regression Tools
10:00 a.m.–11:45 a.m.	CE_35T	Shawn Harahush	From Software to Solutions in Statistics and Risk Analysis
10:00 a.m.–11:45 a.m.	CE_36T	Sharad Prabhu/ José G. Ramírez	Design and Analysis of Split-Plot Experiments Using the SAS ADX Interface
10:00 a.m.–11:45 a.m.	CE_37T	Michael Borenstein/ Hannah Rothstein	Meta-analysis: Concepts and Applications
10:00 a.m.–11:45 a.m.	CE_38T	Weicai Zhong	Generalized Linear Modeling in SPSS
1:00 p.m.–2:45 p.m.	CE_39T	Mikhail Golovnya	Advances in Data Mining: Jerome Friedman's TreeNet/MART and Leo Breiman's Random Forests
1:00 p.m.–2:45 p.m.	CE_40T	Colin (Lin) Chen	Quantile Regression Using the SAS QUANTREG Procedure

# Seeking a CAREER in STATISTICS?

Salt Lake City, UT  
July 29–August 1



Are you nearing graduation and wondering about entry-level jobs?  
Are you an experienced statistics professional interested in career information?

**Register for the JSM Career Placement Service!**

## *What can the CAREER PLACEMENT SERVICE do for YOU?*

Each year, hundreds of companies, universities, recruiters, and government agencies search for applicants using the JSM Career Placement Service. The JSM Career Placement Service provides the best opportunity for qualified applicants to meet employers, establish valuable contacts, and learn about organizations employing statisticians.

## *Career Placement Service BENEFITS*

**APPLICANT READING AREA**—for applicants to review complete job descriptions and contact information for all registered employers.

**VISIBILITY TO EMPLOYERS**—applicants who register by July 12, 2007, will have their information and résumés included in the advance applicant access database, available to employers prior to the meeting. Employers often contact applicants in the database prior to JSM to schedule interviews.

**COMPUTERIZED MESSAGE CENTER**—allows applicants and employers to communicate throughout the meeting.

**ONLINE ACCESS TO JOB POSTINGS**—this year, included with ALL Career Placement Service registrations.

***Register at the registration desk, and bring your résumé to Hall C!***

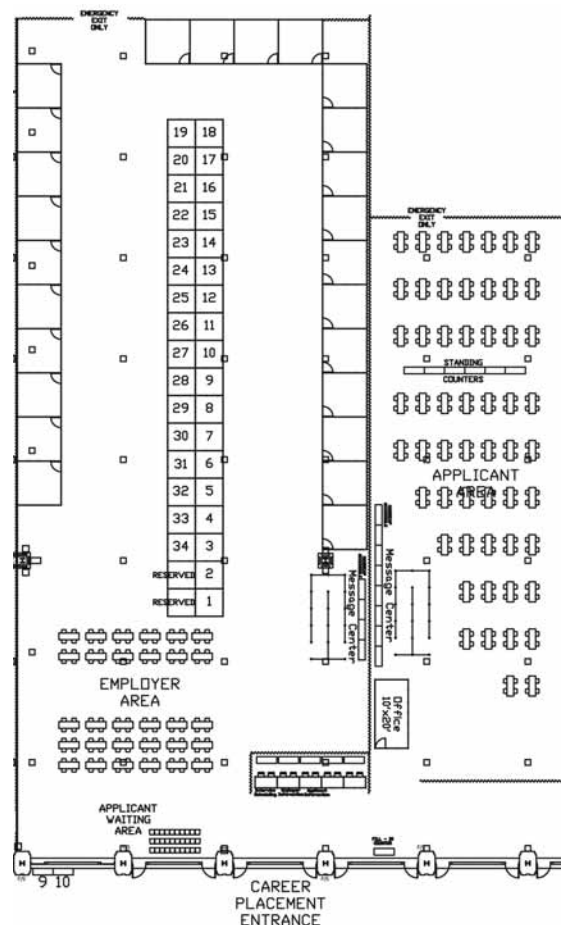
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Organizations Represented at Recent JSM Career Placement Services

Capital One • FDA • PPD • Mayo Clinic  
GE Money • Westat • Eli Lilly

## Executive Suite Employers

Abbott Laboratories  
 Amgen Inc.  
 Battelle  
 Bristol-Myers Squibb  
 Capital One  
 Eli Lilly and Company  
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 Devices and Radiological Health  
 U.S. Food and Drug Administration, Center for  
 Drug Evaluation and Research  
 GE Money  
 GlaxoSmithKline  
 John Deere Credit  
 Johnson & Johnson Family of Companies  
 Mayo Clinic  
 Merck Research Laboratories  
 National Opinion Research Center (NORC) at the  
 University of Chicago  
 National Security Agency  
 Pacific Northwest National Laboratory  
 PPD  
 Quintiles  
 sanofi-aventis  
 SAS Institute Inc.  
 Takeda Pharmaceuticals North America



## Salt Palace Convention Center—Exhibit Hall C

## Registered Employers

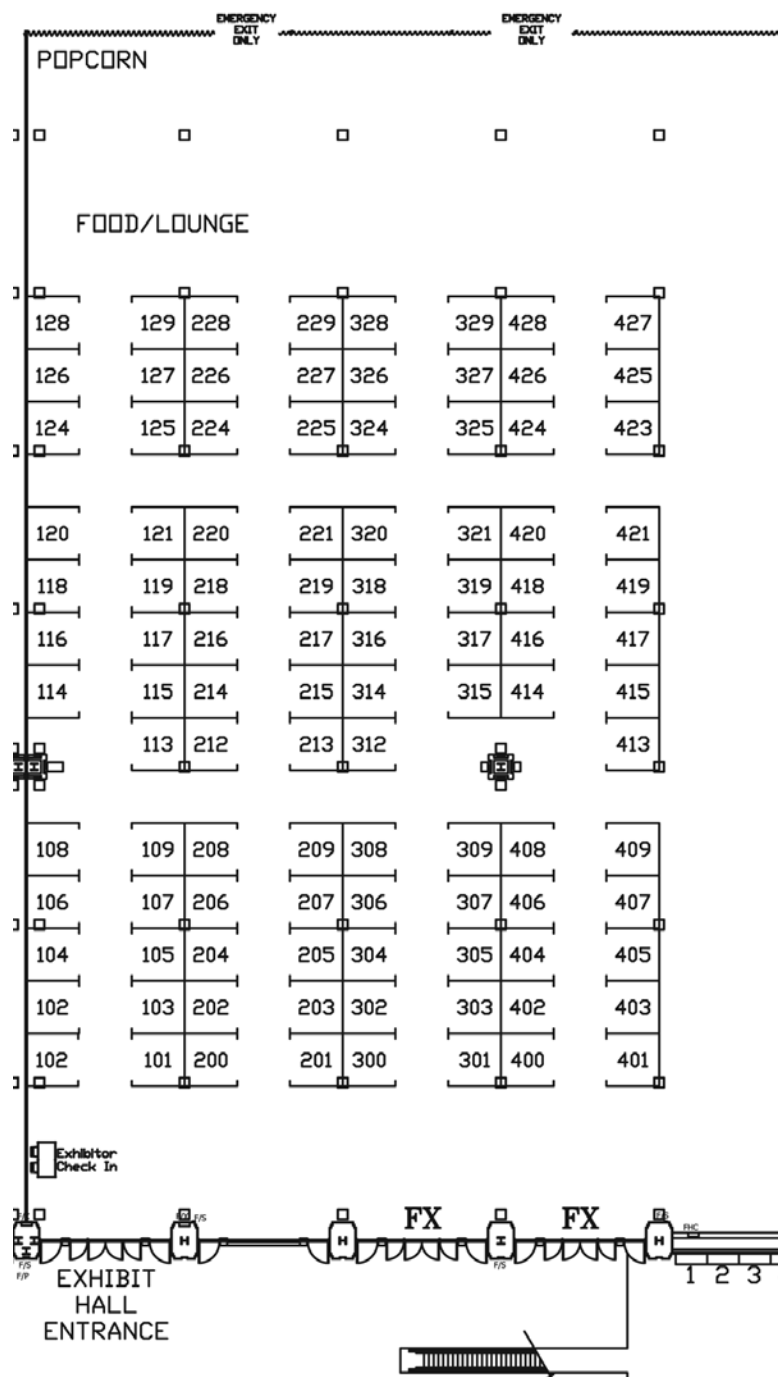
AgentHR  
 Alaska Department of Fish and Game-Sport Fish  
 Boehringer Ingelheim  
 Bucknell University  
 Bureau of Labor Statistics  
 Chastain Research Group, Inc.  
 Constellation Energy Commodities Group  
 Department of Biostatistics, Medical College of  
 Georgia  
 DuPont  
 Elon University  
 Exponent  
 GE Global Research  
 Geisinger Center for Health Research

IBM T. J. Watson Research Center  
 Instituto Tecnológico Autónomo de México  
 (ITAM)  
 Lawrence Livermore National Laboratory  
 Medical Technology and Practice Patterns  
 Institute, Inc.  
 Medical University of South Carolina  
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 Myriad Genetics, Inc.  
 Pfizer Inc.  
 Precision Bioassay  
 Regeneron Pharmaceuticals, Inc.  
 RTI International  
 Schering-Plough Research Institute  
 Smith Hanley Associates LLC

Statistics of Income Division, IRS  
 The Cambridge Group Ltd.  
 The Children's Hospital of Philadelphia  
 The EMMES Corporation  
 The University of Texas Health Science Center-SA,  
 Department of Epidemiology and Biostatistics  
 Thomas Jefferson University  
 U.S. Census Bureau  
 UCSF Immune Tolerance Network  
 United States Military Academy  
 Valeant Pharmaceuticals  
 Washington University in St. Louis, School of  
 Medicine  
 Westat  
 Yahoo! Inc.



# EXPO 2007 Floor Plan



## Exhibitors by Booth Number

Booth Number	Exhibitor Name
100	Institute of Mathematical Statistics
101, 103, 105	American Statistical Association
102	Statistical Society of Canada
104	ASA-SIAM Series
106	SIAM: Society for Industrial and Applied Mathematics
107	JSM 2008 Denver
108	Bureau of Labor Statistics
109	Bureau of Economic Analysis
113	StatPoint, Inc.
114, 116	Minitab Inc.
115	The Cambridge Group LTD
117, 119, 121, 216, 218, 220	CRC Press-Taylor & Francis Group
118, 120	Duxbury, Thomson
124	Palisade Corporation
125	Kforce Clinical Research Staffing
126, 128	StatSoft, Inc.
127, 129	Cambridge University Press
200, 202	JMP, a business unit of SAS
201, 203, 205	SAS Application
204, 206, 208	SAS Publishing
207, 209	SAS Institute, Education Division
212	Capital One
213, 312	RTI International
214	COMSYS
215, 217	Oxford University Press
219	MacKichan Software
221	Hawkes Learning Systems
224	Salford Systems
225	SYSTAT Software, Inc.
226, 228	Elsevier
227, 229	XL Solutions Corporation
300, 302	W.H. Freeman & Company
301	NCSS
303	Eli Lilly and Company
304	U.S. Department of Education/IES

Booth Number	Exhibitor Name
305	Stat-Ease, Inc.
306, 308	SPSS, Inc.
307, 309, 406, 408	Springer
307	Birkhäuser
314, 316	Cytel, Inc.
315, 317, 319	John Wiley & Sons
318	statistics.com
320	Smith Hanley
321	Blackwell Publishing
324	SAGE Publications
325	Biostat, Inc.
326	World Scientific Publishing Company
327	Pfizer Global Research and Development
328	Google
329	Prosoft Software, Inc.
400	Addison Wesley
401, 403	Prentice Hall
402	Wolfram Research
404	GE Money
405, 407	REvolution Computing
409	National Center for Health Statistics
413	CDC/ATSDR
414	USDA, NASS
415	Internal Revenue Service, Statistics of Income Division
416	ASG, Inc.
417, 419	Johnson & Johnson Family of Companies
418, 420	Insightful Corporation
421	MedFocus LLC
423	Allergan, Inc.
424	Fforde Management
425, 427	National Security Agency
426	Space-Time Research
428	INFORMS

# Who's Who in the Exhibit Hall

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416

agement, analytical research, setting standards for statistics, and promoting statistical education.

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325

## ASA-SIAM Series

Alexandria, Virginia

The ASA-SIAM Series on Statistics and Applied Probability is published jointly by the American Statistical Association and the Society for Industrial and Applied Mathematics. The series consists of a broad spectrum of books on topics in statistics and applied probability and provides inexpensive, quality publications of interest to the societies' intersecting membership.

104

## Birkhäuser

New York, New York

Save 20% on all books at the Birkhäuser booth. Browse Birkhäuser's selection of first-rate titles in a variety of statistical areas and applied probability. Check out best-selling, new, and forthcoming titles, such as P. Good's *Resampling Methods*, 3/e, W. Woyczynski's *A First Course in Statistics for Signal Analysis*, T. Ogden's *Essential Wavelets for Data Analysis*, and G. Schay's *Introduction to Probability with Statistical Applications*. Also on display will be books from the Statistics in Industry and Technology Series and Probability and Its Applications Series.

307

## Addison-Wesley

Boston, Massachusetts

Please visit Addison-Wesley in Booth 400. Stop by, meet our authors, and explore a full display of our statistics titles, including DeVeaux/Velleman/Bock's *Stats: Data and Models*, 2/e, Weiss *Introductory Statistics*, 8/e, and Triola *Essentials of Statistics*, 3/e, as well as our texts in biostatistics, probability, and time series. Also, try out some of our new and exciting technology, including MyStatLab and ActivStats.

400

## Blackwell Publishing

Hoboken, New Jersey

Blackwell Publishing is a leading international publisher in all areas of statistics, science, technology, and medicine. Please stop by our booth for complimentary copies of our journals, and visit our web site at [www.blackwellpublishing.com](http://www.blackwellpublishing.com) for information about all our publications.

321

## Allergan, Inc.

Irvine, California

Allergan, Inc., is a premier, global specialty pharmaceutical and medical device company that discovers, develops, and commercializes innovative products for ophthalmology, neurosciences, medical dermatology, medical aesthetics, and other specialty markets. The company is dedicated to delivering value to its customers, satisfying unmet medical needs, and improving lives.

423

## Bureau of Economic Analysis

Baltimore, Maryland

The Bureau of Economic Analysis (BEA) promotes a better understanding of the U.S. economy by providing the timeliest, relevant, and accurate economic accounts data in an objective and cost-effective manner.

109

## American Statistical Association 101, 103, 105

Alexandria, Virginia

Since 1839, the ASA has been the world's leading professional association for statisticians. The ASA serves as a forum for sharing ideas, experiences, innovations, and accomplishments. Members are involved in medicine, computer applications, quality man-

## Bureau of Labor Statistics

Washington, DC

The Bureau of Labor Statistics is the principal fact-finding agency for the federal government that provides statistical data online at [www.bls.gov](http://www.bls.gov) and in various publications.

108

**CDC/ATSDR****Atlanta, Georgia**

The Centers for Disease Control and Prevention is one of the 13 major operating components of the Department of Health and Human Services, which is the principal agency in the United States government for protecting the health and safety of all Americans and for providing essential human services.

**413****COMSYS****Portage, Michigan**

COMSYS is the leading provider of SAS, statistics, and clinical services to companies nationwide. We enable statisticians and programmers to support their customers more efficiently through innovative analytical applications and overflow support. COMSYS is a SAS Alliance Gold Partner with more than 40 offices in the United States and Canada.

**214****★CRC Press-Taylor & Francis Group****Boca Raton, Florida**

CRC Press, a member of the Taylor & Francis Group, is a premier publisher of scientific and technical books, journals, and electronic databases. Please visit our booth during the show to peruse our titles, pick up a sample journal, and purchase books while taking advantage of show discounts.

**117, 119, 121, 216,  
218, 220****Cambridge University Press****New York, New York**

Cambridge's new titles in statistics, biostatistics, econometrics, and mathematical finance are available at a 20% discount. New books in the Cambridge Series in Statistical and Probabilistic Mathematics include *Statistical Mechanics of Disordered Systems*, by Anton Bovier, and *The Coordinate-Free Approach to Linear Models*, by Michael J. Wichura.

**127, 129****● Capital One****Richmond, Virginia**

Capital One is a Fortune 500 company providing access to credit for tens of millions worldwide. We also provide auto, home, and business loans, plus banking and other services. Statistical expertise is central to our success, which is why we seek superior applied statisticians at all career stages.

**212****■ Cytel, Inc.****Cambridge, Massachusetts**

Celebrating its 20th year, Cytel, Inc., is a leading provider of clinical trial services and statistical software for biopharmaceutical development and general research applications. Cytel's East® is

**314, 316**

used at hundreds of biopharmaceutical sites worldwide to design adaptive, group sequential and traditional trials. StatXact®, LogXact®, and new CrossOver® comprise Cytel's renowned exact statistics packages.

**■ Duxbury-Thomson****Belmont, California**

Visit Duxbury-Thomson Publishers at booths 118 and 120 to view our latest publications and technology innovations. With more than 30 years' experience publishing in statistics, Duxbury is the source of complete solutions for all teaching needs, from introductory to advanced statistics courses. Duxbury: A Tradition of Quality and Innovation.

**118, 120****★ Eli Lilly and Company****Indianapolis, Indiana**

Eli Lilly is a leading, innovation-driven corporation committed to developing a growing portfolio of best-in-class and first-in-class pharmaceutical products that help people live longer, healthier, and more active lives. Lilly products treat depression, schizophrenia, attention-deficit hyperactivity disorder, diabetes, osteoporosis, and many other conditions. We are committed to providing answers that matter.

**303****■ Elsevier****New York, New York**

Elsevier/Academic Press delivers world-class content to statisticians and mathematicians, from textbooks to corporate and clinical research references. Come see our new and bestselling books in all areas of statistics, from renowned authors Sheldon Ross, Robert Riffenbergh, C. R. Rao, and Ronald Forthofer. Conference discounts apply and sample journals are available.

**226, 228****Fforde Management****New York, New York**

Fforde is a global executive search firm specializing in staffing solutions for the pharmaceutical, biotechnology, CRD, and medical devices industries. Fforde has offices located in the United States, Europe, and the UK, making us a truly global staffing solution.

**424****GE Money****Stamford, Connecticut**

GE Money is a leading provider of credit services to consumers, retailers, and auto dealers with more than 300,000 employees, \$180 billion in assets, and businesses in 54 countries. We offer flexible work arrangements, a diverse environment, world-class leadership, comprehensive training, and "fast track" leadership programs to help you achieve your career goals.

