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Washington State Convention & Trade Center

Level 3

- Technical Sessions
- CE Course Rooms
- Technical Sessions and CE Course Rooms

Seattle 5
Washington State Convention & Trade Center

Level 5

—Speaker Workrooms
Level 1

Level 6

Level 7

—Business & Committee Meetings
1 Sheraton Seattle Hotel & Towers
1400 Sixth Avenue
COC/COS, committee, and social activities

2 Grand Hyatt Seattle
721 Pine Street
Committee and social activities

No scheduled activities

3 Summerfield Suites
1011 Pike Street

4 Red Lion Hotel on Fifth Avenue
1415 Fifth Avenue

5 The Roosevelt Seattle
1531 Seventh Avenue

6 The Paramount Hotel
724 Pine Street

7 Mayflower Park Hotel
405 Olive Way

8 Hilton Seattle
1301 Sixth Avenue

9 Crowne Plaza Seattle
1113 Sixth Avenue

10 Executive Hotel Pacific
400 Spring Street

11 Renaissance Seattle Hotel
515 Madison Street

12 The Warwick Seattle Hotel
401 Lenora Street

13 Sixth Avenue Inn
2000 Sixth Avenue

14 Seattle University
1111 E. Columbia, Bellarmine Hall

15 Marriott SpringHill Suites
1800 Yale Avenue
American Statistical Association
MARKET PLACE
LOCATED IN THE MAIN REGISTRATION AREA

Saturday, Aug. 5
noon – 5:00 p.m.

Sunday – Wednesday
Aug. 6 – Aug. 9
9:00 a.m. – 5:00 p.m.

Thursday, Aug. 10
8:00 – 10:30 a.m.

Mugs, hats, ASA apparel, children’s shirts, JSM shirts, pens, and more!
JSM Registration Area Floor Plan and Committee or Society Tables
Washington State Convention & Trade Center—Level 4

--- Committee or Society Tables

1. Caucus for Women in Statistics
2. Christian Statisticians
3. Federal Committee on Statistical Methodology (FCSM)
4. Gay and Lesbian Concerns in Statistics
5. International Chinese Statistical Association (ICSA)
6. International Indian Statistical Association (IISA)
7. International Statistical Institute (ISI)
While at JSM...

Emergency Telephone Messages
The general conference telephone number is (206) 219-4700. 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 electronic JSM Cyber Center, located in the registration area at the Washington State Convention & Trade Center. 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:

- Sheraton Seattle Hotel & Towers (206) 621-9000
- Grand Hyatt Seattle (206) 774-1234
- Summerfield Suites (206) 682-8282
- Red Lion Hotel on Fifth Avenue (206) 971-8000
- The Roosevelt Seattle (206) 621-1200
- The Paramount Hotel (206) 292-9500
- Mayflower Park Hotel (206) 623-8700
- Hilton Seattle (206) 624-0500
- Crowne Plaza Seattle (206) 464-1980
- Executive Hotel Pacific (206) 623-3900
- Renaissance Seattle Hotel (206) 583-0300
- The Warwick Seattle Hotel (206) 443-4300
- Sixth Avenue Inn (206) 441-8300
- Seattle University, Bellarmine Hall (206) 296-5620
- Marriott SpringHill Suites (206) 254-0500

Child Care
While JSM will not have organized child care, services may be organized through PANDA Dial-a-Sitter. Child care providers will come to your hotel room; the rate is $76 (plus parking) for four hours of service for up to two children, with an additional fee of $14 per hour thereafter. With the addition of a third child, the fee is $88 (plus parking) and $16/hour after the four-hour minimum. All three children cannot be under the age of 5. The fee for two families that want to share a sitter is decided on a case-by-case basis. For more information, call (206) 325-2327 or visit www.seattlesbestchildcare.com.

The Caucus for Women in Statistics will provide a subsidy toward four hours of babysitting per family for up to 14 families. For details, contact Mary Gray at mgray@american.edu.

Electronic Devices
Please turn off all cell phones, pagers, and other electronic devices before attending any JSM session. These devices cause interference with the audiovisual equipment and are a distraction to the session speakers and attendees.

No Smoking Policy
For the comfort and health of all attendees, smoking is not permitted at any JSM function. This includes plenary sessions, concurrent sessions, workshops, luncheons, and receptions (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. This is a disruption for the speakers, a distraction for the audience, and an infringement on intellectual property rights. Only the official JSM photographer will be authorized to take photographs.

Recycling at JSM
Your participation can make the difference. You can help by making use of the paper, plastic, aluminum, and glass trash containers in the lobby areas of the Washington State Convention & Trade Center. Also, participating in the towel and linen programs in use at the area hotels makes a significant impact on the amount of energy and water used. You also can change the option from print to not print or use the paper recycling containers available at the Cyber Center to help us continue our efforts to conserve. If you have additional questions, please stop by the Special Assistance Desk at the Washington State Convention & Trade Center registration area.
Poster Sessions
CC – Level 6, East Lobby

Regular and topic-contributed poster sessions are held Sunday from 4:00 p.m.–5:50 p.m. and 8:00 p.m.–9:50 p.m. and Monday, Tuesday, and Wednesday from 10:30 a.m.–12:20 p.m. and 2:00 p.m.–3:50 p.m. These sessions are designed for the display of graphical materials, charts, printouts, etc., rather than the text of the paper. Details are available in the general program schedule. Authors are assigned a poster board corresponding to the number in the program and will remain for the allotted time.

The Monday morning session includes the Data Expo competition entries, which provide graphical summaries of a NASA dataset containing geographic and atmospheric data. The competition is sponsored by the Sections on Statistical Graphics, Statistical Computing, and Statistics and the Environment.

Introductory Overview Lectures
The Introductory Overview Lectures are a series of talks on a variety of topics. No pre-registration is necessary, and they are open to all JSM registrants. If you have suggestions for next year, please contact 2007 JSM Program Chair Allan Rossman at arossman@calpoly.edu.

Sunday, August 6, 2:00 p.m. - 3:50 p.m.  CC-4C-4
Session 1  Genetic Association Studies

Sunday, August 6, 4:00 p.m. - 5:50 p.m.  CC-4C-4
Session 38  Adaptive Designs/Interim Pilots and Regression Trees

Monday, August 7, 8:30 a.m. - 10:20 a.m.  CC-400
Session 83  Statistical Consulting

Tuesday, August 8, 8:30 a.m. - 10:20 a.m.  CC-4C-4
Session 219  Computer Experiments

Wednesday, August 9, 8:30 a.m. - 10:20 a.m.  CC-4C-4
Session 355  Image Statistics and Bootstrap
Late-Breaking Sessions
The JSM partner societies recently approved two additional session slots for special invited late-breaking sessions to cover important topics that might emerge close in time to each JSM. This is an exciting addition to the JSM program, most of which is organized well in advance.

Monday, August 7, 2:00 p.m. – 3:50 p.m. CC - 4C-4
Session 173 Statistical/Mathematical Challenges in Biodefense Immune Modeling

Wednesday, August 9, 8:30 a.m. – 10:20 a.m. CC-400
Session 354 What Is the Role of Statistics in Public Policy Debates about Climate Change?

Business and Committee Meetings
All meetings are open unless shown as “closed” or “by invitation only.” Section business meetings are open to all, and members are urged to attend. The business meetings of ASA Sections provide the opportunity for JSM attendees to give suggestions about Section business.

Opening Mixer
CC – Ballroom 6ABC
Don’t miss your chance to get JSM 2006 off to a great start while enjoying refreshments with your colleagues. Join us Sunday, August 6, from 8:00 p.m. - 10:30 p.m. Based on last year’s success, a poster session will be on display during the mixer in the East Lobby. We will see you there!

Student Mixer
S – Metropolitan Ballroom B
Student registrants can enjoy refreshments, meet their peers, and make plans for local events and outings at this mixer, Monday, August 7, from 6:00 p.m. – 7:30 p.m. The 2006 Student Mixer is sponsored by the ASA Committee on Membership Retention and Recruitment. A number of door prizes will be given away. Students, you don’t want to miss it!

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

American Statistical Association
CC-612
Sunday, August 6, 6:00 p.m. – 7:30 p.m.

Statistical Society of Canada Reception
H-Princessa II Ballroom
Monday, August 7, 5:00 p.m. – 7:00 p.m.

IMS Member Reception
S-Aspen
Monday, August 7, 5:30 p.m. – 7:00 p.m.

International Biometric Society,
ENAR Business Meeting
CC-604
Tuesday, August 8, 5:30 p.m. – 7:00 p.m.

IMS New Member & Student Reception
S-Willow A
Tuesday, August 8, 5:30 p.m. – 6:30 p.m.
Gertrude Cox Scholarship Race
5K Race and 2.5K Fun Run/Walk
Tuesday, August 8

The Caucus for Women in Statistics, in conjunction with the ASA, presents the 17th annual Gertrude Cox Scholarship Race at the Joint Statistical Meetings in Seattle, Washington. All proceeds will benefit the Gertrude M. Cox Scholarship in Statistics.

The Race: Two races running concurrently—a competitive 5K and a 2.5K fun run/walk

When: Tuesday, August 8, at 7:00 a.m.

Where: Location and logistical information will be posted at the caucus table in the exhibit hall, Hall 4A, Level 4 of the Washington State Convention & Trade Center.

How Much: The entry fee is $20.

Registration: Those interested in participating are encouraged to register early. You may register at the hospitality table for the Caucus for Women in Statistics in the exhibit hall, Hall 4A, Level 4 of the Washington State Convention & Trade Center. 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 Lori Thombs at thombsl@missouri.edu or (573) 882-3844.