**404**

## Google

Mountain View, California

Google's innovative search technologies connect millions of people around the world with information every day. Founded in 1998 by Stanford PhD students Larry Page and Sergey Brin, Google is now a top web property in all major global markets. Google's targeted advertising program provides businesses of all sizes with measurable results, while enhancing the overall web experience for users. Google is headquartered in Silicon Valley, with offices throughout the Americas, Europe, and Asia. For more information, visit [www.google.com](http://www.google.com).

## Hawkes Learning Systems

Charleston, South Carolina

Discover the benefits of using interactive software to teach and learn mathematics. Hawkes Learning Systems promotes grade improvement and motivates students to learn by providing tutorials, unlimited practice, helpful feedback from artificial intelligence, and mastery-based homework. Come see a demonstration of our state-of-the-art test generator, online grade book, and student courseware.

## INFORMS

Hanover, Maryland

The Institute for Operations Research and the Management Sciences (INFORMS) is a professional association with 10,000

328

members that publishes 12 journals used extensively in business and engineering schools. Have a membership question? Want a look at INFORMS' newest publications? Need advice on marketing the profession? Stop by the INFORMS booth to talk with the staff. For details, visit [www.informs.org](http://www.informs.org).

## Insightful Corporation

Seattle, Washington

Insightful Corporation is a provider of predictive analytics and reporting solutions that gives companies the knowledge to act™. Insightful products S-PLUS®, Insightful Miner™, S-PLUS® Server, and InFact® allow customers to perform sophisticated statistical data analysis and data mining and create high-quality graphics. For more information, visit [www.insightful.com](http://www.insightful.com).

418, 420

## Institute of Mathematical Statistics

Beachwood, Ohio

The IMS is an international professional and scholarly society devoted to the development, dissemination, and application of statistics and probability. The IMS publishes five journals: Annals of Statistics, Annals of Applied Statistics, Annals of Probability, Annals of Applied Probability, and Statistics Science. IMS membership is free to students.

100

428

# Bringing the ASA to Salt Lake City

Visit the **ASA BOOTH, #101**, at JSM and learn about the many programs available to you. Within the ASA Booth, you can hear about:

**SECTIONS**—Get information about 22 Sections that encompass several special interests in statistics

**PUBLICATIONS**—Flip through the ASA's journals and magazines or pick up brochures about various ASA programs

**MEMBERSHIP**—Ask an ASA staff member questions about the Association or member benefits

*Discover the benefits of membership*



## **Internal Revenue Service**

Washington, DC

The Statistics of Income (SOI) Division of the IRS produces income data compiled from tax and information returns filed with the IRS. SOI data include financial information about individuals, business taxpayers, tax-exempt organizations, and more. Data are available through publications, electronic databases, Tax Stats ([www.irs.gov/taxstats](http://www.irs.gov/taxstats)), and SOI's Statistical Information Services, (202) 874-0410.

**415**

## **JMP, a business unit of SAS**

Cary, North Carolina

JMP, a division of SAS, develops JMP® software, which brings comprehensive data analysis to the desktop, empowering users to interactively explore, visualize, and understand their data. Visit us at [www.jmp.com](http://www.jmp.com).

**200, 202**

## **JSM 2008 Denver**

Alexandria, Virginia

Denver, Colorado, host of JSM 2008, welcomes you. Please stop by Booth #107 for visitor information and answers to your questions.

**107**

## **■ John Wiley & Sons**

Hoboken, New Jersey

Wiley-Blackwell is a global publisher of print and electronic statistical information, including International Statistical Reviews; *Journal of the Royal Statistical Society Series A (Statistics in Society)*, *B (Statistical Methodology)*, and *C (Applied Statistics)*; *Biometrics*; *Statistics in Medicine*; *Scandinavian Journal of Statistics*; *Statistics Neerlandica*; *Biometrical Journal*; and *Statistical Analysis and Data Mining*. Visit us online at [www.wiley.com/statistics](http://www.wiley.com/statistics).

**315, 317, 319**

## **■ Johnson & Johnson Family of Companies**

New Brunswick, New Jersey

Johnson & Johnson, through its operating companies, is the world's most comprehensive and broadly based manufacturer of health-care products and a provider of related services for the consumer, pharmaceutical, and medical devices and diagnostics markets.

**417, 419**

## **Kforce Clinical Research Staffing**

Tampa, Florida

Kforce Clinical Research provides a full range of outsourcing alternatives and traditional staffing services for the biopharmaceutical industries. Established in 1988, Kforce Clinical

**125**

Research is a leader in hybrid solutions. Our expertise includes clinical trial monitoring and management, drug safety and surveillance, clinical data management, biostatistics, data entry, and clinical application development.

## **MacKichan Software**

Poulsbo, Washington

Scientific WorkPlace 5.5 simplifies writing, sharing, and doing mathematics. A click of a button allows you to typeset in LaTeX. The integrated computer algebra system lets you solve and plot equations; animate 2D and 3D plots; rotate, move, and fly through 3D plots; create 3D implicit plots; and more.

**219**

## **MedFocus LLC**

Chicago, Illinois

MedFocus offers clinical and scientific research contract outsourcing and staffing to the pharmaceutical, biotechnology, and medical device industries. MedFocus allows you to maintain consistency with high-quality consulting while managing variability in clinical work demand without headcount issues. For more information, visit [www.medfocus.com](http://www.medfocus.com).

**421**

## **★ Minitab Inc.**

State College, Pennsylvania

Minitab 15® is the leading software for statistics education worldwide. It is accurate, reliable, and easy to use, with powerful graphics abilities. Minitab integrates into curriculums seamlessly and affordably and is used at more than 4,000 colleges and universities. Visit [www.minitab.com/minitab](http://www.minitab.com/minitab) for a free trial version.

**114, 116**

## **NCSS**

Kaysville, Utah

We will be displaying our new NCSS 2007 data/statistical analysis software; PASS 2005, our popular power analysis and sample size software; and GESS 2006, our new microarray analysis software. Stop by and pick up a free trial CD while they last.

**301**

## **National Center for Health Statistics**

Hyattsville, Maryland

The NCHS exhibit will showcase the various NCHS programmatic areas, with an emphasis on statistical research and methodology. The exhibit will allow attendees to view and acquire a host of publications, electronic products, and other promotional products.

**409**

## ■ National Security Agency

425, 427

Ft. Meade, Maryland

The Information Assurance mission provides the solutions, products, and services—and conducts defensive information operations—to achieve information assurance for the information infrastructures critical to U.S. national security interests. The foreign signals intelligence, or SIGINT, mission allows for an effective, unified organization and control of all the foreign signals collection and processing activities of the United States.

## ■ Oxford University Press

215, 217

New York, New York

Oxford University Press is a leading international publisher of books and journals in statistics and math. Visit booths 215 and 217 to see our latest titles, enter our raffle to win \$100 worth of books, join our email list, and receive a 20% discount on all titles on display.

## Palisade Corporation

124

Ithaca, New York

Palisade Corporation has been a leading provider of risk analysis, decision analysis, optimization, and data analysis software since 1984. Recently, Palisade released NeuralTools, a neural networks add-in for Microsoft Excel, and StatTools, a statistical analysis add-in for Microsoft Excel that replaces Excel's statistics functions with a robust and accurate set of statistical analysis procedures and routines.

## Pfizer Global Research and Development

327

New London, Connecticut

Imagine a career that touches the lives of people everywhere. Imagine an opportunity to reach beyond your area of expertise to impact something greater than the bottom line. Imagine playing a key role in some of the most critical issues facing health care today. Relying on our scientific talent, a steady stream of breakthroughs ensures the best medicines for man and animals in years to come. This is your career at Pfizer: a career unlike any other.

## Prentice Hall

401, 403

Upper Saddle River, New Jersey

Prentice Hall, a premier college textbook publisher, will display statistics textbooks ranging from the introductory level, such as Agresti/Franklin's *Statistics: The Art and Science of Learning from Data* and McClave/Sincich's *Statistics 10/e*, to more advanced and specialized course texts, such as Blair/Taylor's *Biostatistics for the Health Sciences* and Tanis/Hogg's *A Brief Course in Mathematical Statistics*.

## Prosoft Software, Inc.

329

King of Prussia, Pennsylvania

Prosoft Software, Inc., is a contract research organization with expertise in biostatistics, data management, project management, and medical writing. Our experience spans all areas of drug and medical device development, including preclinical and clinical phases I–IV in such areas as cardiovascular, dermatology, respiratory, allergy, immunology, CNS, and oncology.

## REvolution Computing

405, 407

New Haven, Connecticut

REvolution Computing is the leading commercial provider of software and support for the R statistical and business intelligence tools ([www.revolution-computing.com](http://www.revolution-computing.com)). REvolution's solution for computational statistics is fully supported and easy to use. It includes commercial features and automatic parallel processing. The REvolution solution for computational statistics renders R practical for mainstream, commercial, and regulated use. REvolution Computing truly is R Evolved!

## ■ RTI International

213, 312

Durham, North Carolina

With a staff of more than 2,600 people, RTI International is an independent, nonprofit organization that offers innovative research and technical solutions to governments and businesses worldwide in the areas of health, epidemiology, and pharmaceuticals; advanced technology; surveys and statistics; education and training; economic and social development; and the environment.

## SAGE Publications

324

Thousand Oaks, California

SAGE Publications—an independent international publisher in the social sciences, technology, and medicine—provides journals, books, and electronic media of the highest caliber. Researchers, students, and professionals have relied on our innovative resources for more than 40 years. Please stop by our booth or visit us at [www.sagepub.com](http://www.sagepub.com).

## ● SAS Application

201, 203, 205

Cary, North Carolina

SAS will exhibit its analytical software for statistics, data mining, econometrics, and statistical quality control. Please visit the SAS booth and learn about new directions in statistical graphics, as well as new downloadable software for Bayesian analysis.

## ● SAS Institute, Education Division 207, 209

Cary, North Carolina

SAS Education offers a broad curriculum of SAS, JMP, and statistical courses to support our users. The division administers the SAS Global Certification Program, where users can earn globally recognized credentials for their knowledge. The Higher Education Consulting Program supports institutions of higher learning incorporate SAS into their curricula.

## ● SAS Publishing 204, 206, 208

Cary, North Carolina

Visit the SAS Publishing booth to learn more about saving 20% on orders placed or mailed to us by August 31, new SAS product documentation titles, new SAS Press Series titles, and SAS® Learning Edition 4.1. SAS Publishing staff members are available to answer questions and assist you with your orders.

## SIAM: Society for Industrial and Applied Mathematics 106

Philadelphia, Pennsylvania

Visit the SIAM booth to check out the titles in the ASA-SIAM Series on Statistics and Applied Probability, get recently published books and information, and see sample issues of SIAM's renowned journals. Membership applications also will be available. Don't forget to pick up a copy of SIAM News for the road.

## ● SPSS, Inc. 306, 308

Chicago, Illinois

SPSS Inc. is a leading global provider of predictive analytics software and solutions. More than 250,000 public sector, academic, and commercial customers rely on SPSS to help increase revenue, reduce costs, and detect fraud. Founded in 1968, SPSS is headquartered in Chicago, Illinois. For additional information, please visit [www.spss.com](http://www.spss.com).

## ■ SYSTAT Software, Inc. 225

San Jose, California

SYSTAT is a high-value, integrated desktop statistics and graphics software package for scientists, engineers, and statisticians that provides the most extensive selection of reliable statistics and high-quality, interactive graphics, enabling users to analyze their data, make meaningful discoveries, and present their results attractively and efficiently.

## Salford Systems 224

San Diego, California

Salford Systems develops advanced statistical and data mining software, including the CART® decision tree, MARS® automated

regression, TreeNet® boosted decision trees, and Random Forests®. Salford Systems strives to make the best academic research easily usable by the practicing data analyst and recently won several distinguished international honors.

## Smith Hanley 320

New York, New York

Our two divisions, permanent placement and contract staffing, offer targeted recruitment in statistics, biostatistics, SAS programming, data management, market research health outcomes, and epidemiology. Since 1980, we've provided clients and recruits dedicated service, experience, and insight into industry trends for positions at all levels. Visit [www.smithhanley.com](http://www.smithhanley.com) or [www.smith-hanley-consulting.com](http://www.smith-hanley-consulting.com) for more information.

## Space-Time Research 426

Victoria, Australia

Space-Time Research provides intuitive, easy-to-use business intelligence and statistical solutions. SuperSTAR technology provides statistical, analytical, and multiformat visualization; simple ad hoc reporting; and geospatial analysis. SuperSTAR uses service-oriented architecture technology to deliver client-based and true web applications. Data management features individual confidentiality and data security.

## ■ Springer 307, 309, 406, 408

New York, New York

Springer is one of the largest international publishers of scientific literature (4,000 new books per year and more than 1,200 journals). Springer's statistics book program is world-renowned and has produced many best-selling textbooks, monographs, and reference works. Notable publications include the *Springer Series in Statistics*, *Statistics for Biology and Health*, and *Statistics and Computing*.

## Stat-Ease, Inc. 305

Minneapolis, Minnesota

Stat-Ease, Inc., produces two easy-to-use Windows programs for design of experiments (DOE), including Design-Ease® software for finding breakthrough factors and Design-Expert® software for optimization. The company also offers computer-intensive DOE workshops, including Experiment Design Made Easy, Response Surface Methods for Process Optimization, and Mixture Design for Optimal Formulations.

## ■ StatPoint, Inc. 113

Herndon, Virginia

StatPoint Inc. develops the STATGRAPHICS® line of statistical analysis software products. Used for 25 years for data analysis

by Fortune 1000 companies and small enterprises worldwide, STATGRAPHICS® Centurion XV.II is available in four languages. StatPoint products include STATGRAPHICS® Mobile, STATBEANS® Java Library, and STATGRAPHICS® MultiLingual® (coming this summer), providing immediate interchangeability of input and output languages.

## **StatSoft, Inc.**

**126, 128**

Tulsa, Oklahoma

StatSoft, Inc., creator of STATISTICA, is one of the largest developers worldwide of enterprise-wide and single-user software for data analysis, data mining, and quality control. STATISTICA has received the highest rating in every comparative review of statistics software since its first release (1993)—a record unmatched in the industry.

## **Statistical Society of Canada**

**102**

Ottawa, Ontario

The Statistical Society of Canada's mission is to encourage the development and use of statistics and probability in Canada. It is the Canadian equivalent of the American Statistical Association. The Statistical Society of Canada also offers two levels of accreditation, the Professional Statistician (PStat.) and the Associate Statistician (A.Stat.).

## **The Cambridge Group LTD**

**115**

Westport, Connecticut

The Cambridge Group LTD focuses on careers in biostatistics, clinical data management, clinical systems, and SAS programming. Opportunities range from entry level through executive posts, both permanent and contract, in the pharmaceutical and biotechnology industries.

## **U.S. Department of Education/IES**

**304**

Washington, DC

IES is the research arm of the U.S. Department of Education. Its mission is to provide rigorous evidence on which to ground education practice and policy. This mission is accomplished through its four centers: National Center for Education Statistics, National Center for Education Research, National Center for Education Evaluation and Regional Assistance, and National Center for Special Education Research. Information about research and evaluation activities, funding opportunities, and reports may be found at [ies.ed.gov](http://ies.ed.gov).

## **USDA, NASS**

**414**

Washington, DC

The National Agricultural Statistics Service is a world leader in sampling, data collection, and estimation procedures for economic,

environmental, and agricultural surveys and censuses. The agency also creates a number of remote-sensing and geographic information system statistical products and conducts ongoing applied research on statistical methodology and estimation approaches. Plans are under way for the 2007 Census of Agriculture.

## **W.H. Freeman and Company**

**300, 302**

New York, New York

W.H. Freeman and Company, publisher of high-quality textbooks and media, highlights current bestsellers, new titles, and the innovative learning management system, StatsPortal, in booths 300 and 302. Look for introductory best-selling books in the Moore series, as well as upper-level titles, and see a StatsPortal demo. Visit [www.whfreeman.com/statsportal](http://www.whfreeman.com/statsportal) for more information.

## **Wolfram Research**

**402**

Champaign, Illinois

Wolfram Research is the world's leading developer of computational software for science and technology, offering organization-wide computing solutions. Led by Mathematica, Wolfram's flagship product, the company's software is relied on today by several million enthusiastic users around the world and has been the recipient of many industry awards. Visit [www.wolfram.com](http://www.wolfram.com) for more information.

## **World Scientific Publishing Company**

**326**

Hackensack, New Jersey

World Scientific is an international, academic publisher with eight offices worldwide. Annually, the company publishes more than 400 books and 100 journals in various fields, including physics, mathematics, and engineering.

## **XL Solutions Corporation**

**227, 229**

Seattle, Washington

XL Solutions Corporation—also known as the creator of R\* (R-Star)—provides predictive analytics software and solutions. XL Solutions Consulting Group has provided statistical and mathematical modeling for data analysis and data mining since 1999. For more information, visit [www.xlsolutions-corp.com](http://www.xlsolutions-corp.com). R u Ready?

## **statistics.com**

**318**

Arlington, Virginia

Statistics.com is the leading provider of online professional development courses in statistics. Statistics.com also distributes the Excel add-ins Resampling Stats (resampling) and XLMiner (data mining, neural nets, decision trees, k-nearest neighbor, logistic regression, clustering, Bayes classification, association rules, partitioning, and time series).

## Session Tag Descriptions

We expect both theme and applied sessions to draw a diverse audience.

### THEME ★

Theme sessions are directly relevant to the 2007 JSM theme, "Statistics: Harnessing the Power of Information." These sessions highlight presentations and discussions on the role being played by the statistical sciences in the protection and development of people around the globe. Theme sessions are designed to expand the frontiers of statistical thought, emphasize new directions, and promote interdisciplinary collaborations and partnerships.

### APPLIED ●

Applied sessions have real applications at the heart of their discussions and presentations. Because these sessions are grounded in applications across the many areas of science and engineering, they may involve interdisciplinary work and include presentations by nonstatisticians. Applied sessions range from presentations on state-of-the-art statistical methodology applied to real-world problems to tutorials. All statisticians should find these sessions appealing.

**All sessions are open freely to registered attendees, except fee events or where noted.**

## THURSDAY, JULY 26

### Committee/Business Meetings & Other Activities

5:00 p.m.–6:30 p.m. GA-Room 2473  
**ASA Management Review Committee (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*

7:00 p.m.–9:00 p.m. GA-Room 2473  
**ASA Board of Directors Executive Committee Working Dinner (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*

## FRIDAY, JULY 27

### Committee/Business Meetings & Other Activities

7:30 a.m.–8:30 a.m. GA-Sussex  
**ASA Board of Directors Breakfast (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*

8:00 a.m.–6:00 p.m. GA-Riviera  
**Academic Program Representatives Department Chairs Meeting Day 1 (closed)**  
*Chair(s): Dalene Stangl, Duke University*

8:30 a.m.–5:00 p.m. GA-Audubon  
**ASA Board of Directors Meeting (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*

12:00 p.m.–1:30 p.m. GA-Vienna  
**Academic Program Representatives Department Chairs Lunch (closed)**  
*Chair(s): Dalene Stangl, Duke University*

12:30 p.m.–1:30 p.m. GA-Sussex  
**ASA Board of Directors Lunch (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*

6:00 p.m.–9:00 p.m. GA-Fontainbleau  
**Academic Program Representatives Department Chairs Dinner (closed)**  
*Chair(s): Darlene Stangl, Duke University*

6:30 p.m.–7:30 p.m. GA-Room 2473  
**JSM Staff and ASA Board of Directors Reception (closed)**  
*Chair(s): William B. Smith, American Statistical Association*

The 18th Annual

# GERTRUDE COX SCHOLARSHIP RACE

The Caucus for Women in Statistics, in conjunction with the ASA, presents the 18th annual Gertrude Cox Scholarship Race at the Joint Statistical Meetings in Salt Lake City, Utah. All proceeds will benefit the Gertrude M. Cox Scholarship in Statistics.

- The Race:** There will be two races running concurrently—a competitive 5K race and a 2.5K fun run/ walk.
- When:** Tuesday, July 31, at 7:00 a.m.
- Where:** Location and logistical information will be posted at the Caucus table at the Salt Palace Convention Center.
- How Much:** The entry fee is \$20.00.
- Registration:** Those interested in participating are encouraged to register early. You may register during JSM at the hospitality table for the Caucus for Women in Statistics at the Salt Palace Convention Center, near the registration area. All participants must sign a registration form and waiver. T-shirts for all preregistered runners will be distributed at the race. If you have questions, please contact Karen Davis at [kedavis@cdc.gov](mailto:kedavis@cdc.gov).

## REGISTRATION FORM (each participant must complete and sign form)

Name

Address

City, State/Province

ZIP/Postal Code

Phone

SEX: ☐ M ☐ F Age \_\_\_\_\_

EVENT: ☐ 5 K Race ☐ 2.5 K Fun Run/Walk

T-SHIRT SIZE: ☐ S ☐ M ☐ L ☐ XL

THE FINE PRINT. I understand that running a road race is a potentially hazardous activity. I will not enter and run unless I am medically able and properly trained. I agree to abide by any decision of a race official relative to my ability to complete the run safely. I assume all risks associated with running in this event, including, but not limited to, falls; contact with other participants; and effects of weather, traffic, and course conditions. All such risks are known and appreciated by me. Having read this waiver, knowing these facts, and in consideration of your accepting my entry, I, for myself and anyone entitled to act on my behalf, waive and release the race directors, the race committee, and all sponsors from all claims of liabilities of any kind arising out of my participation in this event, even though such liability may arise as a result of negligence or carelessness on the part of the persons named in this waiver.

Signature

Date

Parent or guardian (if under 18)

Make check payable to *The Gertrude Cox Scholarship Fund*.

Please return this form along with your check to

Karen Davis, Race Organizer, National Center for Health Statistics, 3311 Toledo Road, Room 3213, Hyattsville, MD 20782.



## SATURDAY, JULY 28

Thurs-Sun

**Tours****TR01 Salt Lake Bees Baseball Game**

7:05 p.m.–10:30 p.m. Off Property-Franklin Covey Field

**TR02 Real Salt Lake Soccer Game**

7:30 p.m.–10:30 p.m. Off Property-Rice-Eccles Stadium

**Committee/Business Meetings  
& Other Activities**7:00 a.m.–6:00 p.m. CC-South Foyer  
**JSM Main Registration and ASA Membership/Special Assistance Desk**7:00 a.m.–6:00 p.m. CC-252 A, CC-252B  
**Speaker Work Rooms**7:00 a.m.–7:00 p.m. CC-South Foyer  
**Cyber Center**7:30 a.m.–8:30 a.m. GA-Sussex  
**ASA Board of Directors Breakfast (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*8:00 a.m.–4:00 p.m. GA-Riviera  
**Academic Program Representatives Department Chairs Meeting Day 2 (closed)**  
*Chair(s): Dalene Stangl, Duke University*8:00 a.m.–5:00 p.m. CC-Exhibit Hall D  
**Exhibitor Move In and Lounge**8:30 a.m.–4:30 p.m. GA-Audubon  
**ASA Board of Directors Meeting (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*9:00 a.m.–5:00 p.m. CC-Main Lobby, Level 2  
**Salt Lake City Visitors Information Center**9:00 a.m.–5:00 p.m. CC-Exhibit Hall C  
**Career Placement Service (job posting and resume submission only)**11:30 a.m.–12:30 p.m. GA-Vienna  
**Association of GCRC Statisticians Lunch (closed)**  
*Organizer(s): Robert Oster, The University of Alabama at Birmingham*12:00 p.m.–1:00 p.m. GA-Sussex  
**ASA Board of Directors Lunch (closed)**  
*Chair(s): Mary Ellen Bock, Purdue University*12:00 p.m.–1:30 p.m. GA-Fontainbleau  
**Academic Program Representatives Department Chairs Lunch (closed)**  
*Chair(s): Dalene Stangl, Duke University*12:00 p.m.–5:00 p.m. CC-South Foyer  
**ASA Marketplace**12:30 p.m.–5:30 p.m. GA-Milano  
**Association of GCRC Statisticians Meeting (closed)**  
*Organizer(s): Robert Oster, The University of Alabama at Birmingham*3:00 p.m.–6:00 p.m. GA-Envoy  
**NISS/SAMSI Affiliates Meeting (closed)**  
*Organizer(s): Alan Karr, National Institute of Statistical Sciences***Continuing Education (Fee Events)****CE\_01C**  
**Bayesian Modeling in Practice**  
8:30 a.m.–5:00 p.m. CC-151 G  
ASA  
*Instructor(s): David Spiegelhalter, MRC Biostatistics Unit***CE\_02C%**  
**Applied Longitudinal Analysis**  
8:30 a.m.–5:00 p.m. CC-150 G  
ASA  
*Instructor(s): Garrett Fitzmaurice, Harvard University*

**CE\_03C****Design and Analysis of Crossover Experiments**

8:30 a.m.–5:00 p.m.

CC-150 A-C

Biopharmaceutical Section, ASA

*Instructor(s): Dallas Johnson, Kansas State University***CE\_06C****Nonclinical Statistics for Drug Discovery**

8:30 a.m.–5:00 p.m.

CC-151 DE

ASA

*Instructor(s): Kimberly Crimin, Wyeth; Thomas Vidmar, Pfizer Inc.***CE\_04C****Latent Class Analysis of Survey Error**

8:30 a.m.–5:00 p.m.

CC-150 D-F

Section on Survey Research Methods, ASA

*Instructor(s): Paul Biemer, RTI International/The University of North Carolina at Chapel Hill***CE\_07C****Graphics of Large Datasets**

8:30 a.m.–5:00 p.m.

CC-151 F

Section on Statistical Graphics, ASA

*Instructor(s): Antony Unwin, University of Augsburg; Heike Hofmann, Iowa State University***CE\_05C****Statistical Methods for the Analysis of Recurrent Events**

8:30 a.m.–5:00 p.m.

CC-151 A-C

ASA

*Instructor(s): Richard J. Cook, University of Waterloo; Jerald F. Lawless, University of Waterloo*

Statistics of Income Division

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## SUNDAY, JULY 29

**Tours****TR03 Utah Gold & Silver**

9:00 a.m.–5:00 p.m. CC-South Foyer (200 South Street)

**TR04 Crossroads of the West City Tour**

1:00 p.m.–4:00 p.m. CC-South Foyer (200 South Street)

**Committee/Business Meetings  
& Other Activities**

7:00 a.m.–8:00 a.m. GA-Vienna

**Association of GCRC Statisticians Breakfast (closed)***Organizer(s): Robert Oster, The University of Alabama at Birmingham*

7:00 a.m.–12:30 p.m. GA-Provence

**Committee on Publications Meeting (closed)***Chair(s): Edward Wegman, George Mason University*

7:00 a.m.–6:00 p.m. CC-252 A, CC-252B

**Speaker Work Rooms**

7:00 a.m.–8:30 p.m. CC-South Foyer

**JSM Main Registration and ASA Membership/Special Assistance Desk**

7:00 a.m.–10:30 p.m. CC-South Foyer

**Cyber Center**

7:30 a.m.–9:30 a.m. GA-Embassy

**Committee on Women in Statistics Meeting (closed)***Chair(s): Teri Peterson, Idaho State University*

8:00 a.m.–12:00 p.m. GA-Milano

**Association of GCRC Statisticians Meeting (closed)***Organizer(s): Robert Oster, The University of Alabama at Birmingham*

8:00 a.m.–12:00 p.m.

GA-Tuscany

**Advisory Committee on Teacher Enhancement Business Meeting***Chair(s): Mike Adams, The University of Alabama*

8:00 a.m.–12:00 p.m.

CC-Exhibit Hall D

**Exhibitor Move In**

8:00 a.m.–1:00 p.m.

GA-Grenoble

**IMS Executive Committee Meeting I (closed)***Organizer(s): Elyse Gustafson, Institute of Mathematical Statistics*

9:00 a.m.–12:00 p.m.

GA-Ambassador

**Council of Sections Governing Board Meeting (closed)***Chair(s): S. Lynne Stokes, Southern Methodist University*

9:00 a.m.–5:00 p.m.

CC-South Foyer

**ASA Marketplace**

9:00 a.m.–5:00 p.m.

CC-Main Lobby, Level 2

**Salt Lake City Visitors Information Center**

10:00 a.m.–4:00 p.m.

GA-Savoy

**Writing Workshop (closed)***Chair(s): Nell Sedransk, National Institute of Statistical Sciences; Keith Crank, American Statistical Association*

12:00 p.m.–1:00 p.m.

GA-Vienna

**Association of GCRC Statisticians Lunch (closed)***Organizer(s): Robert Oster, The University of Alabama at Birmingham*

12:00 p.m.–2:00 p.m.

GA-Riviera

**Statistica Sinica Board Meeting (closed)***Organizer(s): Xiao-li Meng, Harvard University*

12:00 p.m.–2:00 p.m.

GA-Embassy

**Journal of Statistics Education Editorial Board Meeting (closed)***Chair(s): William Notz, The Ohio State University*

# General Program Schedule

⊕ Themed Session

● Applied Session

❖ Presenter

CC-Salt Palace Convention Center

GA-The Grand America Hotel

1:00 p.m.–2:30 p.m.

GA-Tuscany

## Committee on Committees Meeting (closed)

*Chair(s): Susan Devlin, The Artemis Group*

5:30 p.m.–7:00 p.m.

CC-151 A-C

## Cancer Center Biostatistics Directors Annual Meeting

*Organizer(s): Terry Hyslop, Thomas Jefferson University*

1:00 p.m.–6:00 p.m.

CC-Exhibit Hall D

## EXPO 2007

5:30 p.m.–7:00 p.m.

GA-Embassy

## Committee on Scientific Freedom and Human Rights Meeting

*Chair(s): Susan Hinkins, NORC at the University of Chicago*

1:00 p.m.–6:00 p.m.

CC-Exhibit Hall D

## ASA Booth #101

1:00 p.m.–6:00 p.m.

CC-Exhibit Hall C

## Career Placement Service (full placement service open)

6:00 p.m.–7:30 p.m.

CC-Ballrooms A-B

## JSM First-Time Attendee Orientation and Reception (open to all first-time attendees, included in registration fee)

*Chair(s): Tena Katsaounis, The Ohio State University*

2:00 p.m.–4:30 p.m.

GA-Murano Garden Salon

## Council of Sections Annual Business Meeting (closed)

*Chair(s): S. Lynne Stokes, Southern Methodist University*

6:00 p.m.–7:30 p.m.

GA-Milano

## Section on Quality and Productivity Executive Committee Meeting (closed)

*Chair(s): William Guthrie, National Institute of Standards and Technology*

3:00 p.m.–4:30 p.m.

GA-Venice

## Caucus for Women in Statistics Executive Committee Meeting (closed)

*Organizer(s): Tena Katsaounis, The Ohio State University*

6:00 p.m.–7:30 p.m.

CC-251 D

## ASA Open Meeting (all welcome)

*Chair(s): Mary Ellen Bock, Purdue University*

4:00 p.m.–5:30 p.m.

GA-Versailles

## 2007 & 2008 ASA Committee Chairs Meeting (closed)

*Chair(s): Susan Devlin, The Artemis Group*

6:00 p.m.–8:00 p.m.

GA-Provence

## Section on Statistics and the Environment Executive Committee Meeting (closed)

*Chair(s): Mary Christman, University of Florida*

4:00 p.m.–6:00 p.m.

GA-Envoy

## Career Development Seminar: You Don't Need To Perish in Order To Publish (free and open to all attendees)

*Chair(s): Janice Lent, Energy Information Administration*

6:00 p.m.–9:00 p.m.

GA-Riviera

## IMS Council Meeting I (closed)

*Organizer(s): Elyse Gustafson, Institute of Mathematical Statistics*

4:30 p.m.–8:00 p.m.

GA-Tuscany

## ENAR Executive Committee Meeting (closed)

*Organizer(s): Kathy Hoskins, ENAR*

6:00 p.m.–9:00 p.m.

GA-Ambassador

## Biometrics Section Executive Meeting (closed)

*Chair(s): Thomas R. Tenhave, University of Pennsylvania*

5:00 p.m.–6:30 p.m.

GA-Audubon

## Council of Sections New Officer Orientation Meeting (closed)

*Chair(s): Linda Gage, California Department of Finance*

6:30 p.m.–8:30 p.m.

Off Property

## Section on Statistical Consulting Executive Committee Meeting (closed)

*Chair(s): Stuart Gansky, University of California, San Francisco*

5:00 p.m.–8:00 p.m.

GA-Vienna

## International Chinese Statistical Association Board Meeting (closed)

*Organizer(s): Ming-Hui Chen, University of Connecticut*

7:00 p.m.–8:00 p.m.

CC-155 B

## Advisory Committee on Continuing Education Presenter Social (closed)

*Chair(s): Katherine Halvorsen, Smith College*

*American Statistical Association*

# OPEN MEETING

**Mary Ellen Bock,**

ASA President

Sunday, July 29, 2007, 6 p.m.

Salt Palace Convention Center, 251 D



## FIND OUT WHAT YOUR ASSOCIATION IS DOING!

Come to the Open Meeting, meet your officers, hear about the following items, among others, and voice your opinions about the ASA:

- 2007 state of the Association – *Mary Ellen Bock*
- Update on ASA finances – *Sastry G. Pantula*
- Update from the Committee on Rewriting the ASA Strategic Plan – *Robert Rodriquez*
- Introduction of Ronald Wasserstein, the incoming ASA executive director – *William B. Smith*
- Summary of 2006 Board task forces – *Sallie Keller-McNulty*
- Questions from the floor – *Executive Committee*

*Please plan to attend and lend your voice to the discussion of important issues affecting the future of the ASA.*



7:00 p.m.–9:00 p.m.

## Isolated Statisticians Meeting

*Organizer(s): Ann Cannon, Cornell College*

CC-150 G

8:00 p.m.–10:30 p.m.

## Opening Mixer (included in registration fee)

CC-Ballrooms C-J

## Continuing Education (Fee Events)

### CE\_01C

#### Bayesian Modeling in Practice

8:30 a.m.–5:00 p.m.

ASA

*Instructor(s): David Spiegelhalter, MRC Biostatistics Unit*

CC-151 G

### CE\_08C

#### Dose Finding in Drug Development

8:00 a.m.–12:00 p.m.

Biopharmaceutical Section, ASA

*Instructor(s): Naitee Ting, Pfizer Inc.; James MacDougall, Bristol-Myers Squibb Company*

CC-151 D-F

### CE\_09C

#### Generalized Linear Mixed Models: Theory and Applications

8:30 a.m.–5:00 p.m.

ASA

*Instructor(s): Oliver Schabenberger, SAS Institute Inc.*

CC-150 G

### CE\_10C

#### Statistical Evaluation of Medical Tests and Biomarkers for Classification

8:30 a.m.–5:00 p.m.

Section on Statistics in Epidemiology, ASA

*Instructor(s): Margaret Pepe, Fred Hutchinson Cancer Research Center; Holly Janes, The Johns Hopkins University; Todd Alonzo, University of Southern California*

CC-150 A-C

### CE\_11C

#### Modeling and Data Analysis for Complex Surveys

8:30 a.m.–5:00 p.m.

Section on Statistics and the Environment, Section on Survey Research Methods, ASA

*Instructor(s): Jay Breidt, Colorado State University; Jean Opsomer, Iowa State University*

CC-150 D-F

### CE\_12C

#### A Practical Guide for the Design and Analysis of Virtual (Computer Model) Experiments

8:30 a.m.–5:00 p.m.

Section on Quality and Productivity, ASA

*Instructor(s): Jerry Sacks, National Institute of Statistical Sciences; William J. Welch, University of British Columbia*

CC-151 A-C

### CE\_13C

#### Data Quality and Record Linkage Techniques

8:30 a.m.–5:00 p.m.

ASA

*Instructor(s): Thomas Herzog, U.S. Department of Housing and Urban Development; Fritz Scheuren, NORC at the University of Chicago; William Winkler, U.S. Census Bureau*

CC-155 A

### CE\_14C

#### Adaptive Dose-Response Studies

1:00 p.m.–5:00 p.m.

ASA

*Instructor(s): Christopher S. Coffey, The University of Alabama at Birmingham; Brenda Gaydos, Eli Lilly and Company; Jose Pinheiro, Novartis Pharmaceuticals*

CC-151 D-F

## Invited Sessions 2:00 p.m.–3:50 p.m.

### 1

CC-251 D

#### ⊕ Bayesian Statistics and Random Matrices—Invited

Section on Bayesian Statistical Science

*Organizer(s): Helene M. Massam, York University*

*Chair(s): Paul Speckman, University of Missouri-Columbia*

2:05 p.m.

**Covariance Selection and Bayes Classification via Modal Shrinkage Estimators—**❖ Jingqin Luo, Washington University in St. Louis; Merlise A. Clyde, Duke University; Edwin Iversen, Duke University

2:30 p.m.

**Discrete Hierarchical Model Search with Conjugate Priors for Log-Linear Parameters—**❖ Adrian Dobra, University of Washington; Helene M. Massam, York University

2:55 p.m.