REGISTRATION FORM (each participant must complete and sign form)

Name

Address

City       State/Province       ZIP/Postal Code

Phone

Gender   □ M   □ F   Age __________

Event   □ 5K Race   □ 2.5K Fun Run/Walk

T-shirt size   □ 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, 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 Lori Thombs, Race Organizer, Department of Statistics, University of Missouri, Middlebush 146, Columbia, MO 65211, or fax to (573) 884-5524.
Before Leaving JSM...

Recycling Badge Holders

JSM badges and badge holders will be collected for recycling. Please place those you are not reusing into a designated bin in the registration area.

2006 JSM Proceedings

A copy of the 2006 Proceedings CD-ROM is included with most registration types; however, additional copies may be ordered by calling (888) 231-3473 or visiting www.amstat.org/asastore. CDs will mail in early 2007.

Anyone who orally presents a paper, panel, or poster during JSM is eligible to submit a paper for publication on the 2006 Proceedings CD-ROM. For information about submitting a paper, visit www.amstat.org/meetings/jsm/2006/index.cfm?fuseaction=proceedings. Papers may be submitted from August 1–October 20 and must be in electronic format.

JSM 2007

The 2007 Joint Statistical Meetings will be held in Salt Lake City, Utah, July 29–August 2, at the Salt Palace Convention Center. Preliminary information about JSM 2007 can be found at the Salt Lake Booth, #109, at this year’s EXPO. The complete listing of the 2007 Program Committee and instructions for submitting contributed papers appeared in the June issue of Amstat News and can be found at www.amstat.org/meetings/jsm/2007.

If You Are Not a Member...

Information about the ASA, ENAR, WNAR, IMS, and SSC will be available at the society booths located in the exhibit hall. Each society provides a variety of publications and activities to anyone interested in applied and/or theoretical statistics. Student membership is offered at substantially reduced rates.

If you are not already a member of the ASA, join now and receive a $15 discount on your first year of Limited or Regular membership. Join at the ASA Membership/Special Assistance Desk in the registration area by Thursday, August 10, at 10 a.m. to receive your discount. This discount is valid for Limited or Regular memberships only. Ask about other discounted memberships for students, post-graduates, retirees, and developing country residents.
Registration

All persons attending JSM, including participants in the program, are required to register. Materials for all those who registered in advance are available at the JSM Registration Desk, located on Level 4, South Lobby, of the Washington State Convention & Trade Center. The ASA Membership/Special Assistance Desk also is located here. Additionally, you may add Continuing Education courses, the Career Placement Service, tours, guests, roundtables with coffee, and roundtables with lunch to your registration at the JSM Registration Desk. Hours of operation:

- **Saturday, August 5** 7:00 a.m. – 6:00 p.m.
- **Sunday, August 6** 7:00 a.m. – 8:30 p.m.
- **Monday, August 7** 7:30 a.m. – 6:00 p.m.
- **Tuesday, August 8** 7:30 a.m. – 4:30 p.m.
- **Wednesday, August 9** 7:30 a.m. – 4:30 p.m.
- **Thursday, August 10** 7:30 a.m. – 10:30 a.m.

JSM registration includes the program book and abstract book or CD, access to EXPO 2006, admission to the Opening Mixer (dry snacks, beer, and soft drinks), the Student Mixer (students only), and the Informal Dance Party (dry snacks and cash bar). If you did not purchase roundtable tickets with your advance registration, ask at the JSM Registration Desk for availability. Existing tickets will be sold until 2 p.m. on the day prior to the scheduled roundtable. NOTE: No onsite kosher or heart healthy meal tickets will be available.

ASA Continuing Education Courses

Courses will be held in rooms on Level 3 of the Washington State Convention & Trade Center. For room assignments, please review the general program or visit the Special Assistance Desk on Level 4, South Lobby, of the Washington State Convention & Trade Center.

Onsite CE Registration: Go to the JSM Registration Desk, located on Level 4, South Lobby, of the Washington State Convention & Trade Center. Availability may be limited, and textbooks will not be available.

Speaker Work Rooms

There will be two speaker work rooms this year, both at the Washington State Convention & Trade Center, Level 5, in rooms 507 and 508. Hours of operation:

- **Saturday, August 5** 7:00 a.m. – 6:00 p.m.
- **Sunday, August 6** 7:00 a.m. – 6:00 p.m.
- **Monday, August 7** 7:00 a.m. – 6:00 p.m.
- **Tuesday, August 8** 7:00 a.m. – 6:00 p.m.
- **Wednesday, August 9** 7:00 a.m. – 6:00 p.m.
- **Thursday, August 10** 7:00 a.m. – 10:30 a.m.

A speaker work room is available for all presenters. There will be practice equipment available in each room. The practice equipment will consist 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. Please rehearse your verbal presentation in the privacy of your hotel room to ensure everyone has a chance to test the equipment.

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

Career Placement Service

CC – Exhibit Hall 4B

The JSM 2006 Career Placement Service will be located in the Washington State Convention & Trade Center, Hall B. Hours of operation:

- **Saturday, August 5**
  - Job Posting and Résumé Submission Only 9:00 a.m. – 5:00 p.m.

- **Sunday, August 6**
  - Full Career Placement Service Open 1:00 p.m. – 6:00 p.m.

- **Monday, August 7**
  - Full Career Placement Service Open 8:00 a.m. – 6:00 p.m.
Tuesday, August 8  
Full Career Placement Service Open 8:00 a.m. – 6:00 p.m.

Wednesday, August 9  
Full Career Placement Service Open 8:00 a.m. – 6:00 p.m.  
(Onsite registration closes at noon.)

**EXPO 2006**  
CC – Exhibit Hall 4A

Visit publishers, software companies, and recruiters. See state-of-the-art products designed for the statistical community.

Exhibitors Move in and out Information

Saturday, August 5  
(exhibitor move in only) 8:00 a.m. – 5:00 p.m.

Sunday, August 6  
(exhibitor move in only) 8:00 a.m. – 11:00 a.m.

Wednesday, August 9  
(exhibitor move out only) 2:00 p.m. – 8:00 p.m.

**Show Hours of Operation**

<table>
<thead>
<tr>
<th>Day</th>
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<tr>
<td>Sunday, August 6</td>
<td>1:00 p.m. – 6:00 p.m.</td>
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<td>9:00 a.m. – 6:00 p.m.</td>
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<td>9:00 a.m. – 6:00 p.m.</td>
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<td>Wednesday, August 9</td>
<td>9:00 a.m. – 2:00 p.m.</td>
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**Cyber Center**  
CC – Level 4, South Lobby

There will be 20 terminals in the Cyber Center available for internet access and the electronic Message Center. The Cyber Center is for registered JSM attendees and will be located in the JSM registration area on Level 4, South Lobby, of the Washington State Convention & Trade Center. There will NOT be 24-hour access to the Cyber Center. To reach an attendee when the Cyber Center is closed, please call his/her hotel directly. Hours of operation:

<table>
<thead>
<tr>
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<tr>
<td>Saturday, August 5</td>
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<td>Thursday, August 10</td>
<td>7:00 a.m. – 10:30 a.m.</td>
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**ASA Marketplace**  
CC – Level 4, South Lobby

The ASA Marketplace is your store for JSM and ASA souvenirs. Purchase your official JSM 2006 T-shirt, new shirt designs, great new gifts, and clearance items. Hours of operation:

<table>
<thead>
<tr>
<th>Day</th>
<th>Hours</th>
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<tr>
<td>Saturday, August 5</td>
<td>12:00 p.m. – 5:00 p.m.</td>
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<td>Sunday, August 6</td>
<td>9:00 a.m. – 5:00 p.m.</td>
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<td>Thursday, August 10</td>
<td>8:00 a.m. – 10:30 a.m.</td>
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**ASA Communities Booth Hours**  
CC – Exhibit Hall 4A, Booth 101

Learn about the many programs available to you, including Chapters, Sections, career development, statistical education, and membership. Hours of operation:

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<td>Wednesday, August 9</td>
<td>9:00 a.m. – 2:00 p.m.</td>
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**Citywide Concierge Center**  
CC – Level 1

The Citywide Concierge Center is operated by the Washington State Convention & Trade Center 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 on Level 1 of the convention center. Hours of operation:

<table>
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<tr>
<th>Day</th>
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**Wireless Internet Access**

The Washington State Convention & Trade Center has wireless internet access in the following locations: 1st floor – Pike Street entrance; 2nd floor – International Meeting Place; 4th floor – South Escalator Landing; and 6th Floor – East and West lobbies. The cost is $9.95 per day; call (206) 219-5644 for technical support.
President's Invited Address

“Data-Driven World: Why Now, and What Do We Do about It?”

Monday, August 7, 4:00 p.m.

William R. Pulleyblank
Vice President, Center for Business Optimization, IBM Global Services, IBM Business Consulting Services

William R. Pulleyblank is the vice president of the Center for Business Optimization within IBM Business Consulting Services. He has served on a number of boards, advisory panels, and editorial boards. His research interests are in operations research, combinatorial optimization, and applications of optimization.

Deming Lecture

“Making Another World: a Holistic Approach to Performance Improvement”

Tuesday, August 8, 4:00 p.m.

Ronald D. Snee
Tunnell Consulting

Ron Snee is principal of Process and Organizational Excellence at Tunnell Consulting. Snee received his BA in mathematics from Washington and Jefferson College and MS and PhD degrees from Rutgers University in applied and mathematical statistics. He is a Fellow of the American Statistical Association, American Society of Quality, and the American Association for the Advancement of Science. His work has been recognized by 20 major awards and medals. He has published four books and more than 165 papers in the fields of performance improvement, statistics, quality, and management.

ASA Presidential Address

“From Data to Policy: Scientific Excellence Is Our Future”

Tuesday, August 8, 8:00 p.m.