**Local Graphical Model Search—**❖ Liang Zhang, Duke University; Adrian Dobra, University of Washington; Mike West, Duke University



You are invited to the JSM

# First-Time Attendee

orientation and reception

Salt Palace Convention Center, Ballrooms A-B

Sunday, July 29, 6:00 p.m.–7:30 p.m.

Learn more about how to get the most out of your first JSM experience, meet new people, and network.

## Open to All First-Timers

(Dinner groups will form after the reception.)

### AGENDA

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- **Introduction:** Tena Katsaounis, President, The Caucus for Women in Statistics
- **Good Advice That I Ignored During My First JSM:** Monnie McGee, Southern Methodist University
- **Reception** (*light hors d'oeuvres to be served*)



*This reception is sponsored by: ASA, ENAR, IMS, SSC, WNAR, The Caucus for Women in Statistics*

3:20 p.m. **Flexible Priors for Covariance Matrices in Gaussian Graphical Models**—❖ Bala Rajaratnam, Statistical and Applied Mathematical Sciences Institute; Carlos Carvalho, Duke University; Helene M. Massam, York University

3:45 p.m. **Floor Discussion**

## 2 CC-250 F The Special Interest Group on Volunteerism: Two Years Out—Invited

Section on Statistical Education, Committee on Scientific Freedom and Human Rights, Section on Government Statistics

*Organizer(s): David Banks, Duke University*

*Chair(s): Susan Hinkins, NORC at the University of Chicago*

2:05 p.m. **Update on SIG on Volunteering Efforts**—❖ Robert Starbuck, Wyeth

2:30 p.m. **Developing Graduate Degrees in Statistics at Universities in Vietnam**—❖ Alicia Carriquiry, Iowa State University

2:55 p.m. **Discussion of the Special Interest Group on Statistical Volunteerism**—❖ Jana Asher, Carnegie Mellon University

3:20 p.m. **Promoting Quantitative Literacy for School-Age Children**—❖ Shail J. Butani, Bureau of Labor Statistics

3:45 p.m. **Floor Discussion**

## 3 CC-255 C ● ⊛ Fundamental Statistical Questions Underlying Clinical Trials—Invited

Biopharmaceutical Section, ENAR, Biometrics Section, WNAR

*Organizer(s): Alan Dorfman, Bureau of Labor Statistics*

*Chair(s): William G. Cumberland, University of California, Los Angeles*

2:05 p.m. **Beyond Statistical Methods: Quality of Trial Issues**—❖ Guoxing Soon, U.S. Food and Drug Administration

2:35 p.m. **On Criteria for a Measure of Statistical Evidence in Clinical Trials: What We Want and What We Don't**—❖ Jeffrey D. Blume, Brown University

3:05 p.m. **Disc:** Alan Dorfman, Bureau of Labor Statistics

3:25 p.m. **Floor Discussion**

## 4 CC-250 B ● ⊛ Some New Developments in Statistical Learning—Invited

Section on Statistical Computing, Section on Bayesian Statistical Science, Section on Teaching Statistics in the Health Sciences, Section on Nonparametric Statistics, Section on Physical and Engineering Sciences

*Organizer(s): Ji Zhu, University of Michigan*

*Chair(s): Sijian Wang, University of Michigan*

2:05 p.m. **The Adaptive Lasso and Its Oracle Properties**—❖ Hui Zou, The University of Minnesota

2:35 p.m. **Robust Support Vector Machines**—❖ Yufeng Liu, The University of North Carolina at Chapel Hill

3:05 p.m. **Bayesian Ensemble Active Learning**—❖ Hugh Chipman, Acadia University; Edward I. George, University of Pennsylvania; Robert McCulloch, The University of Chicago Graduate School of Business

3:35 p.m. **Floor Discussion**

## 5 CC-355 A ● ⊛ Time Series Studies of Air Pollution and Health—Invited

WNAR, ENAR, Section on Health Policy Statistics, Section on Risk Analysis, Biometrics Section, Section on Statistics and the Environment

*Organizer(s): Paul Switzer, Stanford University*

*Chair(s): Paul Switzer, Stanford University*

2:05 p.m. **Estimating the Distributed Lag between Air Pollution and Hospitalization Using a Bayesian Hierarchical Model**—❖ Roger Peng, The Johns Hopkins University; Francesca Dominici, The Johns Hopkins University; Leah Welty, Northwestern University

2:35 p.m. **Reassessing the Relationship Between Ozone and Short-Term Mortality in U.S. Urban Communities**—❖ Richard L. Smith, The University of North Carolina at Chapel Hill; Baowei Xu, The University of North Carolina at Chapel Hill; Allen S. Lefohn, A.S.L. & Associates; Paul Switzer, Stanford University

3:05 p.m. **Looking Through the Time Series Study Lens: Do We See Reality or Fiction?**—❖ Elizabeth A. Sheppard, University of Washington

3:35 p.m. **Floor Discussion**

- 6** **⊛ Threshold Estimation for Functions in Nonparametric and Semiparametric Problems—Invited** **CC-250 C**
- Section on Nonparametric Statistics  
*Organizer(s): Moulinath Banerjee, University of Michigan*  
*Chair(s): Kerby Shedden, University of Michigan*
- 2:05 p.m. **Asymptotically Optimal Tests Under Loss of Identifiability in Semiparametric Models**—Rui Song, The University of North Carolina at Chapel Hill; ❖ Michael Kosorok, The University of North Carolina at Chapel Hill; Jason Fine, University of Wisconsin-Madison
- 2:30 p.m. **Trajectories as Predictors of Univariate Responses**—❖ Ian McKeague, Columbia University
- 2:55 p.m. **Multistage Procedures for Change Point Estimation**—❖ George Michailidis, The University of Michigan
- 3:20 p.m. Disc: Moulinath Banerjee, University of Michigan
- 3:40 p.m. **Floor Discussion**
- 3:20 p.m. **Break Detection for a Class of Nonlinear Time Series Models**—❖ Richard A. Davis, Colorado State University; Thomas C. M. Lee, The Chinese University of Hong Kong; Gabriel Rodriguez-Yam, Universidad Autonoma Chapingo
- 3:45 p.m. **Floor Discussion**
- 9** **● Propensity-Score Matching for Observational Studies: Recent Extensions and Refinements—Invited** **CC-251 A**
- IMS, Section on Statistics in Epidemiology, Section on Health Policy Statistics, Biometrics Section, WNAR  
*Organizer(s): Ben B. Hansen, University of Michigan*  
*Chair(s): Jonathan Stroud, University of Pennsylvania*
- 2:05 p.m. **Semiparametric Sequential Estimators for Dynamic Causal Models**—❖ Michael H. Lechner, University of St. Gallen
- 2:30 p.m. **Propensity Score-Matching Design in Studies with Repeated Measures**—❖ Bo Lu, The Ohio State University
- 2:55 p.m. **Matching with Propensity and Prognostic Scores**—❖ Ben B. Hansen, University of Michigan
- 3:20 p.m. Disc: Donald B. Rubin, Harvard University
- 3:40 p.m. **Floor Discussion**
- 7** **Medallion Lecture I—Invited** **CC-155 E**
- IMS, General Methodology, Biometrics Section  
*Organizer(s): Tony Cai, University of Pennsylvania*  
*Chair(s): Brani Vidakovic, Georgia Institute of Technology*
- 2:05 p.m. **Modeling Genes: Statistical Challenges in Modern Genetics**—❖ Peter Donnelly, University of Oxford
- 3:30 p.m. **Floor Discussion**
- 8** **⊛ Nonlinear and Nonstationary Time Series Analysis—Invited** **CC-250 E**
- International Indian Statistical Association  
*Organizer(s): Soumendra N. Lahiri, Texas A&M University*  
*Chair(s): Soumendra N. Lahiri, Texas A&M University*
- 2:05 p.m. **Multiple Local Whittle Estimation in Stationary Systems**—❖ Peter M. Robinson, London School of Economics
- 2:30 p.m. **Generalized R-estimators Under Conditional Heteroscedasticity**—❖ Kanchan Mukherjee, The University of Liverpool
- 2:55 p.m. **Conditions for the Propagation of Memory Parameter from Durations to Counts and Realized Volatility**—❖ Clifford M. Hurvich, New York University
- 10** **● Inference for Multistate Data Under Complex Censoring Structures—Invited** **CC-260**
- ENAR, Biometrics Section, Section on Physical and Engineering Sciences  
*Organizer(s): Somnath Datta, University of Louisville*  
*Chair(s): Susmita Datta, University of Louisville*
- 2:05 p.m. **Statistical Analysis of Multivariate Interval-Censored Data**—❖ Jianguo Sun, University of Missouri-Columbia; Manhua Chen, University of Missouri-Columbia; Xingwei Tong, Academia of Science
- 2:30 p.m. **Analysis of Longitudinal and Response/Failure Time Data from an Observational Study with Missing Observations**—❖ Dianne M. Finkelstein, Harvard/MGH; Natasa Rajcic, Pfizer Inc.; David A. Schoenfeld, MGH/Harvard
- 2:55 p.m. **Multiply Robust Higher-Order U-Statistics Estimators for Continuous-Time Multistate Data Structures**—❖ James Robins, Harvard School of Public Health

3:20 p.m. Disc: Somnath Datta, University of Louisville

3:40 p.m. Floor Discussion

11

CC-155 B

## ● ⬢ Alzheimer's Disease Research in Utah: Analysis Methods for Early Detection, Epidemiology, and Clinical Trials—Invited

ASA, Utah Chapter, Council of Chapters, ENAR, Section on Statistics in Epidemiology, Biometrics Section

Organizer(s): Suzanne Hendrix, Myriad Pharmaceuticals

Chair(s): C. Shane Reese, Brigham Young University

2:05 p.m. Cognitive Change as a Biomarker in the Early Detection of Alzheimer's Disease—❖ Gordon J. Chelune, The University of Utah

2:35 p.m. Analyzing Repeated Neuropsychiatric, Cognitive, and Functional Measures in a Population-Based Study of Dementia—❖ Chris Corcoran, Utah State University; Carl F. Pieper, Duke University; Peter Zandi, The Johns Hopkins University

3:05 p.m. Responder versus Means Analysis: Illustrated with Data from a Phase 2 Study of Tarenflurbil (MPC-7869) in Alzheimer's Disease (AD)—❖ Kenton Zavitz, Myriad Pharmaceuticals; Mark Laughlin, Myriad Pharmaceuticals; Edward Swabb, Myriad Pharmaceuticals

3:35 p.m. Floor Discussion

12

CC-355 F

## ● ⬢ Measuring and Improving Data Quality: A Prerequisite to Harnessing the Power of Information—Invited

Social Statistics Section, Section on Government Statistics, Section on Survey Research Methods

Organizer(s): Nancy Gordon, U.S. Census Bureau

Chair(s): Nancy Gordon, U.S. Census Bureau

2:05 p.m. Assessing the Effectiveness of Using Panel Respondent Mode Preferences—❖ Thomas B. Hoffer, NORC at the University of Chicago; Karen Grigorian, NORC at the University of Chicago; Ron Fecso, National Science Foundation

2:30 p.m. Look and Listen, But Don't Stop: Interviewers and Data Quality in the 2007 SCF—❖ Arthur B. Kennickell, Federal Reserve Board

2:55 p.m. Survey Quality and Quality Metrics: An Economic Approach—❖ Julia Lane, NORC at the University of Chicago; Suzanne Bard, NORC at the

University of Chicago; Judith Petty, NORC at the University of Chicago

3:20 p.m. Disc: Cheryl R. Landman, U.S. Census Bureau

3:40 p.m. Floor Discussion

## Topic-Contributed Sessions

2:00 p.m.–3:50 p.m.

13

CC-355 B

## ● 2007 Government Statistics, Social Statistics, and Survey Research Methods Student Paper Awards Session—Topic-Contributed

Section on Survey Research Methods, Social Statistics Section, Section on Government Statistics, SSC

Organizer(s): Roberta Sangster, Bureau of Labor Statistics

Chair(s): Steven Heeringa, Institute for Social Research

2:05 p.m. Small-Area Estimation in Multivariate Surveys—❖ Hukum Chandra, University of Southampton; Ray Chambers, University of Wollongong

2:25 p.m. Nonparametric Modeling of the Second Order Structure of Processes with Time-Varying Memory—❖ Georg Goerg, Vienna University of Technology; Dana Draghicescu, Hunter College

2:45 p.m. Cosponsorship in the U.S. Senate: A Mixed Effects Approach to Detecting the Subtle Influence of Social Relational Factors on Legislative Behavior—❖ Justin Gross, Carnegie Mellon University; Stephen Fienberg, Carnegie Mellon University; Cosma Shalizi, Carnegie Mellon University; David Krackhardt, Carnegie Mellon University

3:05 p.m. Imputing Missing Data in the FBI's Uniform Crime Reports—❖ Clint Roberts, The Ohio State University; Elizabeth A. Stasny, The Ohio State University; Michael D. Maltz, The Ohio State University

3:25 p.m. Using the Multiple Imputation Technique To Correct for Measurement Error and Statistical Disclosure Control in Sensitive Count Data in a National Survey—❖ Mandi Yu, University of Michigan

3:45 p.m. Floor Discussion

14

CC-255 D

● ⊛ **Efficient Designs in Drug Development—Topic-Contributed**

Biopharmaceutical Section, Biometrics Section, ENAR

*Organizer(s): Michael Smith, Pfizer Inc.*

- 2:05 p.m. **Bayesian Forecasting of Multicenter Enrollment—**  
❖ Byron Jones, Pfizer Inc.
- 2:25 p.m. **A Bayesian Design and Analysis for Dose-Response Using Informative Prior Information—**❖ Michael Smith, Pfizer Inc.; Scott Marshall, Pfizer Inc.
- 2:45 p.m. **Model-Based Trial Design in Depression Using Bayesian Monitoring and Bootstrap Trial Simulation—**❖ Roberto Gomeni, GlaxoSmithKline
- 3:05 p.m. **Optimizing the Manufacturing of Phase III Material During Phase II Trials—**❖ Nitin Patel, Cytel Inc.; Françoise Vandenhende, Eli Lilly and Company
- 3:25 p.m. **Accounting for Patient Heterogeneity in Phase II Clinical Trials—**❖ J. Kyle Wathen, The University of Texas M. D. Anderson Cancer Center; Peter F. Thall, The University of Texas M. D. Anderson Cancer Center; John D. Cook, The University of Texas M. D. Anderson Cancer Center
- 3:45 p.m. **Floor Discussion**

15

CC-255 E

● ⊛ **Novel Analyses of Time-To-Event Data—Topic-Contributed**

Biopharmaceutical Section, ENAR, Section on Risk Analysis

*Organizer(s): Devan V. Mehrotra, Merck & Co., Inc.**Chair(s): Donna Kowalski, Astellas Pharma US*

- 2:05 p.m. **Extensions of Cure Models for Clustered Time-to-Event Data—**❖ Jeremy Taylor, University of Michigan; Yingwei Peng, Queen's University
- 2:25 p.m. **Constructing Approximate Confidence Bounds for the True Survival Curve Using the Kaplan-Meier Survival Function by Adding an Imaginary Failure or Eternal Survivor—**❖ Craig B. Borkowf, Centers for Disease Control and Prevention (CDC)
- 2:45 p.m. **A Two-Stage Procedure for Comparing Hazard Rate Functions—**❖ Peihua Qiu, The University of Minnesota
- 3:05 p.m. **Improved Hazard Ratio Estimation in Small Time-to-Event Trials—**❖ Devan V. Mehrotra, Merck & Co., Inc.; Arthur Roth, Pfizer Inc.
- 3:25 p.m. **Disc:** David P. Harrington, Dana-Farber Cancer Institute
- 3:45 p.m. **Floor Discussion**

16

CC-259

● **Design and Inference in Multinational Trials—Topic-Contributed**

ENAR, Biometrics Section, Biopharmaceutical Section, WNAR

*Organizer(s): Yoko Tanaka, Eli Lilly and Company**Chair(s): Ramon Littell, University of Florida*

- 2:05 p.m. **Design of Multinational Study for Global Development—**❖ Yoshiharu Horie, Nippon Boehringer Ingelheim Co. Ltd.; Masahiro Takeuchi, Kitasato University
- 2:25 p.m. **Sample Size Determination of Japanese Patients for Multiregional Clinical Trial in Oncology—**❖ Risa Sekiguchi, Eli Lilly and Company; Sachio Ogawa, Eli Lilly and Company; Hiroyuki Uesaka, Eli Lilly and Company
- 2:45 p.m. **Issues in Design of Multiregional Trials—**❖ Yoichi Ii, Pfizer Japan Inc.; Osamu Komiyama, Pfizer Japan Inc.; Kazuhiko Kuribayashi, Pfizer Japan Inc.
- 3:05 p.m. **Issues in Conducting Multiregional Trial: Experience in the PMDA Consultation Meetings—**❖ Yuki Ando, Pharmaceuticals and Medical Devices Agency
- 3:25 p.m. **Disc:** Henry Hsu, U.S. Food and Drug Administration
- 3:45 p.m. **Floor Discussion**

17

CC-155 C

● ⊛ **Sufficient Dimension Reduction and High-Dimensional Data—Topic-Contributed**

IMS, Section on Nonparametric Statistics

*Organizer(s): Lexin Li, North Carolina State University**Chair(s): Wenbin Lu, North Carolina State University*

- 2:05 p.m. **Generalized K-Means Inverse Regression Estimation—**❖ Xuerong Wen, University of Missouri-Rolla
- 2:25 p.m. **A Novel Moment-Based Sufficient Dimension Reduction Approach in Multivariate Regression—**❖ Jae Keun Yoo, University of Louisville
- 2:45 p.m. **Principal Components for Regression: A Conditional Point of View—**❖ Liliana Forzani, The University of Minnesota
- 3:05 p.m. **Dimension Reduction in Time Series—**❖ Jin-Hong Park, University of Georgia
- 3:25 p.m. **Model-Free Multivariate Reduced-Rank Model Regression with Categorical Predictor—**❖ Messan C. Setodji, RAND Corporation; Lexin Li, North Carolina State University
- 3:45 p.m. **Floor Discussion**



18

CC-155 F

## ● ⊛ Spatial Statistics Applied to Environment— Topic-Contributed

IMS, Section on Statistical Consulting, Section on Statistics and the Environment