Sallie Keller-McNulty
Rice University

Sallie Keller-McNulty is dean of the George R. Brown School of Engineering, professor of statistics, and the E.D. Butcher Chair of Engineering at Rice University in Houston, Texas. She is also Fellow and president of the American Statistical Association, was named fellow of the American Association for the Advancement of Science, and is a recipient of the ASA’s Founders Award. She has more than 60 statistical science publications. Her areas of research are uncertainty quantification, computational and graphical statistics and related software and modeling techniques, and data access and confidentiality.

COPSS Fisher Lecture

“Recombination and Linkage”

Wednesday, August 9, 4:00 p.m.

Terence P. Speed
University of California, Berkeley

While working toward his PhD in mathematics at Monash University, Terence P. Speed was in close contact with population genetics and heard much about Fisher’s work in that area, but his research was in algebra. His first academic job was at the University of Sheffield, where he fell in love with sufficiency and dipped more deeply into Fisher’s works. In 1997, he took up a 50% appointment in medical research at the University of Melbourne. Since then, he has divided his time as follows: 50% Berkeley, 50% Melbourne, and 50% in the air. Statistics, genetics, and molecular biology are among his major research interests.
Committees Page

Advisory Committee on Continuing Education
Charles Yun Tan, Chair
Merck & Co., Inc.
Katherine T. Halvorsen
Smith College
Gordon J. Johnston
SAS Institute
Nandini Kannan
University of Texas
Eileen C. King
Procter & Gamble
Andy Maumoustakos
University of Arkansas
Leonard Oppenheimer
J&J PRD
Xiaoming Sheng
University of Utah
Clyde Tucker
Bureau of Labor Statistics

ASA Continuing Education
Madge Haven
Education Programs Administrator
Rick Peterson
Education Programs Administrator

ASA Meetings
Elaine L. Powell, CMP
Assistant Director of Meetings
Kathleen Wert
Meetings Planner
Donna R. Arrington
Meetings Planner

American Statistical Association
Email: jsm@amstat.org
Web: www.amstat.org

2006 PROGRAM COMMITTEE

JSM 2006 Program Chair
Lisa M. LaVange
The University of North Carolina

International Biometric Society (ENAR)
Brent Coull
Harvard School of Public Health

International Biometric Society (WNAR)
Gabriel Huerta
University of New Mexico

Statistical Society of Canada (SSC)
Georgia Roberts
Statistics Canada

Council of Chapters, ASA
James R. Kenyon
Bristol-Myers Squibb Company

Committee on Committees, ASA
Margo J. Anderson
University of Wisconsin-Milwaukee

Invited and Contributed Posters
Maura E. Stokes
SAS Institute

Section on Bayesian Statistical Science, ASA
Steven H. MacEachern
The Ohio State University

Biometrics Section, ASA
Michael J. Daniels
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Columbia University

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Kansas State University

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Boeing

Aileen Murphy
ZymoGenetics

Paul Below
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Paul Ross
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Sabyasachi (Shobbo) Basu
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Section U, Statistics
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Business Office
Eastern North American Region
International Biometric Society
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<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_01C</td>
<td>Gary G. Koch/Todd Schwartz/Rebekkah Dann</td>
<td>Categorical Data Analysis (two-day course)</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_02C</td>
<td>Partha Lahiri</td>
<td>Small Area Estimation</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_03C</td>
<td>Peter Guttorp/Paul Sampson</td>
<td>Modern Approaches to Nonstationary Models of Spatial and Space-Time Processes with Air Quality Applications</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_04C</td>
<td>Bruno Sanío</td>
<td>Bayesian Inference</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_05C</td>
<td>Richard De Veaux</td>
<td>Practical Data Mining</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_06C</td>
<td>Garrett Fitzmaurice</td>
<td>Applied Longitudinal Analysis</td>
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**SUNDAY, AUGUST 6, 2006**

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<td>Gary G. Koch/Todd Schwartz/Rebekkah Dann</td>
<td>Categorical Data Analysis (two-day course)</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_07C</td>
<td>David Madigan/David Lewis</td>
<td>Text Mining</td>
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<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_08C</td>
<td>Roger Tourangeau</td>
<td>The Psychology of Survey Response</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_09C</td>
<td>Stefan Wellek</td>
<td>Statistical Methods for the Confirmatory Analysis of Equivalence/Noninferiority Studies</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_10C</td>
<td>Jennifer A. Hoeting/Geof H. Givens</td>
<td>Computational Statistics: Methods for Monte Carlo Integration and Optimization</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_11C</td>
<td>Frank E. Harrell, Jr.</td>
<td>Regression Modeling Strategies</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_12C</td>
<td>Bradley P. Carlin/Thomas A. Louis</td>
<td>Hierarchical Bayes Methods and Software for Data Analysis</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_13C</td>
<td>Oliver Schabenberger</td>
<td>Generalized Linear Mixed Models: Theory and Applications</td>
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**MONDAY, AUGUST 7, 2006**

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<td>8:00 a.m. – noon</td>
<td>CE_14C</td>
<td>Anthony R. Olsen/Donald L. Stevens, Jr.</td>
<td>Spatial Survey Design with a Focus on Natural Resources</td>
</tr>
<tr>
<td>8:00 a.m. – noon</td>
<td>CE_15C</td>
<td>Danyu Lin</td>
<td>Analysis of Multivariate Failure Time Data</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_16C</td>
<td>Peter H. Westfall</td>
<td>Multiple Comparisons and Multiple Tests</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_17C</td>
<td>Bruce D. Spencer/Juha M. Alho</td>
<td>Statistical Demography with Applications</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_18C</td>
<td>Christy Chuang-Stein/Alex Dmitrienko/Geert Molenberghs</td>
<td>Analysis of Clinical Trials: Theory and Applications</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_19C</td>
<td>Alan Gelfand/Athanassios Kottas</td>
<td>Applied Bayesian Nonparametric Modeling</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_20C</td>
<td>Sophia Rabe-Hesketh/Anders Skrondal</td>
<td>Generalized Linear and Latent Mixed Models</td>
</tr>
<tr>
<td>1:00 p.m. – 5:00 p.m.</td>
<td>CE_21C</td>
<td>Naomi B. Robbins</td>
<td>Creating More Effective Graphs</td>
</tr>
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**TUESDAY, AUGUST 8, 2006**

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<tr>
<td>8:00 a.m. – noon</td>
<td>CE_23C</td>
<td>Thomas W. O’Gorman</td>
<td>Adaptive Tests of Significance and Confidence Intervals</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_24C</td>
<td>Malay Ghosh/Bhramar Mukherjee/Samiran Sinha</td>
<td>Bayesian Analysis of Case-Control Data</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_25C</td>
<td>Dennis R. Helsel/Lopaka Lee</td>
<td>Analysis of Environmental Data with Nondetects</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_26C</td>
<td>Geert Verbeke/Geert Molenberghs</td>
<td>Models for Discrete Repeated Measures</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_27C</td>
<td>Judith A. Swan</td>
<td>Effective Scientific Writing</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_28C</td>
<td>Scott D. Patterson/Byron Jones</td>
<td>Bioequivalence and Statistics in Clinical Pharmacology</td>
</tr>
<tr>
<td>8:30 a.m. – 5:00 p.m.</td>
<td>CE_29C</td>
<td>Geoff McLachlan/Kim-Anh Do</td>
<td>Methods and Computational Tools for the Screening and Classification of Microarray Gene Expression Data</td>
</tr>
<tr>
<td>1:00 p.m. – 5:00 p.m.</td>
<td>CE_30C</td>
<td>Ingram Olkin</td>
<td>Meta-analysis: Statistical Methods for Combining the Results of Independent Studies</td>
</tr>
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### Computer Technology Workshops at a glance

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<td>8:30 a.m. – 10:15 a.m.</td>
<td>CE_31T</td>
<td>Dongping Fang</td>
<td>Time Series in SPSS: Automatic Model Selection and Outlier Detection</td>
</tr>
<tr>
<td>8:30 a.m. – 10:15 a.m.</td>
<td>CE_32T</td>
<td>Michael Borenstein/Hannah R. Rothstein</td>
<td>Meta-analysis: Concepts and Applications</td>
</tr>
<tr>
<td>8:30 a.m. – 10:15 a.m.</td>
<td>CE_33T</td>
<td>John Castelloe</td>
<td>Power and Sample Size Analysis Using SAS/STAT Software</td>
</tr>
<tr>
<td>10:30 a.m. – 12:15 p.m.</td>
<td>CE_34T</td>
<td>Mikhail Golovnya</td>
<td>Introduction to CART: Data Mining with Decision Trees</td>
</tr>
<tr>
<td>10:30 a.m. – 12:15 p.m.</td>
<td>CE_35T</td>
<td>Michael Borenstein</td>
<td>Power Analysis: A Simple and Effective Approach</td>
</tr>
<tr>
<td>10:30 a.m. – 12:15 p.m.</td>
<td>CE_36T</td>
<td>Robert Cohen</td>
<td>Modern Regression Analysis in SAS Software</td>
</tr>
<tr>
<td>2:00 p.m. – 3:45 p.m.</td>
<td>CE_37T</td>
<td>Mikhail Golovnya</td>
<td>Advances in Data Mining: Jerome Friedman’s TreeNet/MART and Leo Breiman’s Random Forests</td>
</tr>
<tr>
<td>2:00 p.m. – 3:45 p.m.</td>
<td>CE_38T</td>
<td>Cyrus Mehta</td>
<td>East 4: A Comprehensive Package for Adaptive and Group Sequential Design, Interim Monitoring, and Simulation</td>
</tr>
<tr>
<td>2:00 p.m. – 3:45 p.m.</td>
<td>CE_39T</td>
<td>Colin (Lin) Chen</td>
<td>Quantile Regression Using the SAS QUANTREG Procedure</td>
</tr>
<tr>
<td>4:00 p.m. – 5:45 p.m.</td>
<td>CE_40T</td>
<td>Mikhail Golovnya</td>
<td>Introduction to MARS: Predictive Modeling with Nonlinear Automated Regression Tools</td>
</tr>
<tr>
<td>4:00 p.m. – 5:45 p.m.</td>
<td>CE_41T</td>
<td>Shawn Harahush</td>
<td>From Software to Solutions in Statistics and Risk Analysis</td>
</tr>
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University of Denver, Daniels College of Business
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Washington University, School of Medicine
Westat

Washington State Convention & Trade Center Exhibit
Hall 4B

*This list represents employers who registered by the Early Bird deadline of June 29, 2006. Additional employers will be participating onsite.
**Listing of Exhibitors by Booth Number**

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

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Vernon Hills, Illinois

ASG, Inc., is a growing national staffing and functional outsourcing company dedicated to providing experienced professionals to staff positions in clinical research; SAS programming; data management; regulatory affairs; and statistical analysis for customers capturing, analyzing, and producing data in the pharmaceutical, biotech, health care, and financial industries.

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Upper Saddle River, New Jersey

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American Statistical Association

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 many areas of statistics, including medicine, computer applications, quality management, analytical research, setting standards for statistics, and promoting statistical education.

Amgen Inc.

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Maple Valley, Washington

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Baltimore, Maryland

The BEA promotes a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic accounts data in an objective and cost-effective way.

Bureau of Labor Statistics

Washington, DC

As the principal fact-finding agency for the federal government in the broad field of labor economics and statistics, the BLS provides useful data that pertain to your community. For example, BLS tracks employment, work-related injuries, illnesses and fatalities, the Consumer Price Index, and wages by area and occupational title. We encourage you to visit our booth and ask for our five-minute demonstration on how to access online current and historical BLS data from the database. Our web site is www.bls.gov.
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Taylor & Francis Group LLC
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New York, New York

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Richmond, Virginia
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Centers for Disease Control and Prevention
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.

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For 20 years, Hawkes Learning Systems has specialized in math courseware. Our courseware is based on mastery-level learning and offers unlimited practice problems, tutorials, and intelligent feedback. On its own or as a supplement, our courseware improves student performance and provides instructors with an online grade book and state-of-the-art test generator.

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Institute of Mathematical Statistics
Beachwood, Ohio
The Institute of Mathematical Statistics is an international professional society devoted to the development and dissemination of the theory and applications of statistics and probability. Its activities include sponsorship of journals and other scientific publications and organization of scientific meetings.

Internal Revenue Service (IRS), Statistics of Income Division
Washington, DC
The Statistics of Income (SOI) Division produces data compiled from tax and information returns filed with the IRS. SOI data about the financial composition of individuals, business taxpayers, tax-exempt organizations, and more are available through publications, electronic databases, Tax Stats (www.irs.gov/taxstats), and SOI's Statistical Information Services office, (202) 874-0410.

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NCSS
Kaysville, Utah
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National Center for Health Statistics
Hyattsville, Maryland
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National Death Index, NCHS, CDC
Hyattsville, Maryland
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National Security Agency

Fort Meade, Maryland

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San Diego, California

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Cary, North Carolina

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Cary, North Carolina

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Philadelphia, Pennsylvania

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Minneapolis, Minnesota

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Ottawa, Ontario

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Statpoint Inc.
Herndon, Virginia
STATGRAPHICS Centurion XV, unmatched statistical software for data analysis, statistical modeling, quality improvement, and Six Sigma. Perform sophisticated data analysis without investing weeks learning a statistical package. Entirely menu-driven, numerous innovative tools—including StatAdvisor, StatWizard, and StatReporter—provide maximum return on investment. STATGRAPHICS Mobile for handheld devices also is available.

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

Systat Software, Inc.
Richmond, California
Systat Software, Inc., provides specialized scientific software products and services for the environment sciences, life sciences, behavioral sciences, medical research, and engineering. Our products are used by the world’s top companies, research centers, and universities and now include SigmaPlot, SigmaStat, SigmaScan, SYSTAT, TableCurve2D, TableCurve3D, PeakFit, and AutoSignal.

The Cambridge Group Ltd.
Westport, Connecticut
The Cambridge Group Ltd. focuses on careers in biostatistics, clinical data management, clinical systems, SAS programming, and more. Opportunities range from entry through executive levels for both permanent and contract positions in the pharmaceutical and biotechnology industries. The Cambridge Group Ltd., 1175 Post Road East, Westport, CT 06880; biostat@cambridgegroup.com; (800) 525-3396.

U.S. Census Bureau
Washington, DC
The U.S. Census Bureau produces key data about the nation’s economic and social health. We produce the Decennial Census each decade, the Economic Census every five years, more than 100 household and business surveys each year, and several monthly surveys that supply data for the nation’s economic indicators.

U.S. Department of Agriculture,
National Agricultural Statistics Service
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.

U.S. Department of Education
Washington, DC
As the research, evaluation, and statistics-gathering arm of the U.S. Department of Education, the Institute of Education Sciences funds research studies on ways to improve academic achievement, conducts large-scale evaluations of federal education programs, and reports an array of statistics on the condition of education.

Visual Numerics, Inc.
San Ramon, California
For decades, Visual Numerics has provided analysis and visualization software to academia on platforms such as C/C++, .NET, Java, and FORTRAN. It delivers tools for conducting research and building curricula for students. The unique combination of the IMSL Libraries, PV-WAVE, and expert professional services is unsurpassed for analytical applications.

W.H. Freeman and Company
New York, New York
W.H. Freeman and Company publishes high-quality textbooks and media in statistics and mathematics. Visit Booth 300 to learn more about the new editions of Moore’s *The Basic Practice of Statistics* and Moore/Notz’s *Statistics: Concepts and Controversies* and the current edition of Moore/McCabe’s *Introduction to the Practice of Statistics*. Also on view will be our innovative media, including our new nationally hosted solution for statistics: StatsPortal. For more information, visit www.whfreeman.com.

Wiley
Hoboken, New Jersey
Session Tag Descriptions
We expect both Theme and Applied sessions to draw a diverse audience.

THEME ✪
JSM Theme sessions are directly relevant to the 2006 JSM theme “Statistics for an Uncertain World: Meeting Global Challenges.” These sessions highlight presentations and discussions on the role that is being played by 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 ●
JSM Applied sessions have REAL applications at the heart of the 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 vary in scope, ranging from presentations on state-of-the-art statistical methodology applied to real world problems to those that are tutorial in nature. All statisticians should find these sessions appealing.

Meeting Rooms
Meeting rooms include “letters” before the name of the room, designating in which facility the room is located:

Washington State Convention & Trade Center = CC
Sheraton Seattle Hotel & Towers = S
Grand Hyatt Seattle = H

THURSDAY, AUGUST 3

Committee/Business Meetings & Other Activities

6:00 p.m.–7:00 p.m. S-Douglas Room
The ASA Management Review Committee (closed)
Chair(s): Sallie Keller-McNulty, Rice University

7:00 p.m.–9:00 p.m. S-Douglas Room
The ASA Board of Directors Executive Committee Working Dinner (closed)
Chair(s): Sallie Keller-McNulty, Rice University

FRIDAY, AUGUST 4

Committee/Business Meetings & Other Activities

7:30 a.m.–8:30 a.m. S-Cedar Room
ASA Board of Directors Breakfast (closed)
Chair(s): Sallie Keller-McNulty, Rice University

8:30 a.m.–10:30 a.m. S-Aspen Room
The ASA Planning Committee (closed)
Chair(s): Sallie Keller-McNulty, Rice University

10:30 a.m.–5:00 p.m. S-Aspen Room
The ASA Board of Directors Meeting (closed)
Chair(s): Sallie Keller-McNulty, Rice University

12:30 p.m.–1:30 p.m. S-Cedar Room
The ASA Board of Directors Lunch (closed)
Chair(s): Sallie Keller-McNulty, Rice University

6:30 p.m.–7:30 p.m. S-Governors Suite
JSM Staff and ASA Board of Directors Reception (closed)
Chair(s): William B. Smith, American Statistical Association; Sallie Keller-McNulty, Rice University
### GENERAL PROGRAM SCHEDULE