*Organizer(s): Tonglin Zhang, Purdue University*

*Chair(s): Michael Levine, Purdue University*

- 2:05 p.m. **Block Bootstrap Procedures for Modeling Inhomogeneous Spatial Point Patterns—**  
❖ Yongtao Guan, Yale University
- 2:25 p.m. **Assimilation of Current Measurements into a Circulation Model of Lake Michigan—**❖ Zepu Zhang, The University of Chicago; Dmitry Beletsky, University of Michigan; David Schwab, National Oceanic and Atmospheric Administration; Michael Stein, The University of Chicago
- 2:45 p.m. **Spectrum Estimation for Isotropic Intrinsically Stationary Spatial Processes—**❖ Chunfeng Huang, The Ohio State University; Tailen Hsing, The Ohio State University; Noel Cressie, The Ohio State University
- 3:05 p.m. **Taxonomy of Spatially Clustered Disease Data: Capturing and Explaining Spatial Clustering and Cluster—**❖ Ge Lin, West Virginia University
- 3:25 p.m. **Space-Time Latent Structure Modeling for Small-Area Health Data—**❖ Andrew B. Lawson, University of South Carolina
- 3:45 p.m. **Floor Discussion**

19

CC-254 B

## ● ⊛ Bayesian Modeling of Longitudinal or Event-Time Data Subject to Nonresponse or Censoring— Topic-Contributed

Section on Bayesian Statistical Science, ENAR, Section on Health Policy Statistics

*Organizer(s): Susan Paddock, RAND Corporation*

*Chair(s): Jamie Bigelow, Duke University*

- 2:05 p.m. **Bayesian Variable Selection in Linear Mixed-Effects Models for Longitudinal Data with Missing Values—**❖ Xiaowei Yang, University of California, Davis
- 2:25 p.m. **Bayesian Variable Selection for Analyzing Longitudinal Substance Abuse Treatment Data Subject to Informative Censoring—**❖ Susan Paddock, RAND Corporation
- 2:45 p.m. **Approximate Bayesian Model Averaging for Latent Class Pattern Mixture Models with an Unknown Number of Classes—**❖ Jason Roy, Geisinger

Health System; Michael Daniels, University of Florida

- 3:05 p.m. **Institutionalization at Follow-Up: An Application of Principal Stratification to the Evaluation of Substance Abuse Treatment—**❖ Daniel McCaffrey, RAND Corporation; Beth Ann Griffin, RAND Corporation
- 3:25 p.m. **Latent Class Modeling of Growth and Reproduction in Sublethal Toxicity Tests—**❖ Michael Pennell, The Ohio State University; David B. Dunson, National Institute of Environmental Health Sciences
- 3:45 p.m. **Floor Discussion**

20

CC-254 A

## ● ⊛ Section on Bayesian Statistics Student Paper Competition—Topic-Contributed

Section on Bayesian Statistical Science

*Organizer(s): Merlise A. Clyde, Duke University*

*Chair(s): Abel Rodriguez, Duke University*

- 2:05 p.m. **Bayesian Classification of Sleep States in Mice (Student Paper Competition)—**❖ Chaitra Nagaraja, University of Pennsylvania; Shane T. Jensen, University of Pennsylvania; Abraham Wyner, University of Pennsylvania
- 2:25 p.m. **Path Sampling To Compute Bayes Factors: An Adaptive Approach—**❖ Genevieve Lefebvre, McGill University; Russell Steele, McGill University; Alain C. Vandal, McGill University; Sridar Narayanan, McConnell Brain Imaging Centre; Douglas L. Arnold, McConnell Brain Imaging Centre
- 2:45 p.m. **Multivariate Developmental Trajectory Models To Identify Longitudinal Patterns of Disability in Seniors—**❖ Jason Connor, Berry Consultants
- 3:05 p.m. **Analysis of Immunohistochemical Data Using Measurement Error Models—**❖ Ronglai Shen, University of Michigan; Debashis Ghosh, University of Michigan; Jeremy Taylor, University of Michigan
- 3:25 p.m. **Floor Discussion**

**Topic-Contributed Panels 2:00 p.m.–3:50 p.m.****21 CC-251 E  
Identifying and Overcoming Barriers to Teaching a Reformed Introductory Course—Topic-Contributed**

Section on Statistical Education, Section on Teaching Statistics in the Health Sciences

*Organizer(s): Doug Zahn, Zahn and Associates*

*Chair(s): Doug Zahn, Zahn and Associates*

- Panelists:** ❖ Marjorie Bond, Monmouth College  
❖ Christine Kohnen, Saint Olaf College  
❖ Karen Kinard, Tallahassee Community College  
❖ Mary Parker, Austin Community College

3:45 p.m. **Floor Discussion**

**Contributed Sessions 2:00 p.m.–3:50 p.m.****22 CC-254 C  
● ⊛ Bayesian Time Series and Binary Data—Contributed**

Section on Bayesian Statistical Science

*Chair(s): Stephen B. Cohen, Agency for Healthcare Research and Quality*

- 2:05 p.m. **Mixtures of State Space Models for Time Series with Structural Breaks**—❖ Ori Rosen, University of Texas at El Paso; Sally Wood, University of New South Wales; Robert Kohn, University of New South Wales
- 2:20 p.m. **Bayesian Analysis and Applications of a Generalized Threshold Autoregressive Model**—❖ Peng Sun, Merck & Co., Inc.
- 2:35 p.m. **Bayesian Clustering of Time Series with Change Points**—❖ Garrick Wallstrom, University of Pittsburgh; William Hogan, University of Pittsburgh
- 2:50 p.m. **Estimating Kappa Coefficient and Tetrachoric Correlation for Clustered Binary Data**—❖ Xiao Zhang, The University of Alabama at Birmingham; Gary Cutter, The University of Alabama at Birmingham
- 3:05 p.m. **Selected Bayesian Inference for Correlated Binary Data**—❖ Patricia Bahnsen, Stephen F. Austin State University
- 3:20 p.m. **Bayesian Inference in 2 by 2 Tables**—❖ Yong Chen, Johns Hopkins Bloomberg School of Public Health; Sining Chen, Johns Hopkins Bloomberg

3:35 p.m.

School of Public Health; Haitao Chu, Johns Hopkins Bloomberg School of Public Health  
**Classification with Spectroscopic Data Using Bayesian Variable Selection**—❖ Hongxiao Zhu, Rice University; Dennis D. Cox, Rice University

**23 CC-255 B  
● ⊛ Recent Advances in Microarray Data Analysis IV—Contributed**

Biometrics Section

*Chair(s): Veera Baladandayuthapani, The University of Texas M. D. Anderson Cancer Center*

- 2:05 p.m. **A Statistical Method for Selecting Differentially Expressed Genes**—❖ Zhao Chen, Florida Gulf Coast University
- 2:20 p.m. **Inferring Genomic Copy Number from CGH Arrays**—❖ Stephen Erickson, The University of Alabama at Birmingham
- 2:35 p.m. **A Ridge Penalized Principal-Components Approach Based on Heritability for High-Dimensional Data**—❖ Yuanjia Wang, Columbia University; Yixin Fang, Columbia University; Man Jin, Columbia University
- 2:50 p.m. **Robustness of Cancer Risk Prediction Using Microarrays**—❖ Chiang-Ching Huang, Northwestern University; Irene Helenowski, Northwestern University
- 3:05 p.m. **Incorporating Prior Knowledge of Predictors into Penalized Classifiers with Multiple Penalty Terms**—❖ Feng Tai, The University of Minnesota; Wei Pan, The University of Minnesota
- 3:20 p.m. **Optimal Microarray Designs for cDNA Microarray Experiments**—❖ Tathagata Bandyopadhyay, Indian Institute of Management Ahmedabad
- 3:35 p.m. **An Integrated Approach Using Nonparametric Local Correlation to Identify Critical Pathways in Disease**—❖ Yian Chen, Texas A&M University; Marina Vannucci, Texas A&M University

**24 CC-255 A  
● ⊛ Recent Advances in Longitudinal Data Analysis—Contributed**

Biometrics Section, Biopharmaceutical Section

*Chair(s): Kai Fun Yu, National Institutes of Health*

- 2:05 p.m. **Self-Reported Behavior of High-Risk HIV + Youth: Random Effects Models for Multivariate Longitudinal Discrete Data**—❖ Lily Altstein, University of California, Los Angeles



- 2:20 p.m. **Longitudinal Analysis for Post-Transplant Serum Creatinine Data**—❖ Zailong Wang, Novartis Pharmaceuticals; Luen Lee, Novartis Pharmaceuticals
- 2:35 p.m. **Giving Treatment to Controls: When Is It a Good Idea?**—❖ Kimberly Walters, The Ohio State University
- 2:50 p.m. **Comparing the Correlation Coefficients Between the Random Effects in Multivariate Linear Mixed Models**—❖ Yuxiao Tang, Rush University; Chengjie Xiong, Washington University in St. Louis
- 3:05 p.m. **Comparison of ICC and CCC for Assessing Agreement for Data Without and with Replications**—❖ Chia-Cheng Chen, North Carolina State University
- 3:20 p.m. **A Local Sensitivity Analysis Approach to Longitudinal Binary Data with Nonignorable Dropout**—❖ Hui Xie, University of Illinois at Chicago
- 3:35 p.m. **A Comparison of Mixed Effect Models and Cox Proportional Hazard Models for Unbalanced Longitudinal Data**—❖ Wonsuk Yoo, Wayne State University; Dennis Tsilimingras, Wayne State University; John M. Flack, Wayne State University

## 25 CC-255 F ● ⊕ Statistical Issues in Discovery and Nonclinical Development—Contributed

Biopharmaceutical Section, Biometrics Section

*Chair(s): Martha E. Nunn, Boston University*

- 2:05 p.m. **A New, Convolution-Based Approach to Developing a Level-A In Vitro In Vivo Correlation**—❖ Roel Straetmans, Johnson & Johnson PRD; Tom Jacobs, University Hasselt; Geert Molenberghs, Hasselt University; Luc Bijnen, Johnson & Johnson PRD
- 2:20 p.m. **Application of Group Sequential Methodology to a Preclinical Model**—❖ Lixin Han, Wyeth; Suzana Marusic, Wyeth
- 2:35 p.m. **Developing Statistical Methods for Setting Specification Limits**—❖ Michelle Quinlan, University of Nebraska-Lincoln; Erin Blankenship, University of Nebraska-Lincoln; Walt Stroup, University of Nebraska-Lincoln; James Schwenke, Boehringer Ingelheim Pharmaceuticals, Inc.
- 2:50 p.m. **Statistical Consideration in the Evaluation of Red Blood Cell Products**—❖ Jeongsook Kim, U.S. Food and Drug Administration; Tie-Hua Ng,

U.S. Food and Drug Administration

- 3:05 p.m. **Optimization of Dilution Scheme**—❖ Andrew Chen, MedImmune, Inc.; Harry Yang, MedImmune, Inc.; Iksung Cho, MedImmune, Inc.
- 3:20 p.m. **Statistical Analysis of Measurement Data with Values Below Detection Limits**—❖ Donghui Zhang, sanofi-aventis; Cun-Hui Zhang, Rutgers University
- 3:35 p.m. **One-Sided Test for Gene-Gene Association**—❖ Chaehyung Ahn, Rho, Inc.

## 26 CC-250 A Generalized Distributions and Testing Methods—Contributed

General Methodology, Biopharmaceutical Section, IMS, Section on Physical and Engineering Sciences, SSC

*Chair(s): Jing Zhao, Merck & Co., Inc.*

- 2:05 p.m. **Iterative Modified Likelihood Ratio Test for Homogeneity**—❖ Pengfei Li, University of Waterloo; Jiahua Chen, University of British Columbia
- 2:20 p.m. **The Equivalence Between Selecting and Hypothesis Testing**—❖ Weixing Cai, Syracuse University; Pinyuen Chen, Syracuse University
- 2:35 p.m. **Small Sample Behavior of Resampling Methods**—❖ Dongmei Li, The Ohio State University; Jason C. Hsu, The Ohio State University
- 2:50 p.m. **The Skew Generalized Secant Hyperbolic Distribution and Its Properties**—❖ David Vaughan, Wilfrid Laurier University
- 3:05 p.m. **Generalized Exponentiated Beta Distribution**—❖ Alfred A. Akinsete, Marshall University
- 3:20 p.m. **A Study of Robust Estimation Approach for Analysis of Variance When the Distribution of Error Terms Is Non-Normal**—❖ Aysun Çetinyürek, Başkent University; Bridal Senoglu, Ankara Universities
- 3:35 p.m. **Floor Discussion**

## 27 CC-155 D ⊕ Multiple Hypothesis Testing and Geomics—Contributed

IMS, Biometrics Section

*Chair(s): John Emerson, Yale University*

- 2:05 p.m. **Hierarchical Dependence in Meta-Analysis**—❖ John R. Stevens, Utah State University; Alan M. Taylor, Brigham Young University-Idaho

- 2:20 p.m. **Sequential Hypothesis Testing in Sensor Networks**—❖ Yajun Mei, Georgia Institute of Technology
- 2:35 p.m. **Modified Holm's Critical Values Using Correlation**—❖ Zijiang Yang, Temple University; Sanat Sarkar, Temple University
- 2:50 p.m. **On the Probability of Correct Selection for Large k Populations with Application to Microarray Data**—❖ Jason Wilson, University of California, Riverside; Xinping Cui, University of California, Riverside
- 3:05 p.m. **Alpha-Investing: A New Multiple Hypothesis Testing Procedure**—❖ Robert Stine, University of Pennsylvania; Dean Foster, University of Pennsylvania
- 3:20 p.m. **Statistics on High-Dimensional Data Analysis**—❖ Yingli Qin, Iowa State University; Song Xi Chen, Iowa State University
- 3:35 p.m. **Pseudo-ROC: Method Comparisons in the Absence of a 'Gold Standard'**—❖ Richard Bourgon, European Bioinformatics Institute

**28****CC-355 D****● ⊛ Health Policy Interventions and Methods—Contributed**

Section on Health Policy Statistics, WNAR

*Chair(s): Arvind Jain, RAND Corporation*

- 2:05 p.m. **Relationship Between Competitiveness of Colleges and Levels of Tobacco Use**—❖ Joost Bottenbley, The Johns Hopkins University; Yasmin H. Said, George Mason University; Edward Wegman, George Mason University; Samer Ellahham, Innovative Medical Institute/Paragon Cardiovascular Foundation; David Anderson
- 2:20 p.m. **Restriction of Trans Fatty Acids in Washington, DC, Metropolitan Area: Health Benefits and Economic Impact**—Joost Bottenbley, The Johns Hopkins University; Samer Ellahham, Innovative Medical Institute/Paragon Cardiovascular Foundation; Yasmin H. Said, George Mason University; Edward Wegman, George Mason University; ❖ Malda Bashi, Paragon Cardiovascular Foundation
- 2:35 p.m. **Price Indexes with a Health Insurance Component**—❖ Ralph Bradley, Bureau of Labor Statistics

- 2:50 p.m. **Multiple Imputation of the Euroqol EQ-5D: Testing Different Approaches Using IVEWare**—❖ Robert Gerzoff, Centers for Disease Control and Prevention; Theodore J. Thompson, Centers for Disease Control and Prevention
- 3:05 p.m. **A Choice of Prediction Rules in Logistic Regression Models**—❖ Melvin Ott
- 3:20 p.m. **Nonparametric Confidence Intervals for the Mean of a Right-Skewed Distribution**—❖ Kenny Shum, The Johns Hopkins University; Scott Zeger, The Johns Hopkins University
- 3:35 p.m. Floor Discussion

**29****CC-251 C****● ⊛ Data Analysis and Modeling—Contributed**

Section on Physical and Engineering Sciences, Section on Quality and Productivity

*Chair(s): Kristofer Jennings, Purdue University*

- 2:05 p.m. **A New Statistical Approach for the Analysis of Uncertain Systems**—❖ Xinja Chen, Louisiana State University; Kemin Zhou, Louisiana State University; Jorge Aravena, Louisiana State University
- 2:20 p.m. **The Efficiency of Ridge Regression Estimators with Respect to Zellner's Balanced Loss Function**—❖ Marvin Gruber, Rochester Institute of Technology
- 2:35 p.m. **Identification of Dispersion Effects in Replicated Experiments**—❖ Cheryl Dingus, Battelle; Angela Dean, The Ohio State University; Bruce Ankenman, Northwestern University
- 2:50 p.m. **A Sequential Methodology for Change Point Estimation**—❖ Yan Lan, University of Michigan; Moulinath Banerjee, University of Michigan; George Michailidis, The University of Michigan
- 3:05 p.m. **Inference for Multipiecewise Regression Using the Bootstrap**—❖ Trevor Craney, Sikorsky
- 3:20 p.m. **Generalized Confidence Intervals for Proportion of Conformance**—❖ Paul Patterson, USDA Forest Service
- 3:35 p.m. **Analysis of Probability of Detection and Probability of Alarm on Sonic IR Inspection Data Using the Mixed Effects Model and Bootstrapping**—❖ Chunwang Gao, Iowa State University; William Meeker, Iowa State University; Donna Mayton, SAIC

30

CC-251 B

## ● Statistical Process Control and Other Related Topics in Quality—Contributed

Section on Quality and Productivity

*Chair(s): William Guthrie, National Institute of Standards and Technology*

- 2:05 p.m. **Multivariate Process Control for Improved Detection of Changes in Process Location—**  
❖ Amitava Mitra, Auburn University
- 2:20 p.m. **Monitoring the Slopes of Linear Profiles—**❖ Junjia Zhu, The Pennsylvania State University
- 2:35 p.m. **Monitoring of Hazard Rates for Dynamically Changing Observations—**❖ Emmanuel Yashchin, IBM T.J. Watson Research Center
- 2:50 p.m. **Benefits of Integrating Operational Profiles with Classical Acceptance Sampling in the 2010 U.S. Census—**❖ Thomas George, Evolver, Inc.
- 3:05 p.m. **Sampling Procedures for Extending the Use of the Fishbone Diagram—**❖ Frank Matejcik, South Dakota School of Mines
- 3:20 p.m. **Floor Discussion**

31

CC-251 F

## Interesting Statistical Applications—Contributed

Section on Statistical Education, General Methodology, Section on Teaching Statistics in the Health Sciences

*Chair(s): James Cochran, Louisiana Tech University*

- 2:05 p.m. **Regression Through the Origin: Models and Methods—**❖ Patrick Johnston, Children's Hospital Boston
- 2:20 p.m. **Testing the Score Invariance of State Performance Tests Over Time—**❖ Jiahe Qian, Educational Testing Service
- 2:35 p.m. **Inference for Normal Mixture Model, Univariate or Multivariate, in Both Mean, and Variance—**  
❖ Xianming Tan, Queens University; Jiahua Chen, University of British Columbia
- 2:50 p.m. **Measurement Error in Factor Analysis: The Question of Structural Validity—**❖ Michael K. Lauritzen, Brigham Young University; Landon Poppleton, Brigham Young University; Mitchell Harris, Brigham Young University; Naomi Hunsaker, Brigham Young University; Robert Bubb, Brigham Young University; Bruce Brown, Brigham Young University
- 3:05 p.m. **The Central Limit Theorem and Structural Validity in Factor Analysis—**❖ Landon Poppleton,

Brigham Young University; Mitchell Harris, Brigham Young University; Michael K. Lauritzen, Brigham Young University; Robert Bubb, Brigham Young University; Bruce Brown, Brigham Young University

3:20 p.m.