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SATURDAY, AUGUST 5</strong></td>
<td></td>
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</tr>
<tr>
<td>7:00 a.m.–6:00 p.m.</td>
<td>CC-Level 4 South Lobby</td>
<td>Committee/Business Meetings &amp; Other Activities</td>
</tr>
<tr>
<td>7:00 a.m.–6:00 p.m.</td>
<td>CC-507, CC-508</td>
<td>JSM Main Registration</td>
</tr>
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<td>ASA Membership/Special Assistance Desk</td>
</tr>
<tr>
<td>7:00 a.m.–6:00 p.m.</td>
<td>S-Cedar Room</td>
<td>Speaker Work Rooms</td>
</tr>
<tr>
<td>7:30 a.m.–8:30 a.m.</td>
<td>S-Cedar Room</td>
<td>The ASA Board of Directors Breakfast (closed)</td>
</tr>
<tr>
<td>8:00 a.m.–5:00 p.m.</td>
<td>CC-Exhibit Hall 4A</td>
<td>Exhibitor Move in and Lounge</td>
</tr>
<tr>
<td>8:30 a.m.–5:30 p.m.</td>
<td>S-Aspen Room</td>
<td>The ASA Board of Directors Meeting (closed)</td>
</tr>
<tr>
<td>8:30 a.m.–10:30 a.m.</td>
<td>S-Spruce Room</td>
<td>ASA BOD-2006 Strategic Activities Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subcommittee (closed)</td>
</tr>
<tr>
<td>8:30 a.m.–10:30 a.m.</td>
<td>S-Douglas Room</td>
<td>ASA BOD-2006 Dues Subcommittee (closed)</td>
</tr>
<tr>
<td>9:00 a.m.–5:00 p.m.</td>
<td>CC-Level 1</td>
<td>Citywide Concierge Center</td>
</tr>
<tr>
<td>9:00 a.m.–5:00 p.m.</td>
<td>CC-Exhibit Hall 4B</td>
<td>Career Placement Service (Electronic Registration Only)</td>
</tr>
<tr>
<td>11:30 a.m.–12:30 p.m.</td>
<td>S-Willow A</td>
<td>Association of GCRC Statisticians Lunch (closed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organizer(s): Robert Oster, The University of Alabama at Birmingham</td>
</tr>
<tr>
<td>12:00 p.m.–5:00 p.m.</td>
<td>CC-Level 4 South Lobby</td>
<td>ASA Marketplace</td>
</tr>
<tr>
<td>12:30 p.m.–5:30 p.m.</td>
<td>S-Willow B</td>
<td>Association of GCRC Statisticians Meeting (closed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organizer(s): Robert Oster, The University of Alabama at Birmingham</td>
</tr>
<tr>
<td>3:00 p.m.–6:00 p.m.</td>
<td>S-Spruce Room</td>
<td>ICES III Program Committee Meeting (closed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chair(s): Eva Elvers, Statistics Sweden</td>
</tr>
<tr>
<td>7:00 p.m.–8:30 p.m.</td>
<td>S-Cedar Room</td>
<td>National Numeracy Network Board Meeting</td>
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<tr>
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<td>Organizer(s): Bernard Madison, University of Arkansas</td>
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<tr>
<td><strong>Continuing Education (Fee Events)</strong></td>
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<tr>
<td>CE_01C</td>
<td>CC-310</td>
<td>Categorical Data Analysis (two-day course)</td>
</tr>
<tr>
<td>8:30 a.m.–5:00 p.m.</td>
<td></td>
<td>The ASA</td>
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<tr>
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<td></td>
<td>Instructor(s): Gary Koch, The University of North Carolina at Chapel Hill; Todd Schwartz, The University of North Carolina at Chapel Hill; Rebekkah Dann, The University of North Carolina at Chapel Hill</td>
</tr>
<tr>
<td>CE_02C</td>
<td>CC-308</td>
<td>Small-Area Estimation</td>
</tr>
<tr>
<td>8:30 a.m.–5:00 p.m.</td>
<td></td>
<td>The ASA, Section on Survey Research Methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructor(s): Partha Lahiri, University of Maryland</td>
</tr>
<tr>
<td>CE_03C</td>
<td>CC-307</td>
<td>Modern Approaches to Nonstationary Models of Spatial and Space-Time Processes with Air Quality Applications</td>
</tr>
<tr>
<td>8:30 a.m.–5:00 p.m.</td>
<td></td>
<td>The ASA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructor(s): Peter Guttorp, University of Washington; Paul D. Sampson, University of Washington</td>
</tr>
<tr>
<td>CE_04C</td>
<td>CC-306</td>
<td>Bayesian Inference</td>
</tr>
<tr>
<td>8:30 a.m.–5:00 p.m.</td>
<td></td>
<td>The ASA, Section on Bayesian Statistical Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instructor(s): Bruno Sanso, University of California, Santa Cruz</td>
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<tr>
<td>Session ID</td>
<td>Location</td>
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<tr>
<td>CE_05C</td>
<td>CC-304</td>
<td></td>
</tr>
<tr>
<td>8:30 a.m.–5:00 p.m.</td>
<td>Practical Data Mining</td>
<td></td>
</tr>
<tr>
<td>CC-303</td>
<td></td>
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<tr>
<td>8:30 a.m.–5:00 p.m.</td>
<td>Applied Longitudinal Analysis</td>
<td></td>
</tr>
</tbody>
</table>

SUNDAY, AUGUST 6

**Tours**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 a.m.–1:30 p.m.</td>
<td>CC-Convention Place TR01 - Northwest Winery Tour (fee event)</td>
</tr>
<tr>
<td>1:00 p.m.–4:00 p.m.</td>
<td>CC-Convention Place TR02 - Seattle City Highlights Tour (fee event)</td>
</tr>
</tbody>
</table>

**Committee/Business Meetings & Other Activities**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m.–8:00 a.m.</td>
<td>S-Willow A Association of GCRC Statisticians Breakfast (closed)  Organizer(s): Robert Oster, The University of Alabama at Birmingham</td>
</tr>
<tr>
<td>7:00 a.m.–6:00 p.m.</td>
<td>CC-507, CC-508 Speaker Work Rooms</td>
</tr>
<tr>
<td>7:00 a.m.–8:30 p.m.</td>
<td>CC-Level 4 South Lobby JSM Main Registration</td>
</tr>
<tr>
<td>7:00 a.m.–10:00 p.m.</td>
<td>CC-Level 4 South Lobby Cyber Center</td>
</tr>
<tr>
<td>7:30 a.m.–10:30 a.m.</td>
<td>S-Douglas Room Committee on Women in Statistics (closed)  Chair(s): Teri Peterson, Idaho State University</td>
</tr>
<tr>
<td>7:30 a.m.–12:30 p.m.</td>
<td>H-Blewett Suite Committee on Publications Meeting (closed)  Chair(s): William Q. Meeker, Jr., Iowa State University</td>
</tr>
<tr>
<td>8:00 a.m.–10:00 a.m.</td>
<td>S-Juniper Business Statistics Focus Group (closed)  Organizer(s): Dona Kenly, Addison Wesley</td>
</tr>
<tr>
<td>8:00 a.m.–11:00 a.m.</td>
<td>CC-Exhibit Hall 4A Exhibitor Move in</td>
</tr>
<tr>
<td>8:00 a.m.–12:00 p.m.</td>
<td>S-Willow B Association of GCRC Statisticians Meeting (closed)  Organizer(s): Robert Oster, The University of Alabama at Birmingham</td>
</tr>
<tr>
<td>8:00 a.m.–12:00 p.m.</td>
<td>CC-302 ICES III Organizing Committee Meeting (closed)  Chair(s): Howard Hogan, U.S. Census Bureau</td>
</tr>
<tr>
<td>8:00 a.m.–6:00 p.m.</td>
<td>CC-209 Amgen Inc. Interview Room (by invitation only)  Organizer(s): Chander Varma, Amgen Inc.</td>
</tr>
<tr>
<td>8:00 a.m.–6:00 p.m.</td>
<td>CC-Exhibit Hall 4A Exhibitor Lounge</td>
</tr>
<tr>
<td>9:00 a.m.–12:00 p.m.</td>
<td>S-Cedar Room Council of Sections Governing Board Meeting (closed)  Chair(s): John E. Boyer, Kansas State University</td>
</tr>
<tr>
<td>9:00 a.m.–5:00 p.m.</td>
<td>CC-Level 1 Citywide Concierge Center</td>
</tr>
<tr>
<td>9:00 a.m.–5:00 p.m.</td>
<td>CC-Level 4 South Lobby ASA Marketplace</td>
</tr>
<tr>
<td>11:00 a.m.–2:00 p.m.</td>
<td>CC-4C-1 NISS/SAMSI Affiliates Meeting (closed)  Organizer(s): Alan Karr, National Institute of Statistical Sciences</td>
</tr>
<tr>
<td>11:30 a.m.–1:00 p.m.</td>
<td>S-Douglas Room Committee on Committees Meeting (closed)  Chair(s): Darryl Downing, GlaxoSmithKline</td>
</tr>
<tr>
<td>12:00 p.m.–1:00 p.m.</td>
<td>S-Willow A Association of GCRC Statisticians Lunch (closed)  Organizer(s): Robert Oster, The University of Alabama at Birmingham</td>
</tr>
</tbody>
</table>
12:00 p.m.–1:30 p.m. H-Portland
Amgen Inc. (closed)
Organizer(s): Chander Varma, Amgen Inc.

12:00 p.m.–1:30 p.m. CC-601
Friends of the Indian Statistical Institute Business Meeting
Organizer(s): Nitis Mukhopadhyay, University of Connecticut

12:00 p.m.–2:00 p.m. S-Juniper
Journal of Statistics Education Editorial Board (closed)
Chair(s): W. Robert Stephenson, Iowa State University

12:00 p.m.–2:00 p.m. S-Aspen Room
Statistica Sinica Board Meeting (closed)
Organizer(s): Michelle Liou, Academia Sinica; Xiao-Li Meng, Harvard University

1:00 p.m.–6:00 p.m. CC-Exhibit Hall 4A
EXPO 2006
ASA Communities Booth #101

1:00 p.m.–6:00 p.m. CC-Exhibit Hall 4B
Career Placement Service (Full Placement Service Open)

2:00 p.m.–4:30 p.m. S-Willow Ballroom
Council of Sections Annual Business Meeting (closed)
Chair(s): John E. Boyer, Kansas State University

4:00 p.m.–5:30 p.m. S-Douglas Room
2006/2007 Committee Chairs Meeting (closed)
Chair(s): Darryl Downing, GlaxoSmithKline

4:00 p.m.–6:00 p.m. H-Stevens Boardroom & Foyer
Career Development Seminar - Snakes and Ladders: Building a Career in Statistics
Chair(s): Janice Lent, Research and Innovative Technology Administration

4:30 p.m.–8:00 p.m. H-Chatham
ENAR Executive Committee Meeting (by invitation only)
Organizer(s): Kathy Hoskins, ENAR

5:00 p.m.–6:00 p.m. CC-303
Volunteer Work in Statistics: The Second Year
Chair(s): Fritz Scheuren, National Opinion Research Center

5:00 p.m.–6:30 p.m. CC-305
Cancer Center Biostatistics Directors Annual Meeting
Organizer(s): Terry Hyslop, Thomas Jefferson University

5:00 p.m.–6:30 p.m. S-Cedar Room
Council of Section New Officer Orientation Meeting (closed)
Chair(s): S. Lynne Stokes, Southern Methodist University

5:00 p.m.–7:30 p.m. H-Blewett Suite
International Chinese Statistical Association (ICSA) Board Meeting (closed)
Organizer(s): Ivan Chan, Merck & Co., Inc.

5:30 p.m.–7:00 p.m. CC-302
Committee on Scientific Freedom and Human Rights Business Meeting
Chair(s): Susan Hinkins, National Opinion Research Center

6:00 p.m.–7:30 p.m. CC-4C-2
JSM First-Time Attendee Orientation and Reception
Chair(s): Mary W. Gray, American University

6:00 p.m.–7:30 p.m. CC-612
ASA Open Meeting (all welcome)
Chair(s): Sallie Keller-McNulty, Rice University

6:00 p.m.–7:30 p.m. S-Aspen Room
Christian Statisticians’ Informal Discussion
Organizer(s): Robert W. Mee, University of Tennessee

6:30 p.m.–8:00 p.m. S-Douglas Room
Committee on Privacy and Confidentiality (closed)
Chair(s): Kim McGuigan, Pfizer, Inc.

6:30 p.m.–8:00 p.m. CC-4C-3
Purdue University Alumni and Friends Reception
Organizer(s): Dana Neary, Director of Alumni Relations

6:30 p.m.–8:30 p.m. off property
Section on Statistical Consulting Executive Committee Meeting (closed)
Chair(s): Philip Dixon, Iowa State University

6:30 p.m.–9:30 p.m. H-Douglas Boardroom & Foyer
Biometrics Section Executive Committee Meeting (closed)
Chair(s): Karen Bandeen-Roche, The Johns Hopkins Bloomberg School of Public Health
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:

- 2006 State of the Association – Sallie Keller-McNulty
- Update on finances – Sastry G. Pantula
- Status of the ASA building – William B. Smith
- Summary of 2005 Board task forces – Fritz J. Scheuren
- Responses to 2005 Open Meeting questions – Executive Committee
- Reports on 2006 task forces (public policy, security, and interaction with other groups)

Please plan to attend and lend your voice to the discussion of important issues affecting the future of the ASA.
7:00 p.m.–8:00 p.m.  
**ACCE Presenters’ Social (closed)**  
Chair(s): Charles Tan, Merck & Co., Inc.

7:00 p.m.–9:00 p.m.  
**Isolated Statisticians Meeting**  
Organizer(s): Ann Cannon, Cornell College

8:00 p.m.–10:30 p.m.  
**JSM Opening Mixer (included in registration fee)**

### Continuing Education (Fee Events)

#### CE_01C  
8:30 a.m.–5:00 p.m.  
**Categorical Data Analysis (two-day course)**  
The ASA  
*Instructor(s):* Gary Koch, The University of North Carolina at Chapel Hill; Todd Schwartz, The University of North Carolina at Chapel Hill; Rebekkah Dann, The University of North Carolina at Chapel Hill

#### CE_07C  
8:30 a.m.–5:00 p.m.  
**Text Mining**  
The ASA, Section on Statistical Computing  
*Instructor(s):* David Madigan, Rutgers University; David D. Lewis, David D. Lewis Consulting LLC

#### CE_08C  
8:30 a.m.–5:00 a.m.  
**The Psychology of Survey Response**  
The ASA, Section on Survey Research Methods  
*Instructor(s):* Roger Tourangeau, University of Maryland

#### CE_09C  
8:30 a.m.–5:00 p.m.  
**Statistical Methods for the Confirmatory Analysis of Equivalence/Noninferiority Studies**  
The ASA  
*Instructor(s):* Stefan Wellek, University of Heidelberg

#### CE_10C  
8:30 a.m.–5:00 p.m.  
**Computational Statistics: Methods for Monte Carlo Integration and Optimization**  
The ASA, Section on Statistical Computing  
*Instructor(s):* Jennifer A. Hoeting, Colorado State University; Geof H. Givens, Colorado State University

#### CE_11C  
8:30 a.m.–5:00 p.m.  
**Regression Modeling Strategies**  
The ASA  
*Instructor(s):* Frank E. Harrell, Jr., Vanderbilt University School of Medicine

#### CE_12C  
8:30 a.m.–5:00 p.m.  
**Hierarchical Bayes Methods and Software for Data Analysis**  
The ASA, Section on Bayesian Statistical Science  
*Instructor(s):* Bradley P. Carlin, University of Minnesota; Thomas A. Louis, The Johns Hopkins University

#### CE_13C  
8:30 a.m.–5:00 p.m.  
**Generalized Linear Mixed Models: Theory and Applications**  
The ASA  
*Instructor(s):* Oliver Schabenberger, SAS Institute, Inc.

### Special Presentation 2:00 p.m.–3:50 p.m.

1  
**Introductory Overview Lectures: Genetic Association Studies—Other**  
The ASA, ENAR, IMS, SSC, WNAR  
*Organizer(s):* Jianwen Cai, The University of North Carolina at Chapel Hill  
*Chair(s):* Barry I. Graubard, National Cancer Institute

2:05 p.m.  
**Association Mapping of Human Disease Genes—**  
*Bruce S. Weir, University of Washington*

2:55 p.m.  
**Statistical Analysis of Haplotype-Disease Association—**  
*Danyu Lin, The University of North Carolina at Chapel Hill*

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

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

2  
**Seasonal Time Series—Invited**  
Business and Economics Statistics Section  
*Organizer(s):* Stuart Scott, Bureau of Labor Statistics  
*Chair(s):* Brian C. Monsell, U.S. Census Bureau

2:05 p.m.  
**Comparing MSEs for Finite X-11 and Model-Based Seasonal Adjustment Filters—**  
*William R. Bell, U.S. Census Bureau; Yea-Jan Chu, SPSS Inc.; George C. Tiao, The University of Chicago*
OPEN TO ALL

(Dinner groups will form after the reception.)

Learn more about how to get the most out of your 1st JSM experience, meet new people, and network.

AGENDA

• Introduction: Mary Gray, President, The Caucus for Women in Statistics
• “Networking for Fun and Profit” Monica Jackson, American 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
2:30 p.m.  A Spectral Approach for Locally Assessing Model Misspecification—Tucker S. McElroy, U.S. Census Bureau; Scott Holan, University of Missouri-Columbia

2:55 p.m.  Nonlinear Seasonal Adjustment in Unobserved Components Models—Siem Jan Koopman, Vrije Universiteit Amsterdam; Kai Ming Lee, Vrije Universiteit Amsterdam

3:20 p.m.  Disc: Xichuan Zhang, Australian Bureau of Statistics

3:40 p.m.  Floor Discussion

3 CC-615
✪ Recent Advances in the Design and Analysis of Clinical Trials—Invited

WNAR, Biometrics Section, ENAR
Organizer(s): Lurdes Y. T. Inoue, University of Washington
Chair(s): Kenneth Rice, University of Washington

2:05 p.m.  A Bayesian Seamless Design—Lurdes Y. T. Inoue, University of Washington

2:30 p.m.  A Geometric Approach to Comparing Treatments for Rapidly Fatal Diseases—Peter F. Thall, M. D. Anderson Cancer Center; Leiko H. Wooten, M. D. Anderson Cancer Center; Elizabeth J. Shpall, M. D. Anderson Cancer Center

2:55 p.m.  Advances in Simple Phase I Trials: Three Examples—Rick Chappell, University of Wisconsin-Madison

3:20 p.m.  Decision Analysis and Clinical Trial Design—Donald Berry, The University of Texas

3:45 p.m.  Floor Discussion

4 CC-609
✪ Pipeline Issues in Recruiting Federal Statisticians—Invited

Committee on Membership Retention and Recruitment, Section on Statistical Education, Committee on Career Development
Organizer(s): David Banks, Duke University
Chair(s): Dayanand Naik, Old Dominion University

2:05 p.m.  JPSM: 14 Years of Training Federal Statisticians—Richard Valliant, University of Michigan; Roger Tourangeau, University of Maryland

2:30 p.m.  Gulliver Tied down by Red Tape? The Federal Government’s Challenges as an Employer of Statisticians—Janice Lent, Research and Innovative Technology Administration

2:55 p.m.  Federal Statisticians in the Physical and Engineering Sciences—William Guthrie, National Institute of Standards and Technology

3:20 p.m.  Disc: David Marker, Westat

3:40 p.m.  Floor Discussion
6

Surveillance Geoinformatics and Hotspot Dynamics for Prediction, Policy, and Management—Invited

Thematic Session

Applied Session

Presenter CC - Washington State Convention & Trade Center  H - Grand Hyatt Seattle  S - Sheraton Seattle Hotel & Towers

General Program Schedule

Tues-Sun

6 CC-3B

Surveillance Geoinformatics and Hotspot Dynamics for Prediction, Policy, and Management—Invited

Environmental and Ecological Statistics, Section on Statistics and the Environment

Organizer(s): Ganapati P. Patil, The Pennsylvania State University

Chair(s): Ganapati P. Patil, The Pennsylvania State University

2:05 p.m. Spatiotemporal Geoinformatic Disease Surveillance—❖ Stephen L. Rathbun, University of Georgia; Ganapati P. Patil, The Pennsylvania State University


2:55 p.m. Applications of Hotspot Detection Analysis to Large-Scale Plant Disease Forecasting: Case Study of Fusarium Head Blight—❖ Murali Haran, The Pennsylvania State University

3:20 p.m. Disc: Bo Ranneby, Swedish University of Agricultural Sciences

3:40 p.m. Floor Discussion

7 CC-400

Density-Based Clustering—Invited

Section on Statistical Computing, Section on Statistical Graphics, Section on Nonparametric Statistics

Organizer(s): David W. Scott, Rice University

Chair(s): Michael W. Trosset, The College of William & Mary

2:05 p.m. Variable Bandwidth Mode Testing—❖ Michael C. Minnotte, Utah State University