**Determining a Minimum Number of Observations in Factor Analytic Studies—**❖ Robert Bubb, Brigham Young University; Bruce Brown, Brigham Young University

3:35 p.m.

**A Meta-Analysis of the Content and Effectiveness of Training Programs for Federal and State Transportation Employees—**John Aleong, University of Vermont; ❖ Chandra Aleong, Delaware State University

32

CC-250 D

## ● Water-Related Issues and Methodology—Contributed

Section on Statistics and the Environment, Biometrics Section

*Chair(s): Annie Chu, University of California, Los Angeles*

- 2:05 p.m. **Functional Linear Models for Daily and Yearly Streamflow Measures—**❖ Mark Greenwood, Montana State University; Johnnie N. Moore, University of Montana; Joel T. Harper, University of Montana
- 2:20 p.m. **Modeling Shark Bycatch: The Zero-Inflated Negative Binomial Regression Model with Smoothing—**❖ Mihoko Minami, Institute of Statistical Mathematics
- 2:35 p.m. **A Distance-Based Classifier with Application to Microbial Source Tracking—**❖ Jayson Wilbur, Worcester Polytechnic Institute
- 2:50 p.m. **Grain Size Distributions in Modern and Ancient Fluvial Systems—**❖ Snehalata Huzurbazar, University of Wyoming
- 3:05 p.m. **Spatial Modeling for Groundwater Arsenic Levels in North Carolina—**❖ Dohyeong Kim, Duke University; Marie Lynn Miranda, Duke University; Joshua Tootoo, Duke University; Alan E. Gelfand, Duke University
- 3:20 p.m. **Change Point Analysis for Water Pressure Data—**Snehalata Huzurbazar, University of Wyoming; ❖ Arunendu Chatterjee, University of Wyoming
- 3:35 p.m. **Weibull Prediction Limits with Retesting—**❖ Kirk Cameron, MacStat Consulting, Ltd.

33

### ● Modeling and Estimation in Environmental and Occupational Health—Contributed

Section on Statistics in Epidemiology, Section on Health Policy Statistics

*Chair(s): Dirk Moore, University of Medicine and Dentistry of New Jersey*

- 2:05 p.m. **A Comparative Analysis of the Chronic Effects of Fine Particulate Matter**—❖ Sorina Eftim, The Johns Hopkins University; Holly Janes, The Johns Hopkins University; Aidan McDermott, The Johns Hopkins University; Jonathan Samet, The Johns Hopkins University; Francesca Dominici, The Johns Hopkins University
- 2:20 p.m. **The Effect of PM<sub>2.5</sub> on Hospital Admissions Rates by Season and Region**—❖ Keita Ebusu, Yale University; Michelle Bell, Yale University; Roger Peng, The Johns Hopkins University; Francesca Dominici, The Johns Hopkins University
- 2:35 p.m. **Statistical Issues in Health Effects of Air Pollution**—❖ Donna Stroup, Klemm Analysis Group, Inc.; Rebecca Klemm, Klemm Analysis Group, Inc.
- 2:50 p.m. **Exposure-Response Assessment of Airborne Indoor Allergen Immunoassay**—❖ Juan Liang, University of Cincinnati; Linda Levin, University of Cincinnati; Tiina Reponen, University of Cincinnati; Grace LeMasters, University of Cincinnati; David Bernstein, University of Cincinnati; Rolanda Olds, University of Cincinnati; Zana Lummus, University of Cincinnati
- 3:05 p.m. **Correcting for Shared Measurement Error in Complex Dosimetry Systems**—❖ Terri K. Johnson, University of Southern California; Daniel Stram, University of Southern California
- 3:20 p.m. **The Comparison of Fitted Nonlinear Exposure-Response Relationships in Cox Models Using Smoothing Methods Through Simulations**—❖ Usha Govindarajulu, Yale University; Betty Malloy, American University; Bhaswati Ganguli, University of Calcutta; Donna Spiegelman, Harvard School of Public Health; Ellen Eisen, Harvard School of Public Health
- 3:35 p.m. **Recovering the Estimated Slope of an Unobservable Predictor in a Simple Regression**—❖ Wenyaw Chan, The University of Texas at Houston; Hung-Wen Yeh, The University of Kansas Medical Center; Elaine Symanski, University of Texas at Houston

CC-258

34

### ● Modeling and Estimation of Disease Prevalence, Incidence, and Spread—Contributed

Section on Statistics in Epidemiology, Section on Health Policy Statistics, Section on Teaching Statistics in the Health Sciences

*Chair(s): Leann Myers, Tulane University*

- 2:05 p.m. **Informative Allocation To Stabilize MLE in Finite Mixture Models**—❖ Nong Shang, Centers for Disease Control and Prevention
- 2:20 p.m. **An Incidence Model for Capture Recapture**—❖ Lawrence Lessner, State University of New York at Albany
- 2:35 p.m. **Spatial Analysis of Breast Cancer Incidence in Rockland County, New York County, and Western Queens County**—❖ Heather Watson, New York University; Mengling Liu, New York University; Judith D. Goldberg, New York University
- 2:50 p.m. **Hills, Valleys, and Rivers: The Transmission of Raccoon Rabies over an Uneven Landscape**—❖ David Wheeler, Emory University; Lance Waller, Emory University
- 3:05 p.m. **A Simulation Model for Testing the Effect of Interventions During a Pandemic Influenza Outbreak**—❖ Xiaoping Jin, Centers for Disease Control and Prevention; Hong Zhou, Centers for Disease Control and Prevention; William W. Thompson, Centers for Disease Control and Prevention; Po-Yung Cheng, Centers for Disease Control and Prevention; David K. Shay, Centers for Disease Control and Prevention; Michael Haber, Emory University
- 3:20 p.m. **Floor Discussion**

35

### ● Imputation of Missing Data: Applications and Methods—Contributed

Section on Survey Research Methods, Section on Health Policy Statistics, Biometrics Section

*Chair(s): Meena Khare, National Center for Health Statistics*

- 2:05 p.m. **Adjusting the German Labor Force Survey for Under-Reporting by Means of Calibrated Imputation**—❖ Hans Kiesel, Institute for Employment Research; Susanne Rässler, Institute for Employment Research

CC-257

CC-355 C



- 2:20 p.m. **Not Just Another Multiple Imputation: Practical Aspects for Highly Correlated Data**—❖ Lester Curtin, Centers for Disease Control and Prevention; Nathaniel Schenker, National Center for Health Statistics; Jeffrey Hughes, Centers for Disease Control and Prevention; Lori Borrund, Centers for Disease Control and Prevention
- 2:35 p.m. **Data Imputation Models for Nontrended Price Data**—❖ Kennon Copeland, IMS Health; Boris Brodsky, IMS Health
- 2:50 p.m. **Weight Adjustments for Fractional Regression Hot Deck Imputation**—❖ Min Hui Paik, Iowa State University; Michael D. Larsen, Iowa State University
- 3:05 p.m. **Robust Sequential Regression Imputation Method**—❖ Irina Bondarenko, University of Michigan; Trivellore E. Raghunathan, University of Michigan
- 3:20 p.m. **Imputation of Rental Equivalence in the Consumer Expenditure Interview Survey**—❖ Barry Steinberg, Bureau of Labor Statistics; Eric Keil, Bureau of Labor Statistics; David Swanson, Bureau of Labor Statistics; Shirley Tsai, Bureau of Labor Statistics; Garner Thesia, Bureau of Labor Statistics
- 3:35 p.m. Floor Discussion

## 36 CC-355 E ● Sampling Design: Methods, Adaptation, Redesign—Contributed

Section on Survey Research Methods

*Chair(s): Vincent G. Iannacchione, RTI International*

- 2:05 p.m. **Multiple Matrix Sampling: A Review**—❖ Jeffrey Gonzalez, Bureau of Labor Statistics; John L. Eltinge, Bureau of Labor Statistics
- 2:20 p.m. **Estimating Population Proportions Using Link-Tracing Sampling Designs with Subsampling and Partial Knowledge on Degree Distribution**—❖ Mike Kwanisai, NORC at the University of Chicago
- 2:35 p.m. **Some Statistical Issues in Adapting Sample Designs for Surveys Requiring Rapid Response**—❖ Allison Deal, The University of North Carolina at Chapel Hill; William D. Kalsbeek, The University of North Carolina at Chapel Hill
- 2:50 p.m. **Optimal 2-Stage Sampling Theory for Business Customer Satisfaction Surveys**—❖ John Rotondo, AT&T Labs - Research
- 3:05 p.m. **An Automated Procedure for Forming Contiguous Sampling Units for Area Probability Samples**—

❖ Bryce Johnson, Westat; Jill M. Montaquila, Westat; Andrew Heller, Westat

- 3:20 p.m. **Selection of Small and Large Schools in State and County School Surveys**—❖ Tonja M. Kyle, Macro International; Pedro J. Saavedra, Macro International; James G. Ross, Macro International
- 3:35 p.m. **Reduction of Sample Areas in the Consumer Price Index and Consumer Expenditure Survey Designs**—❖ Lawrence Ernst, Bureau of Labor Statistics; William H. Johnson, Bureau of Labor Statistics; William E. Larson, Bureau of Labor Statistics

## Special Presentation 4:00 p.m.–5:50 p.m.

### 37 CC-255 E Introductory Overview Lecture 1: Adaptive Designs and Other Emerging Issues in Clinical Trials—Other

ASA, ENAR, WNAR, IMS, SSC, Committee on Applied Statisticians

*Organizer(s): Mani Y. Lakshminarayanan, Pfizer Inc.*

*Chair(s): Inna Perevozskaya, Merck & Co., Inc.*

- 4:05 p.m. **Designing Clinical Trials To Evaluate Dynamic Treatment Regimes**—❖ Peter F. Thall, The University of Texas M. D. Anderson Cancer Center
- 4:50 p.m. **When Would I Consider Adaptive Design for Late-Stage Development?**—❖ Keaven M. Anderson, Merck & Co., Inc.
- 5:35 p.m. Floor Discussion

## Invited Sessions 4:00 p.m.–5:50 p.m.

### 38 CC-250 E ● ⊕ Curve Forecasting in Modern Business—Invited

Business and Economics Statistics Section

*Organizer(s): Haipeng Shen, The University of North Carolina at Chapel Hill*

*Chair(s): Hui Zhi, GlaxoSmithKline*

- 4:05 p.m. **Bayesian Forecasting of an Inhomogeneous Poisson Process with Applications to Call Center Data**—❖ Jonathan Stroud, University of Pennsylvania; Jonathan Weinberg, University of Pennsylvania; Lawrence D. Brown, University of Pennsylvania

- 4:30 p.m. **Interday Forecasting and Intraday Updating of Call Center Arrivals**—◆ Haipeng Shen, The University of North Carolina at Chapel Hill; Jianhua Z. Huang, Texas A&M University
- 4:55 p.m. **Bayesian Modeling and Forecasting of Intraday Electricity Load and Spot Prices**—◆ Michael S. Smith, University of Melbourne
- 5:20 p.m. Disc: J. Stephen Marron, The University of North Carolina at Chapel Hill
- 5:45 p.m. **Floor Discussion**

## 39

## CC-355 B

● ⊛ **Design and Analysis for Genome-Wide Association Studies—Invited**

ENAR, Section on Statistics in Epidemiology, Biometrics Section, WNAR  
*Organizer(s): Colin O. Wu, National Heart, Lung, and Blood Institute*  
*Chair(s): Jungnam Joo, National Heart, Lung, and Blood Institute*

- 4:05 p.m. **Statistical Issues Arising from Analysis of Genome-Wide Case-Control Association Studies**—◆ Gang Zheng, National Heart, Lung, and Blood Institute; Jungnam Joo, National Heart, Lung, and Blood Institute; Colin O. Wu, National Heart, Lung, and Blood Institute; Nancy L. Geller, National Heart, Lung, and Blood Institute
- 4:30 p.m. **Multistage Sampling for Genetic Studies**—◆ Robert C. Elston, Case Western Reserve University
- 4:55 p.m. **Testing Strategies for Genome-Wide Association Studies: Using the Same Dataset for Screening and Replication**—◆ Christoph Lange, Harvard School of Public Health
- 5:20 p.m. **Interactions in Whole-Genome Association Studies**—◆ Josephine Hoh, Yale University
- 5:40 p.m. **Floor Discussion**

## 40

## CC-155 F

● ⊛ **First Hitting Time Models and Threshold Regression—Invited**

SSC, Biometrics Section  
*Organizer(s): George A. Whitmore, McGill University*  
*Chair(s): George A. Whitmore, McGill University*

- 4:05 p.m. **What Hides Behind the Data?**—◆ Odd O. Aalen, University of Oslo
- 4:35 p.m. **A Class of Simple Lifetime Regression Models Resulting from First-Hitting Times**—◆ Thierry Duchesne, Laval University

- 5:05 p.m. **Longitudinal Data in Threshold Regression: Implementation and Relation to Cox Regression with Time-Varying Covariates**—◆ Mei-Ling Ting Lee, The Ohio State University; George A. Whitmore, McGill University
- 5:35 p.m. **Floor Discussion**

## 41

## CC-255 D

● **The Role of Statistical Standards in Federal Surveys—Invited**

Section on Survey Research Methods, Section on Government Statistics, Social Statistics Section

*Organizer(s): Pamela D. McGovern, U.S. Census Bureau*

*Chair(s): Jennifer Madans, National Center for Health Statistics*

- 4:05 p.m. **Evaluation of Prospective Costs and Benefits of Standards for Statistical Programs**—◆ John L. Eltinge, Bureau of Labor Statistics
- 4:30 p.m. **Developing and Implementing Data Quality Standards at the U.S. Census Bureau**—Pamela D. McGovern, U.S. Census Bureau; ◆ David C. Whitford, U.S. Census Bureau; John M. Bushery, U.S. Census Bureau
- 4:55 p.m. **Lessons Learned Using Statistical Standards To Improve/Ensure Data Quality**—◆ Marilyn Seastrom, National Center for Education Statistics
- 5:20 p.m. Disc: Brian Harris-Kojetin, Office of Management and Budget
- 5:40 p.m. **Floor Discussion**

## 42

## CC-250 F

● **Collaboration Between Academia, Industry, and Government in Statistical Sciences—Invited**

SPAIG Committee, Section on Statisticians in Defense and National Security, ENAR

*Organizer(s): Morteza Marzjarani, Saginaw Valley State University*

*Chair(s): George Williams, Amgen Inc.*

- 4:05 p.m. **The 2007 SPAIG Salary Survey**—◆ Michael D. Larsen, Iowa State University; Dianne Anderson, Iowa State University; Janice Larson, Iowa State University
- 4:30 p.m. **Student Recruitment Database**—◆ Robert G. Wilkinson, The Lubrizol Corporation
- 4:55 p.m. **The WPI-NCHS Partnership**—◆ Balgobin Nandram, Worcester Polytechnic Institute

5:20 p.m. **How to Compete for the Academe, Industry, and Government (SPAIG) Award?**—❖Jai W. Choi, National Center for Health Statistics; Robert Starbuck, Wyeth

5:45 p.m. **Floor Discussion**

## 43 Rietz Lecture—Invited

IMS

*Organizer(s): Tony Cai, University of Pennsylvania*

*Chair(s): Tze Leung Lai, Stanford University*

4:05 p.m. **Statistical Problems of Gene Mapping**—❖David Siegmund, Stanford University

5:30 p.m. **Floor Discussion**

## 44 ● ⊛ Challenge Issues on Longitudinal Biomedical Data Analysis—Invited

Biometrics Section, ENAR, Section on Statistics in Epidemiology, Section on Health Policy Statistics, WNAR

*Organizer(s): Annie Qu, Oregon State University*

*Chair(s): Annie Qu, Oregon State University*

4:05 p.m. **Does Mis-specification of the Random Effects Distribution Affect Predictions of Random Effects?**—❖Charles E. McCulloch, University of California, San Francisco; John Neuhaus, University of California, San Francisco

4:30 p.m. **Modeling of Mean-Covariance Structures in Generalized Estimating Equations for Longitudinal Data**—❖Jianxin Pan, University of Manchester

4:55 p.m. **Finite Sample Bias Corrections to Sandwich Covariance Estimators for Longitudinal and Clustered Data**—❖John Preisser, The University of North Carolina at Chapel Hill; Bing Lu, Brown University; Bahjat Qaqish, The University of North Carolina at Chapel Hill

5:20 p.m. **Analysis of Clustered Longitudinal Data with Applications to Clinical Dental Research**—❖Brian G. Leroux, University of Washington

5:45 p.m. **Floor Discussion**

## 45 Probing the Universe with Nonparametric Methods—Invited

IMS, Biometrics Section, Section on Nonparametric Statistics

*Organizer(s): Christopher Genovese, Carnegie Mellon University*

*Chair(s): Xu Han, University of Pennsylvania*

4:05 p.m. **Statistical Issues in Detecting Gamma-Ray Pulsars**—❖John Rice, University of California, Berkeley

4:35 p.m. **Semiparametric Bivariate Density Estimation with Irregularly Truncated Data**—❖Chad Schafer, Carnegie Mellon University

5:05 p.m. **Clustering of Absorption Systems**—❖Ji Meng Loh, Columbia University

5:35 p.m. **Floor Discussion**

## 46 ● ⊛ Gerontologic Biostatistics—Invited

Section on Statistics in Epidemiology, Biometrics Section, WNAR

*Organizer(s): Heather G. Allore, Yale University*

*Chair(s): Heather G. Allore, Yale University*

4:05 p.m. **Integrating Qualitative and Quantitative Information in Clinical Epidemiologic Research with Older Populations**—❖Peter H. Van Ness, Yale University

4:25 p.m. **Meta-Analysis at the Individual Level: Synthesis of Inferences Across Multiple Gerontological Databases**—❖Karen Bandeen-Roche, Johns Hopkins Bloomberg School of Public Health

4:45 p.m. **Multiple Trajectories in Aging Research**—❖Carl F. Pieper, Duke University

5:05 p.m. **Disc: Christina Wolfson, McGill University**

5:25 p.m. **Disc: Brenda F. Kurland, Fred Hutchinson Cancer Research Center**

5:45 p.m. **Floor Discussion**

## 47 ● ⊛ Land Grant University Ethics (LANGURE): The Ethical Use of Statistics in Research—Invited

Section on Statistical Consulting, Section on Statistical Education

*Organizer(s): Marcia Gumpertz, North Carolina State University*

*Chair(s): Don Edwards, University of South Carolina*

4:05 p.m. **The Ethical Use of Statistics in Research**—❖George P. McCabe, Purdue University

4:30 p.m. **Training University Students in Ethical Use of Statistics as Part of the LANGURE Project**—❖Larry A. Nelson, North Carolina State University

4:55 p.m. **Land Grant University Ethics (LANGURE): The Ethical Use of Statistics in Research**—❖Michael Crotty, SAS Institute Inc.