2:30 p.m. Generalized Single-Linkage Clustering—❖ Werner Stuetzle, University of Washington; Rebecca Nugent, University of Washington

2:55 p.m. Mixture Model Building for High-Dimensional and Functional Data—❖ Catherine Loader, The University of Auckland; Ramani S. Pilla, Case Western Reserve University

3:20 p.m. Disc: David W. Scott, Rice University

3:40 p.m. Floor Discussion

8 CC-614

Statistical Methods for Oral Health Research—Invited

ENAR, Biometrics Section, WNAR

Organizer(s): Jason Roy, University of Rochester

Chair(s): Julie Stoner, University of Nebraska Medical Center

2:05 p.m. Analysis of Correlated Dental Data: Challenges and Recent Developments—❖ Brian G. Leroux, University of Washington

2:30 p.m. Finding the Right Pair of Genes: Adding a Genetic Component to Existing Oral Health Studies—❖ Deborah V. Dawson, The University of Iowa

2:55 p.m. A Flexible Model for Recurrent Event Outcomes in Oral Health—❖ Elizabeth H. Slate, Medical University of South Carolina; Edsel A. Pena, University of South Carolina

3:20 p.m. Statistical Approaches for Dealing with Missing Tooth- and Surface-Level Data in Caries Research—❖ Jason Roy, University of Rochester

3:45 p.m. Floor Discussion

9 CC-620

Empirical Likelihood-Based Semiparametric Inference—Invited

Biometrics Section, Section on Nonparametric Statistics

Organizer(s): Hua Liang, University of Rochester Medical Center

Chair(s): Xiaogang (Steven) Wang, York University

2:05 p.m. Empirical Likelihood-Based Inference for Comparison of Two Populations with Censored Data—❖ Hua Liang, University of Rochester Medical Center

2:30 p.m. Empirical Likelihood-Based Inferences for Receiver Operating Characteristic Curves in the Presence of Verification Bias—❖ Jing Qin, National Institute of Allergy and Infectious Diseases

2:55 p.m. Empirical Likelihood for Accelerated Failure Time Model—❖ Mai Zhou, University of Kentucky

3:20 p.m. Nonparametric Imputation of Missing Values for Estimating Equation-Based Empirical Likelihood Inference—❖ Song X. Chen, Iowa State University; ❖ Dong Wang, University of Nebraska

3:45 p.m. Floor Discussion
10 CC-203

New Directions in Bayesian Joint Modeling of Longitudinal and Survival Data—Invited
Section on Bayesian Statistical Science, Biometrics Section, WNAR, ENAR
Organizer(s): Timothy Hanson, University of Minnesota
Chair(s): Timothy Hanson, University of Minnesota
2:05 p.m. A Flexible B-Spline Model for Multiple Longitudinal Biomarkers and Survival—Elizabeth Brown, University of Washington
2:35 p.m. Extensions of the Standard Joint Model—Jeremy M. G. Taylor, University of Michigan
3:05 p.m. Bayesian Semiparametric Methods for Joint Modeling of Longitudinal and Survival Data—Adam Branscum, University of Kentucky; Timothy Hanson, University of Minnesota; Wesley O. Johnson, University of California, Irvine
3:35 p.m. Floor Discussion

11 CC-604

Modern Monte Carlo Methods for Statistical Inference—Invited
IMS, Section on Bayesian Statistical Science, Section on Nonparametric Statistics
Organizer(s): Anthony Brockwell, Carnegie Mellon University
Chair(s): Arnaud Doucet, The University of British Columbia
2:05 p.m. An Overview of SMC and Adaptive MCMC—Anthony Brockwell, Carnegie Mellon University
2:35 p.m. Simulated Tempering Made Easy—Yves Atchade, University of Ottawa
3:05 p.m. Adaptive Monte Carlo Computing Methods—Christophe Andrieu, University of Bristol
3:35 p.m. Floor Discussion

12 CC-606

Advances in Item Response Theory—Topic-Contributed
Social Statistics Section
Organizer(s): Sandip Sinharay, Educational Testing Service
Chair(s): Guowen Sun, sanofi-aventis
2:05 p.m. Limited Information Goodness-of-Fit Testing in Multidimensional Contingency Tables—Harry Joe, The University of British Columbia
2:25 p.m. Sensitivity of Latent Trait Analysis to Highly Skewed Ability Distributions—David Dailey, Woodcock-Munoz Foundation; Elena Erosheva, University of Washington
2:45 p.m. Checking the Appropriateness of the Statistical Model Used in National Assessment of Educational Progress—Sandip Sinharay, Educational Testing Service
3:05 p.m. Improve Variance Estimation for the Assessments Based on the Plausible Values Approach—Jiahe Qian, Educational Testing Service; Shelby Haberman, Educational Testing Service
3:25 p.m. Estimation of Measurement Errors at Observed and Scaled Scores—Michelle Liou, Academia Sinica; Philip E. Cheng, Academia Sinica
3:45 p.m. Floor Discussion

13 CC-619

Bayesian Modeling of Biomedical Data—Topic-Contributed
Biometrics Section, Section on Bayesian Statistical Science, WNAR, ENAR
Organizer(s): W. John Boscardin, University of California, Los Angeles
Chair(s): Joseph W. Hogan, Brown University
2:05 p.m. Analysis of Longitudinal Clinical Trial Data with Informative Dropout—Xiaohong Yan, University of California, Los Angeles; W. John Boscardin, University of California, Los Angeles
2:25 p.m. Bayesian Approach to Multiple Changepoint with Application to HIV Immunologic Responses—Pulak Ghosh, Georgia State University; Kaushik Ghosh, New Jersey Institute of Technology; Ram Tiwari, National Institutes of Health
2:45 p.m. Bayesian Model Checking for a Longitudinal Binary Variable—Catherine Crespi, University of California, Los Angeles; W. John Boscardin, University of California, Los Angeles
3:05 p.m. Modeling Multivariate Biomedical Data with Polynomial Smoothing Splines—Hector Lemus, University of California, Los Angeles; W. John Boscardin, University of California, Los Angeles
3:25 p.m. Real-Time Learning for Heterogeneous Multivariate Longitudinal Data—W. John Boscardin, University of California, Los Angeles; Hector Lemus, University of California, Los Angeles
3:45 p.m. Floor Discussion
CART®

Salford Systems’ CART is the only classification and regression tree software based on the original proprietary source code developed by Breiman, Friedman, Olshen, and Stone. We have been working with these researchers since 1990 to perfect the engine to give you a celebrated and award-winning system.

MARS®

Jerome Friedman’s MARS (Multivariate Adaptive Regression Splines) is stepwise regression done right for the first time. MARS does variable selection, variable transformation, interaction detection, and self-testing to prevent overfitting, all automatically. Like CART, there is only one trademarked MARS and it is available exclusively from Salford Systems.

TREE®NET™

TreeNet, Jerome Friedman’s latest data mining tool, is based on boosted decision trees. TreeNet is an astonishingly accurate model builder and function approximation system that also serves as a powerful initial data exploration tool. Use TreeNet to extract the most important relationships in your data and calibrate how predictable the outcomes are. Then either use the TreeNet model directly or incorporate the results in CART, MARS, or conventional statistical models.

Random Forests™

Random Forests, Leo Breiman’s latest data mining technology, is based on learning ensembles of CART trees. By judiciously injecting randomness into the tree building process and then combining hundreds of these trees, RF is able to deliver high performance predictive models and a variety of novel exploratory data analysis results.

About Salford Systems

Salford Systems is an award-winning data mining software development and consulting company with a proven record of technical and practical excellence. Applications in both software and consulting span market research segmentation, direct marketing, fraud detection, credit scoring, risk management, bio-medical research and manufacturing quality control. Industries using Salford Systems products and consultation services include telecommunications, transportation, banking, financial services, insurance, healthcare, manufacturing, retail and catalog sales, and education. Salford Systems’ software is installed at more than 3,500 sites worldwide, including 300 major Universities.
14

**Planning Medical Device Studies—Topic-Contributed**

Biopharmaceutical Section, Biometrics Section, ENAR
Organizer(s): Philip Lavin, Averion Inc.; Greg Campbell, U.S. Food and Drug Administration
Chair(s): Greg Campbell, U.S. Food and Drug Administration

2:05 p.m. **Statistical Myths in the Design and Analysis of Clinical Trials**—Victor Hasselblad, Duke University

2:25 p.m. **New Medical Device? When Clinical Data Are Needed for a New Medical Device**—Jeng Mah, American Medical Systems Inc.

2:45 p.m. **Statistical Review Quality Assessment for Therapeutic PMA Submissions**—Lilly Yue, U.S. Food and Drug Administration

3:05 p.m. **What Device Pivotal Studies Have in Common: Recurring Themes in Study Planning**—Philip Lavin, Averion Inc.