- 5:20 p.m. Disc: John Gardenier, Retired  
 5:40 p.m. Floor Discussion

#### 48 CC-251 B ● Design- and Model-Based Sampling and Inference—Invited

Section on Statistics and the Environment, Section on Statistics in Epidemiology, Biometrics Section, General Methodology, Section on Survey Research Methods

*Organizer(s): Ronald E. McRoberts, USDA Forest Service*

*Chair(s): Gretchen G. Moisen, USDA Forest Service*

- 4:05 p.m. **Design-Based, Model-Based, and Model-Assisted Sampling, and Inference in Natural Resources—**  
 ❖ Mary Christman, University of Florida
- 4:30 p.m. **Optimal Spatial Sampling: Probability-Based or Model-Based?—**❖ Don L. Stevens, Jr., Oregon State University
- 4:55 p.m. **Design-Based and Model-Based Issues in Natural Resource Inventories—**❖ Ronald E. McRoberts, USDA Forest Service
- 5:20 p.m. Disc: Timothy Gregoire, Yale University
- 5:40 p.m. Floor Discussion

#### 49 CC-259 ● Missing Information in Health-Related Quality-of-Life Data—Invited

Section on Health Policy Statistics, ENAR, Biometrics Section, WNAR

*Organizer(s): Shannon E. Allen, Merck & Co., Inc.*

*Chair(s): Shannon E. Allen, Merck & Co., Inc.*

- 4:05 p.m. **Bivariate Normal Frailty Models for Multiple QOL Outcomes—**❖ Andrea B. Troxel, University of Pennsylvania; Denise A. Esserman, The University of North Carolina at Chapel Hill
- 4:35 p.m. **The Analysis of Questionnaire Submission Rates in Longitudinal HRQOL Assessment—**❖ Stephanie R. Land, University of Pittsburgh; Marcie W. Ritter, University of Pittsburgh; Sarah Haile, University of Pittsburgh
- 5:05 p.m. **The Value of Ancillary Data in Longitudinal Studies of Health-Related Quality of Life with Informative Dropout—**❖ Diane Fairclough, University of Colorado at Denver and Health Services Center; Mark Jaros, University of Colorado at Denver and Health Services Center
- 5:35 p.m. Floor Discussion

#### Invited Panels 4:00 p.m.–5:50 p.m.

#### 50 CC-251 E Issues in Conducting Experiments in Statistical Education—Invited

Section on Statistical Education, Section on Teaching Statistics in the Health Sciences

*Organizer(s): Patti Collings, Brigham Young University*

*Chair(s): Patti Collings, Brigham Young University*

- Panelists:** ❖ William Harkness, The Pennsylvania State University  
 ❖ G. Bruce Schaalje, Brigham Young University  
 ❖ Dennis K. Pearl, The Ohio State University  
 ❖ John P. Holcomb, Cleveland State University

- 5:45 p.m. Floor Discussion

#### Topic-Contributed Sessions 4:00 p.m.–5:50 p.m.

#### 51 CC-355 E ● ⊛ Ethnic Comparisons in Global Health Research—Topic-Contributed

Biopharmaceutical Section, Section on Health Policy Statistics

*Organizer(s): Kyoungah See, Eli Lilly and Company*

*Chair(s): Yoko Tanaka, Eli Lilly and Company*

- 4:05 p.m. **Assessment of Similarity in Dose Responses Between Two Ethnic Populations for Drug Development: A Resampling Approach—**  
 ❖ Kyoungah See, Eli Lilly and Company
- 4:25 p.m. **The Application of Adaptive Design in R&D in Japan from a Statistical Point of View—**❖ Hajime Uno, Kitasato University; Masahiro Takeuchi, Kitasato University; Fumiaki Takahashi, Kitasato University
- 4:45 p.m. **A Bayesian Approach to Evaluation of Bridging Evidence—**❖ Hsiao-Hui Tsou, National Health Research Institutes; Chin-Fu Hsiao, National Health Research Institutes; Yu-Yi Hsu, Iowa State University; Jen-pei Liu, National Taiwan University
- 5:05 p.m. **Minority Differences in Cancer Survival on Cooperative Group Clinical Trials—**❖ Beow Yong Yeap, Massachusetts General Hospital/Harvard Medical School; Marvin Zelen, Harvard School of Public Health
- 5:25 p.m. Floor Discussion

52

CC-250 C

## ⊛ Ranked Set Sampling II—Topic-Contributed

Section on Nonparametric Statistics, Section on Survey Research Methods

Organizer(s): Omer Ozturk, The Ohio State University

Chair(s): Omer Ozturk, The Ohio State University

- 4:05 p.m. **Optimal Sign Test for One Sample Bivariate Location Model Using an Alternative Bivariate Ranked Set Sample**—❖ Hani Samawi, Georgia Southern University
- 4:25 p.m. **Optimal Allocation for Unbalanced Stratified Ranked Set Sample**—❖ Chris Sroka, The Ohio State University; Elizabeth A. Stasny, The Ohio State University; Douglas Wolfe, The Ohio State University
- 4:45 p.m. **Order-Restricted Randomized Designs for Linear Models Using L1 Norm**—❖ Shannon Markiewicz, The Ohio State University; Omer Ozturk, The Ohio State University
- 5:05 p.m. **Optimal Allocation in the Presence of Missing Data**—❖ Jessica Kohlschmidt, The Ohio State University; Elizabeth A. Stasny, The Ohio State University; Douglas Wolfe, The Ohio State University
- 5:25 p.m. **Rejective Sampling and Conditional Tests from Biased Samples for the Equality of Two Distributions**—❖ Qing Kang, North Dakota State University; Paul I. Nelson, Kansas State University
- 5:45 p.m. **Floor Discussion**

53

CC-251 C

## ● ⊛ Consumer Product Risk—Topic-Contributed

Section on Risk Analysis

Organizer(s): Rose Ray, Exponent, Inc.

Chair(s): Rose Ray, Exponent, Inc.

- 4:05 p.m. **Sex Differences: Rare Traffic Fatalities Support Nature over Nurture**—❖ Leonard Evans, Science Serving Society
- 4:25 p.m. **Evaluation of the Effect of ABS in Truck Crashes Using LTCCS Data**—❖ Wai Chan, Exponent, Inc.; Rose Ray, Exponent, Inc.; Bruce Ketcham, Exponent, Inc.
- 4:45 p.m. **National Estimates of Nonfatal Consumer Product Injuries: Surveillance Data from Hospital Emergency Departments, 1980–2005**—❖ Madhu Iyer, Exponent, Inc.

- 5:05 p.m. **To Recall or Not To Recall? Statistical Assessment of Consumer Product Failure Risk**—❖ Ke Zhao, Exponent, Inc.; Duane Steffey, Exponent, Inc.
- 5:25 p.m. **Disc: Michael Orkin, Exponent, Inc.**
- 5:45 p.m. **Floor Discussion**

54

CC-254 B

## ● Analyzing Time Series Data with Time-Varying Frequencies—Topic-Contributed

Section on Physical and Engineering Sciences, Section on Statistics and the Environment

Organizer(s): Wayne Woodward, Southern Methodist University

Chair(s): Henry L. Gray, Southern Methodist University

- 4:05 p.m. **The Application of the Kalman Filter to Nonstationary Time Series Through Time Deformation**—❖ Zhu Wang, Fred Hutchinson Cancer Research Center
- 4:25 p.m. **Time-Frequency Analysis: G(lambda)-stationary Processes**—❖ Huiping Jiang, Columbia University; Henry L. Gray, Southern Methodist University; Wayne Woodward, Southern Methodist University
- 4:45 p.m. **Filtering Analysis for Nonstationary Time Series by Time Deformation**—❖ Mengyuan Xu, Southern Methodist University
- 5:05 p.m. **Generalization and Applications of Linear Chirp Stationary Processes**—❖ Stephen Robertson, Southern Methodist University
- 5:25 p.m. **Time Transformation Methods for Analyzing Data with Time-Varying Frequencies, with Applications**—❖ Wayne Woodward, Southern Methodist University; Henry L. Gray, Southern Methodist University
- 5:45 p.m. **Floor Discussion**

55

CC-255 A

## ⊛ Spatial Statistics: Methods and Applications—Topic-Contributed

IMS, Section on Statistical Graphics, Section on Statistics and the Environment

Organizer(s): Zepu Zhang, The University of Chicago

Chair(s): Li Chen, The University of Chicago

- 4:05 p.m. **Exploratory Spatial Data Analysis Using APLE Statistics**—❖ Hongfei Li, The Ohio State University; Catherine A. Calder, The Ohio State University; Noel Cressie, The Ohio State University

- 4:25 p.m. **Statistical Trend Detection of a Global Change Signal in Regional Climate**—✦ Airong Cai, University of Illinois at Chicago; Katharine Hayhoe, Texas Tech University; George Tiao, The University of Chicago; Donald Wuebbles, University of Illinois at Urbana-Champaign
- 4:45 p.m. **Detection of the Significance of Cool Spot Clusters with Application to the Indiana Colorectal Cancer Study**—✦ Tonglin Zhang, Purdue University
- 5:05 p.m. **Spatial Statistical Analysis of Doctors' Prescription Amounts by Region**—✦ Lei Kang, The Ohio State University; Noel Cressie, The Ohio State University; Desheng Liu, The Ohio State University
- 5:25 p.m. **Mis-specified Maximum Likelihood Estimates and Spatial Error Models**—✦ Jiehua Chen, Stanford University; Paul Switzer, Stanford University
- 5:45 p.m. **Floor Discussion**

## 56 CC-254 C

### ⊛ Some Recent Advances in High-Dimensional Data Modeling—Topic-Contributed

IMS, Section on Nonparametric Statistics, Section on Physical and Engineering Sciences, WNAR

*Organizer(s): Sijian Wang, University of Michigan*

*Chair(s): Jie Peng, University of California, Davis*

- 4:05 p.m. **Local Multidimensional Scaling for Nonlinear Dimension Reduction, Graph Layout, and Approximability Analysis**—✦ Lisha Chen, Yale University; Andreas Buja, University of Pennsylvania
- 4:25 p.m. **Model-Based Protein Summaries and Differential Label-Free Quantitative Proteomics**—✦ Alan Dabney, Texas A&M University
- 4:45 p.m. **Kernel-Induced Classification Tree and Random Forest**—✦ Guangzhe Fan, University of Waterloo
- 5:05 p.m. **A Statistical Perspective on Nonlinear Dimensionality Reduction and Manifold Learning**—✦ Ann Lee, Carnegie Mellon University
- 5:25 p.m. **Some Recent Advances in High-Dimensional Data Modeling**—✦ Wenbin Lu, North Carolina State University; Hao Zhang, North Carolina State University
- 5:45 p.m. **Floor Discussion**

## 57 CC-254 A

### ⊛ Statistical Machine Learning and High-Dimensional Inference—Topic-Contributed

IMS, Section on Nonparametric Statistics

*Organizer(s): Woncheol Jang, University of Georgia*

*Chair(s): Sayan Mukherjee, Duke University*

- 4:05 p.m. **Nonparametric Density Estimation in High Dimensions Using the Rodeo**—✦ Han Liu, Carnegie Mellon University; John Lafferty, Carnegie Mellon University; Larry Wasserman, Carnegie Mellon University
- 4:25 p.m. **Functional Data Analysis in Lipoprotein Profile Data**—✦ Yehua Li, University of Georgia; Tailen Hsing, The Ohio State University
- 4:45 p.m. **Variable Selection Procedures for Generalized Linear Mixed Models in Longitudinal Data Analysis**—✦ Hongmei Yang, North Carolina State University; Daowen Zhang, North Carolina State University; Hao Zhang, North Carolina State University
- 5:05 p.m. **Semiparametric Estimation of Covariance Matrices for Longitudinal Data**—✦ Yichao Wu, Princeton University; Jianqing Fan, Princeton University
- 5:25 p.m. **Characterizing the Function Space for Bayesian Kernel Models**—✦ Natesh Pillai, Duke University
- 5:45 p.m. **Floor Discussion**

## 58 CC-251 D

### ● ⊛ Bayesian Hierarchical Modeling and Computation—Topic-Contributed

Section on Bayesian Statistical Science, WNAR

*Organizer(s): Lei Qian, University of California, Los Angeles*

*Chair(s): Xiao-li Meng, Harvard University*

- 4:05 p.m. **Latent Variable Model for Multiple Outcomes with Nonignorable Missing Data**—✦ Xiaohong Yan, University of California, Los Angeles; W. John Boscardin, University of California, Los Angeles
- 4:25 p.m. **Modeling Common Effects of Predictors on Multiple Longitudinal Outcomes**—✦ Juan Jia, University of California, Los Angeles; Robert E. Weiss, University of California, Los Angeles
- 4:45 p.m. **Using Incompatible Gibbs Samplers To Efficiently Fit Hierarchical Models**—✦ Taeyoung Park, University of Pittsburgh; David van Dyk, University of California, Irvine

- 5:05 p.m. **Bayesian Mixtures for Modeling Correlation**—✦ Lei Qian, University of California, Los Angeles; Robert E. Weiss, University of California, Los Angeles
- 5:25 p.m. Disc: Thomas Belin, University of California, Los Angeles
- 5:45 p.m. **Floor Discussion**

## 59 CC-250 D

### ● ✧ Section on Bayesian Statistics Student Paper Competition: New Developments in Bioinformatics and Genetics—Topic-Contributed

Section on Bayesian Statistical Science

*Organizer(s): Merlise A. Clyde, Duke University*

*Chair(s): Donatello Telesca, University of Washington*

- 4:05 p.m. **Hidden Markov Model for Jointly Modeling Probe Sequences and ChIP-Chip Microarray Data**—✦ Jonathan Gelfond, The University of North Carolina at Chapel Hill; Mayetri Gupta, The University of North Carolina at Chapel Hill; Joseph G. Ibrahim, The University of North Carolina at Chapel Hill
- 4:25 p.m. **On Detecting Stabilizing or Divergent Selection Using Patterns of Variation at SNP Loci**—✦ Feng Guo, University of Connecticut; Dipak Dey, University of Connecticut; Kent Holsinger, University of Connecticut
- 4:45 p.m. **A Bayesian Integrated Approach for Learning About Renal Clear**—✦ David Gold, Texas A&M University; Loleta Harris, The University of Texas M. D. Anderson Cancer Center; Kevin Coombes, The University of Texas M. D. Anderson Cancer Center; Bani Mallick, Texas A&M University
- 5:05 p.m. **Using Evolutionary Relationships to Model Correlation in Mixed Effects Models**—✦ Hua Guo, University of California, Los Angeles; Robert E. Weiss, University of California, Los Angeles; Marc A. Suchard, University of California, Los Angeles
- 5:25 p.m. **Bayesian Multivariate Spatial Models for Association Mapping in Structured Samples**—✦ Meijuan Li, The University of Minnesota; Brad Carlin, The University of Minnesota; Cavan Reilly, The University of Minnesota
- 5:45 p.m. **Floor Discussion**

## 60 CC-250 A

### ● Statistical Computing and Statistical Graphics Paper Competition—Topic-Contributed

Section on Statistical Computing, Section on Statistical Graphics

*Organizer(s): John R. Lockwood, RAND Corporation*

*Chair(s): John R. Lockwood, RAND Corporation*

- 4:05 p.m. **Improved Centroids Estimation for the Nearest Shrunk Centroid Classifier**—✦ Sijian Wang, University of Michigan; Ji Zhu, University of Michigan
- 4:25 p.m. **Exploratory Model Analysis with R and GGobi**—✦ Hadley Wickham, Iowa State University
- 4:45 p.m. **spBayes: An R Package for Univariate and Multivariate Hierarchical Point-Referenced Spatial Models**—✦ Andrew Finley, The University of Minnesota; Sudipto Banerjee, The University of Minnesota; Brad Carlin, The University of Minnesota
- 5:05 p.m. **A Flexible Variable Selection Algorithm for the Cox Model with High-Dimensional Data**—✦ Alexander Pearson, University of Rochester; Derick R. Peterson, University of Rochester
- 5:25 p.m. **Floor Discussion**

## 61 CC-155 D

### Open-Ended Questions in Mail, Web, and Telephone Surveys—Topic-Contributed

Section on Survey Research Methods, Section on Government Statistics, SSC, WNAR, Social Statistics Section

*Organizer(s): Don Dillman, Washington State University*

*Chair(s): Roberta Sangster, Bureau of Labor Statistics*

- 4:05 p.m. **Effects of Answer Space Size on Responses to Open-Ended Questions in Mail Surveys**—✦ Glenn Israel, University of Florida
- 4:25 p.m. **Improving the Quality of Open-End Questions in Mail, Web, and Telephone Surveys**—✦ Don Dillman, Washington State University; Jolene Smyth, Washington State University; Leah M. Christian, The University of Georgia
- 4:45 p.m. **Impact of Presentation Format of Open-Ended Survey Questions on Response Quality**—✦ Steven Swinford, Montana State University
- 5:05 p.m. **The Influence of Color and Space Constraints on Responses to Open-Ended Questions in Paper Questionnaires**—✦ Virginia Lesser, Oregon State University; Lydia Newton, Oregon State University
- 5:25 p.m. Disc: Fred Lorenz, Iowa State University
- 5:45 p.m. **Floor Discussion**



62

CC-355 A

### ● ⊛ Statistical Methods for Chronic Inflammatory Diseases—Topic-Contributed

WNAR, ENAR, Section on Health Policy Statistics

*Organizer(s): Grace Park, University of California, Los Angeles**Chair(s): Bin Zhang, Boston University*

- 4:05 p.m. **Some Statistical Issues in Rheumatology—**  
❖ Charlie Goldsmith, McMaster University
- 4:25 p.m. **Meta-Analysis of Clinical Trial Safety Data in Rheumatoid Arthritis (RA) and Other Inflammatory Disease—**❖ Yun Chon, Amgen Inc.; Hong A. Xia, Amgen Inc.
- 4:45 p.m. **Predicting Trends of Radiographic Outcomes Using Baseline Data—**❖ Grace Park, University of California, Los Angeles; Weng-Kee Wong, University of California, Los Angeles; Abdelmonem A. Afifi, University of California, Los Angeles; David A. Elashoff, University of California, Los Angeles; Dinesh Khanna, University of Cincinnati; John T. Sharp, University of Washington; Richard H. Gold, University of California, Los Angeles; Harold E. Paulus, University of California, Los Angeles
- 5:05 p.m. **Estimating the Effect of Treatment on Rates of Unintended Events in Rheumatoid Arthritis: A Case History with Caveats—**❖ Mark Lunt, University of Manchester; Daniel H. Solomon, Brigham and Women's Hospital; Deborah P. M. Symmons, University of Manchester; Til Stürmer, Brigham and Women's Hospital
- 5:25 p.m. **Disc:** Marlene Egger, University of Utah
- 5:45 p.m. **Floor Discussion**

### Contributed Sessions 4:00 p.m.–5:50 p.m.

63

CC-355 D

### ● ⊛ Recent Advances in Microarray Data Analysis VI—Contributed

Biometrics Section

*Chair(s): James L. Rosenberger, The Pennsylvania State University*

- 4:05 p.m. **Smoothing Spline Mixed Effects Modeling of Multifactorial Gene Expression Profiles—**  
❖ Brandon Smith, University of Illinois; Sandra Rodriguez-Zas, University of Illinois at Urbana-Champaign; Bruce Southey, University of Illinois at Urbana-Champaign

- 4:20 p.m. **Estimating Absolute Transcript Concentration for Microarrays Using Langmuir Adsorption Theory—**  
❖ Min Mo, University of Texas at Arlington
- 4:35 p.m. **Positive and Negative Association Rules of Gene Coexpression Patterns—**❖ Sandra Rodriguez-Zas, University of Illinois at Urbana-Champaign; Bruce Southey, University of Illinois at Urbana-Champaign; Younhee Ko, University of Illinois at Urbana-Champaign; Chengxiang Zhai, University of Illinois at Urbana-Champaign
- 4:50 p.m. **Model-Based Background Correction for Illumina Microarray Data—**❖ Yang Xie, The University of Texas Southwestern Medical Center at Dallas; Lianghao Ding, The University of Texas Southwestern Medical Center at Dallas; Michael Story, The University of Texas Southwestern Medical Center at Dallas; Guanghua Xiao, The University of Texas Southwestern Medical Center at Dallas
- 5:05 p.m. **An Efficient Mixture Model Approach To Characterize Gene Pathways Using Bayesian Networks—**❖ Younhee Ko, University of Illinois at Urbana-Champaign; Sandra Rodriguez-Zas, University of Illinois at Urbana-Champaign; Chengxiang Zhai, University of Illinois at Urbana-Champaign
- 5:20 p.m. **Penalties Paid for Ignoring the Correlation Between Intensity Channels in Gene-Expression Analysis—**  
❖ Sang-Hoon Cho, University of Wisconsin-Madison; Michael Kosorok, The University of North Carolina at Chapel Hill; Richard A. Johnson, University of Wisconsin-Madison
- 5:35 p.m. **ANCOVA-Based Normalization Method for cDNA Microarrays—**❖ Natalia Tchetcherina, The Pennsylvania State University; James L. Rosenberger, The Pennsylvania State University

64

CC-155 C

### ● ⊛ Longitudinal Data Analysis—Contributed

Biometrics Section, Biopharmaceutical Section, Section on Health Policy Statistics

*Chair(s): LeAnna G. Stork, Monsanto Company*

- 4:05 p.m. **Inference for Intraclass Correlation Models with Missing Responses at Random—**❖ Kai Fun Yu, National Institutes of Health; Mixia Wu, National Institutes of Health; Aiyi Liu, National Institutes of Health

- 4:20 p.m. **Comparing Approaches for Predicting Prostate Cancer from Longitudinal Data**—❖ Christopher Morrell, Loyola College in Maryland; Larry J. Brant, National Institute on Aging; Shan L. Sheng, National Institute on Aging
- 4:35 p.m. **Improving the Efficiency of Estimators for Treatment Effect in Two-Arm Randomized Trials Using Auxiliary Covariates**—❖ Min Zhang, North Carolina State University
- 4:50 p.m. **Moving Block Bootstrap for Analyzing Longitudinal Data**—❖ Hyunsu Ju, The University of Texas Medical Branch; Suojin Wang, Texas A&M University
- 5:05 p.m. **Comparison of Design-Based and Model-Based Methods to Estimate the Cluster Effect Using National Population Health Survey Data (1994–2003)**—❖ Sunita Ghosh, University of Saskatchewan; Punam Pahwa, University of Saskatchewan
- 5:20 p.m. **Highly Efficient Longitudinal Designs That Are Robust Against Mis-specification of the Model**—❖ Shirley Ortega Azurduy, Maastricht University; Frans Tan, Maastricht University; Martijn P. F. Berger, University of Maastricht
- 5:35 p.m. **Solving Structured Maximum Likelihood Estimating Equations for Nested Marginal Discrete Longitudinal Models**—❖ Arunava Chakravartty, University of California, Riverside

## 65 CC-255 F ● ⊛ Statistical Issues Related to Categorical Data in Clinical Trials—Contributed

Biopharmaceutical Section, Biometrics Section

*Chair(s): Richard McNally, Pharmion Corp.*

- 4:05 p.m. **Sample Size Determination for Binomial Endpoints Based on the Width of the Confidence Interval in Phase IIA Clinical Trials**—❖ Tai-Tsang Chen, Bristol-Myers Squibb Company; Vishwanath Iyer, Novartis Healthcare Pvt. Ltd; Aparna B. Anderson, Bristol-Myers Squibb Company
- 4:20 p.m. **Sample Size Estimation for the Phase III Confirmatory Clinical Trials Considering the Uncertainty of the Effect Size**—❖ Zhe Shang, Novartis Pharmaceuticals; Yawei Zhang, University of Pennsylvania

- 4:35 p.m. **Small-Sample Tests for Efficacy in Fixed-Dose Drug Combination Studies**—❖ Melinda M. Holt, Sam Houston State University; Jesse Linder, Southeastern Louisiana University; Ferry Butar Butar, Sam Houston State University
- 4:50 p.m. **Extension of the Rank Sum Test for Clustered Data in Vision Clinical Trials**—❖ Ratna Ramaswamy, Johnson & Johnson PRD; Gary Koch, The University of North Carolina at Chapel Hill; Ram Ganeshan, Statistical Consultant
- 5:05 p.m. **Estimation of Diagnostic Accuracy Measures for a Binocular Test**—❖ Daniel Bonzo, Altus Pharmaceuticals, Inc.; Alexander R. de Leon, University of Calgary
- 5:20 p.m. **Exposure Adjusted Incidence and Event Rates in Safety Analysis**—❖ Li Chen, Amgen Inc.; Xin He, University of Missouri-Columbia; Lei Lei, Amgen Inc.; Hong A. Xia, Amgen Inc.
- 5:35 p.m. **Conditional Confidence Intervals for  $p_1$ - $p_2$  and  $p_1/p_2$  Using a Generalized Fisher's Exact Test**—Devan V. Mehrotra, Merck & Co., Inc.; ❖ Arthur Roth, Pfizer Inc.

## 66 CC-355 F ● ⊛ Use of Bayesian Statistics in Phase-I Clinical Studies—Contributed

Biopharmaceutical Section, Biometrics Section

*Chair(s): Afisi S. Ismaila, McMaster University*

- 4:05 p.m. **Maximum Likelihood Methods for Optimal Treatment Schedule-Finding in Clinical Trials**—❖ Changying Liu, University of Michigan; Thomas M. Braun, University of Michigan
- 4:20 p.m. **Power and Sample Size for Dose Proportionality Studies**—❖ Ilsung Chang, Johnson & Johnson PRD; Jaya Natarajan, Johnson & Johnson PRD
- 4:35 p.m. **Elicitation of Expert Opinion and Bayesian Fitting of a Logistic Dose-Response Curve**—❖ Les Huson, GNB Limited; Nelson Kinnersley, Roche Products Limited
- 4:50 p.m. **A Discussion on Operational Characteristics in Bayesian Clinical Trials**—❖ Xin Zhao, Merck & Co., Inc.
- 5:05 p.m. **EWOC Online: An Interactive Web Tool for Dose Escalation in Cancer Phase I Clinical Trials**—❖ Zhiheng Xu, Emory University; Haibin Wang, Emory University; Mourad Tighiouart, Emory University; André Rogatko, Emory University

- 5:20 p.m. **Semiparametric Mixed Analysis on PK/PD Models Using Differential Equations**—❖ Yi Wang, University of Nebraska-Lincoln; Kent Eskridge, University of Nebraska-Lincoln; Shunpu Zhang, University of Nebraska-Lincoln

5:35 p.m. **Floor Discussion**

## 67

## CC-355 C

### ● Longitudinal Data Analysis—Contributed

ENAR, Section on Health Policy Statistics, Biometrics Section

*Chair(s): Nathan Tintle, Hope College*

- 4:05 p.m. **Pool-Testing Samples with Random Intercept**—❖ Peng Chen, University of South Carolina; Joshua M. Tebbs, University of South Carolina
- 4:20 p.m. **Multiple Parameter Combination of Between-Cluster and Within-Cluster Regression Coefficient Estimates**—❖ Julie A. Stoner, University of Nebraska Medical Center; Brian G. Leroux, University of Washington
- 4:35 p.m. **Combined Linkage and Association Mapping of Quantitative Trait Loci with Missing Genotype Data**—Ruzong Fan, Texas A&M University; ❖ Lian Liu, Texas A&M University; Jeeseun Jung, Indiana University; Ming Zhong, Texas A&M University
- 4:50 p.m. **Analyzing Correlated Data with Partial and Small Clusters**—❖ Xianqun Luan, The Children's Hospital of Philadelphia; Avital Cnaan, The Children's Hospital of Philadelphia
- 5:05 p.m. **Using the Power of an F-Test To Compare Designs for Response Surface Models with Random Block Effects**—❖ Sourish Saha, University of Florida; Andre I. Khuri, University of Florida
- 5:20 p.m. **Minimum Hellinger Distance Estimation of Finite Mixtures of Generalized Linear Models**—❖ Jing Shen, IBM T.J. Watson Research Center; Daniel Hall, University of Georgia; Chenhua Zhang, University of Georgia
- 5:35 p.m. **Design and Analysis of Multiple Control Arm Studies**—❖ Laura Johnson, National Institutes of Health; Catherine M. Stoney, National Institutes of Health

## 68

## CC-250 B

### ● ⊛ Hardware, Software, and Algorithms—Contributed

Section on Statistical Computing, Section on Statistical Graphics

*Chair(s): Morteza Marzjarani, Saginaw Valley State University*

- 4:05 p.m. **WISDOM for  $\mu$ Stat: Web-Based Support for the Analysis of Multivariate Hierarchical Data**—❖ Knut M. Wittkowski, The Rockefeller University
- 4:20 p.m. **Creating Statistical Web Services Using ASP.NET**—❖ Neil Polhemus, StatPoint, Inc.
- 4:35 p.m. **Grid Computing**—❖ Abdullah Alnoshan, George Washington University; Shmuel Rotenstreich, George Washington University; Yasmin H. Said, George Mason University; Edward Wegman, George Mason University; Adil Rajput, BearingPoint
- 4:50 p.m. **Access Control Model for E-Learning System**—❖ Fahad Bin Muhaya, Imam University; Yasmin H. Said, George Mason University
- 5:05 p.m. **A Web-Based Program for Computing Percentage Points of Pearson Distributions**—❖ Wei Pan, University of Cincinnati; Haiyan Bai, University of Central Florida; Shengbao Chen, JMW Truss & Components
- 5:20 p.m. **minSpline: An R Package for Fitting Splines**—❖ Sundar Dorai-Raj, PDF Solutions, Inc.; Spencer Graves, PDF Solutions, Inc.
- 5:35 p.m. **Calculating the Interatomic Distance Distribution from Small-Angle X-Ray Scattering via Curve Averaging**—❖ Lanqing Hua, Purdue University; Alan Friedman, Purdue University; Chris Bailey-Kellogg, Dartmouth University; Bruce Craig, Purdue University

## 69

## CC-155 E

### ● Section on Statistics in Sports Contributed—Contributed

Section on Statistics in Sports

*Chair(s): Michael S. Anderson, Battelle*

- 4:05 p.m. **The Distribution and Simulation of Baseball Winning Percentages**—❖ Richard Auer, Loyola College in Maryland
- 4:20 p.m. **Assessing Pitcher and Catcher Influences on Base Stealing in Major League Baseball**—❖ Thomas M. Loughin, Simon Fraser University; Jason Bargen, Sprint Nextel
- 4:35 p.m. **Sorting Algorithms and Sport Tournaments**—❖ Hans Block, KTH, Stockholm, Sweden
- 4:50 p.m. **Batter-Pitcher Matchups in Baseball**—❖ Hal Stern, University of California, Irvine; Adam Sugano, University of California, Los Angeles



- 5:05 p.m. **Statistical Analysis in One-Day Cricket—**  
✦ Wathurawa A. Bandulasiri, Sam Houston State University; Ferry Butar Butar, Sam Houston State University
- 5:20 p.m. **A Bayesian Approach to Ranking Women's College Hockey Teams—**✦ Michael Rutter, The Pennsylvania State University, Erie
- 5:35 p.m. **Bivariate Score Plots—**✦ Rafe Donahue, Vanderbilt University; Tatsuki Koyama, Vanderbilt University; Jeff Horner, Vanderbilt University; Cole Beck, Vanderbilt University

## 70

CC-257

### ● ✦ Small Area Estimation: Techniques and Applications—Contributed

Section on Survey Research Methods, Social Statistics Section

*Chair(s): James Knaub, Energy Information Administration*

- 4:05 p.m. **Hierarchical Bayes Small-Area Estimates of Adult Literacy Using Unmatched Sampling and Linking Models—**✦ Leyla Mohadjer, Westat; J. N. K. Rao, Carleton University; Benmei Liu, Westat; Thomas Krenzke, Westat; Wendy VanDeKerckhove, Westat
- 4:20 p.m. **Hierarchical Bayes Modeling of Survey-Weighted, Small-Area Proportions—**✦ Benmei Liu, Westat; Graham Kalton, Westat; Partha Lahiri, University of Maryland
- 4:35 p.m. **A Simple Computational Method for Estimating Mean Squared Prediction Error in General Small-Area Model—**✦ Snigdhasu Chatterjee, The University of Minnesota; Partha Lahiri, University of Maryland
- 4:50 p.m. **On Comparison of Different MSE Estimators in Small-Area Estimation—**✦ En-Tzu Tang, University of California, Davis; Jiming Jiang, University of California, Davis
- 5:05 p.m. **The Cumulative Distribution Function (CDF) Adjustment Method Applied to Small-Area Estimates of Serious Psychological Distress in the National Survey on Drug Use and Health (NSDUH)—**✦ Jeremy Aldworth, RTI International; Neeraja Sathe, RTI International; Misty Foster, RTI International
- 5:20 p.m. **Expedient Small-Area Estimation via Proportional Odds Ratio Log-Linear Models—**✦ Lei Li, RTI International; Paul S. Levy, RTI International

- 5:35 p.m. **Small-Area Estimation for a Survey of High School Students in Iowa—**✦ Lu Lu, Iowa State University; Michael D. Larsen, Iowa State University

## 71

CC-260

### ● ✦ Ancillary Data in Survey Design and Estimation—Contributed

Section on Survey Research Methods, Social Statistics Section

*Chair(s): David R. Judkins, Westat*

- 4:05 p.m. **Handling Imperfect Overlap Identification in a Dual-Frame Survey—**✦ Jay Clark, Westat; Marianne Winglee, Westat; Benmei Liu, Westat
- 4:20 p.m. **Using the Statistics of Income Division's Sample Data To Reduce Measurement and Processing Errors in Small-Area Estimates Produced from Administrative Tax Records—**✦ Kimberly A. Henry, Internal Revenue Service; Robin Fisher, U.S. Department of the Treasury; Partha Lahiri, University of Maryland
- 4:35 p.m. **An Empirical Evaluation of Various Direct, Synthetic, and Traditional Composite Small-Area Estimators—**✦ William Chen, Internal Revenue Service; Kimberly A. Henry, Internal Revenue Service; Michael Strudler, Internal Revenue Service
- 4:50 p.m. **Using Administrative Records To Avoid Survey Data Capture Errors—**✦ Tim Withum, Lockheed Martin Corporation
- 5:05 p.m. **Optimal Estimators for Two-Phase Sample Designs—**✦ Stephen Ash, U.S. Census Bureau
- 5:20 p.m. Floor Discussion

## 72

CC-258

### ● ✦ Advances and Applications in Causal Inference and Multi-Level Modeling—Contributed

Social Statistics Section

*Chair(s): Donsig Jang, Mathematica Policy Research, Inc.*

- 4:05 p.m. **Alternative Balance Metrics for Bias Reduction in Matching Methods for Causal Inference—**✦ Jasjeet Sekhon, University of California, Berkeley
- 4:20 p.m. **Causal Inference in Spatial Settings: A Case Study of Community Policing Programs in Chicago—**✦ Natalya Verbitsky, University of Michigan; Stephen Raudenbush, The University of Chicago



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4:35 p.m. **Can Results from an Observational Study Be Generalized to a Larger Population? A Study of Pathways from Divorce to Illness**—❖Bridget Lavelle, Iowa State University; Fred Lorenz, Iowa State University; Jean Opsomer, Iowa State University

4:50 p.m. **Students, Teachers, Schools, and ACT Scores**—❖Stephen Ponisciak, Consortium on Chicago School Research

5:05 p.m. **How Well Do Postsecondary Enrichment Programs Prepare High School Students for College? A Multilevel Models Approach**—❖Mack Shelley, Iowa State University; Florence Hamrick, Iowa State University; Robyn Johnson, Iowa State University

5:20 p.m. **Multilevel Mixture Modeling Applications**—Tihomir Asparouhov, Muthén & Muthén; Bengt Muthén, University of California, Los Angeles; ❖Shaunna Clark, University of California, Los Angeles

5:35 p.m. **Analyzing the Changes in Repeated Measures Responses in Financial Literacy Education**—❖Xin Shi, University of Manchester; Pauline Davis, University of Manchester; Sue Ralph, University of Manchester; Valerie Farnsworth, University of Manchester; Laura Black, University of Manchester; Afroditi Kalambouka, University of Manchester

## OpeningMixer

Sunday, July 29  
8:00 p.m.–10:30 p.m.

Salt Palace Convention Center,  
Ballrooms C-J