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

15

**Bayesian Student Paper Competition II—Topic-Contributed**

Section on Bayesian Statistical Science
Organizer(s): Steven N. MacEachern, The Ohio State University
Chair(s): Steven L. Scott, University of Southern California

2:05 p.m. **Statistical Inference for Nonlinear Models Involving Ordinary Differential Equations**—Lovely Goyal, North Carolina State University; Sujit Ghosh, North Carolina State University

2:25 p.m. **Weighted Model-Based Clustering for Remote Sensing Image Analysis**—Joseph Richards, Carnegie Mellon University; Johanna Hardin, Pomona College

2:45 p.m. **On Bayesian Analysis of Generalized Linear Models Using Jacobian Technique**—Sourish Das, University of Connecticut; Dipak Dey, University of Connecticut

3:05 p.m. **Using Incompatibility To Build Fast Gibbs Samplers**—Taeyoung Park, Harvard University; David A. van Dyk, University of California, Irvine

3:25 p.m. **Improving Classification When a Class Hierarchy Is Available Using a Hierarchy-Based Prior**—Babak Shahbaba, University of Toronto; Radford Neal, University of Toronto

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

16

**IT Process Monitoring and Planning—Topic-Contributed**

Section on Physical and Engineering Sciences
Organizer(s): Yasuo Amemiya, IBM T. J. Watson Research Center
Chair(s): Yasuo Amemiya, IBM T. J. Watson Research Center

2:05 p.m. **Fourier Domain Estimation for Network Tomography**—Jin Cao, Bell Labs, Lucent Technologies; Aiyou Chen, Bell Labs, Lucent Technologies; Tian Bu, Bell Labs, Lucent Technologies

2:25 p.m. **Robust Estimation for Zero-Inflated Longitudinal Data with Application to IT System Monitoring**—Jing Shen, University of Georgia/IBM; Daniel Hall, University of Georgia

2:45 p.m. **Some Statistical Problems in Capacity Management and Planning for on-Demand Computing Services**—Ta-Hsin Li, IBM T. J. Watson Research Center

3:05 p.m. **Modeling Multivariate Time Series with Application to Software Defects Data**—Mihaela Serban, Carnegie Mellon University; Wanli Min, IBM T. J. Watson Research Center

3:25 p.m. **Improving Service Delivery Process**—Wen-Hua Ju, Avaya Labs Research; Lorraine Denby, Avaya Labs Research; James M. Landwehr, Avaya Labs Research

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

17

**Statistical and Quantitative Literacy 2006—Topic-Contributed**

Section on Statistical Education, Section on Teaching Statistics in the Health Sciences
Organizer(s): Milo Schield, Augsburg College
Chair(s): Jerry Moreno, John Carroll University

2:05 p.m. **Increasing Quantitative Literacy through the Mathematics across the Community College Curriculum Project**—Rebecca Hartzler, Seattle Central Community College; Kim Rheinlander, Dartmouth College

2:25 p.m. **Quirks of Rhetoric: a Quantitative Analysis of Quantitative Reasoning in Student Writing**—Neil Lutsky, Carleton College; Scott Bierman, Carleton College

2:45 p.m. **Common Misconceptions in Statistical Literacy**—Marc Isaacson, Augsburg College
<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>3:05 p.m.</td>
<td>Statistical Literacy: Graphs, Studies, and Related Confounders — Milo Schield, Augsburg College</td>
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<tr>
<td>3:25 p.m.</td>
<td>Pedagogical Challenges of Quantitative Literacy — Bernard Madison, University of Arkansas</td>
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<td>3:45 p.m.</td>
<td>Floor Discussion</td>
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18 CC-205


Section on Statisticians in Defense and National Security

Organizer(s): Michael Last, National Institute of Statistical Sciences

Chair(s): Michael Last, National Institute of Statistical Sciences

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<th>Time</th>
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<tr>
<td>2:05 p.m.</td>
<td>A Study of Data Swapping for Categorical Variables — Lisa R. Denogean, SAMSI</td>
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<tr>
<td>2:25 p.m.</td>
<td>Anomaly Detection — Francisco Vera, National Institute of Statistical Sciences</td>
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<td>2:45 p.m.</td>
<td>New Measures of Data Utility — Mi-Ja Woo, National Institute of Statistical Sciences</td>
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<tr>
<td>3:05 p.m.</td>
<td>Agent-Based Methods for Dynamic Social Networks — Eric Vance, Duke University; David Banks, Duke University</td>
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<td>3:25 p.m.</td>
<td>Disc: Alan Karr, National Institute of Statistical Sciences</td>
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<td>3:45 p.m.</td>
<td>Floor Discussion</td>
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19 CC-613

**Estimation Techniques for Diagnostics Devices — Topic-Contributed**

Section on Statistics in Epidemiology; Biometrics Section; Section on Physical and Engineering Sciences

Organizer(s): Roseann White, Guidant Corporation

Chair(s): David Snead, CORDIS

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<tr>
<td>2:05 p.m.</td>
<td>Evaluation of a Noninvasive Diagnostic Device Using Weighted Least Squares Approach — Zhen Huang, Duke Clinical Research Institute; Huiman Barnhart, Duke University</td>
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<tr>
<td>2:25 p.m.</td>
<td>System Accuracy Requirements for Blood Glucose Monitors — Nancy Schatz, Home Diagnostics, Inc.</td>
</tr>
<tr>
<td>2:45 p.m.</td>
<td>Bayesian Predictive Probability as a Diagnostic Assessment of the Likelihood of Coronary Artery Disease in Collateral Arteries — Laura Thompson, U.S. Food and Drug Administration</td>
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20 CC-607

**Types of Modes and Effects on Response Rates and Performance — Contributed**

Social Statistics Section

Chair(s): Kristin Stettler, U.S. Census Bureau

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<tr>
<th>Time</th>
<th>Title</th>
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<tr>
<td>2:05 p.m.</td>
<td>A Repeated Measures Design To Investigate Mode Effects in the Center for Epidemiologic Studies Depression Scale — Richard Swartz, M. D. Anderson Cancer Center; Carl de Moor, Harvard Medical School; Karon Cook, University of Washington; Rachel T. Fouladi, Simon Fraser University; Karen Basen-Engquist, M. D. Anderson Cancer Center; Cathy Eng, M. D. Anderson Cancer Center</td>
</tr>
<tr>
<td>2:20 p.m.</td>
<td>Making Item Selection More Efficient in Computerized Adaptive Testing — Hua-Hua Chang, University of Illinois; Zhiliang Ying, Columbia University</td>
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<td>2:35 p.m.</td>
<td>Floor Discussion</td>
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21 CC-618

**Functional Data Analysis, Supervised Learning, and Dimension Reduction — Contributed**

Biometrics Section; Section on Nonparametric Statistics, ENAR

Chair(s): Carsten Botts, Williams College

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<th>Time</th>
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<tr>
<td>2:05 p.m.</td>
<td>Functional Regression Analysis for Longitudinal Data with a Large Number of Repeated Measures — Xiaowei Yang, University of California, Davis; Hongquan Xu, University of California, Los Angeles; Qing Shen, Edmuns.com</td>
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<tr>
<td>2:20 p.m.</td>
<td>Self-Modeling Regression with Application to Arterial Pulse Pressure Waveforms — Lyndia Brumback, University of Washington; Doug</td>
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Tommet, University of Washington; Richard Kronmal, University of Washington

2:35 p.m. Classification and Gene Selection of Cancer Micro-Arrays by nu-Ridge Regression—Jun Luo, Michigan State University

2:50 p.m. Boosting with Missing Predictors—Ching-Yun Wang, Fred Hutchinson Cancer Research Center; Ziding Feng, Fred Hutchinson Cancer Research Center

3:05 p.m. Prediction Based on Two-Stage Modeling—Amita K. Manatunga, Emory University; Jose N. G. Binongo, Emory University; Ming Yuan, Georgia Institute of Technology

3:20 p.m. Steps Toward Individualized Treatment: a Double Supervised Machine-Learning Method—Steven Y. Cen, University of Southern California; Catherine Sugar, University of Southern California; Bryan Langholz, Keck School of Medicine of USC; David Conti, University of Southern California; Doug Stahl, City of Hope National Medical Center; Stanley P. Azen, University of Southern California

3:35 p.m. On Reducing Multiple Outcomes into a Single Score—Hui Xie, Boston University

23

● Normalization and Analysis of Microarrays—Contributed

Biometrics Section, ENAR
Chair(s): Dean Billheimer, Vanderbilt University

2:05 p.m. Two Extensions of the TW-SLM for Systematically Incorporating Control Genes and Spot Quality Information To Improve Normalization of cDNA Microarray Data—Deli Wang, The University of Alabama at Birmingham; Cun-Hui Zhang, Rutgers University; Marcelo B. Soares, Northwestern University; Jian Huang, The University of Iowa

2:20 p.m. Using Cytogenetics Data To Guide the Normalization of SNP Microarray Signals—Stanley Pounds, St. Jude Children’s Research Hospital; Cheng Cheng, St. Jude Children’s Research Hospital; Charles Mullighan, St. Jude Children’s Research Hospital; Salil Goorha, St. Jude Children’s Research Hospital; Sheila Shurtleff, St. Jude Children’s Research Hospital; Susana C. Raimondi, St. Jude Children’s Research Hospital; James R. Downing, St. Jude Children’s Research Hospital

2:35 p.m. Category Analysis for Microarray Data—Zhen Jiang, Fred Hutchinson Cancer Research Center; Robert Gentleman, Fred Hutchinson Cancer Research Center

2:50 p.m. Probe-Level Modeling and Multiple Testing of Microarray Gene Expression—Tao Wang, University of South Florida; Magali Mouy, deCODE genetics; Jason Hsu, The Ohio State University; Hakon Hakonarson, deCODE genetics; Kari Stefansson, deCODE genetics

3:05 p.m. Application of Temporal Association Rules to a cDNA Microarray Experiment—Bruce Southey, University of Illinois; Sandra Rodriguez-Zas, University of Illinois; Younhee Ko, University of Illinois; Chengxiang Zhai, University of Illinois
3:20 p.m. Quantitative Association Rules Applied to the Analysis of cDNA Microarray Experiments—
❖ Younhee Ko, University of Illinois; Bruce Southey, University of Illinois; Chengxiang Zhai, University of Illinois; Sandra Rodriguez-Zas, University of Illinois

3:35 p.m. Strategies for Genome-Wide Family-Based Association Analysis for the Study of Integrative Genomics—
❖ James Degnan, Harvard University; Jessica Su, Harvard University; Cliona Molony, Rosetta Inpharmatics LLC; Eric Schadt, Rosetta Inpharmatics LLC/Merck Research Laboratories; Benjamin Raby, Harvard University; Christoph Lange, Harvard School of Public Health

25 CC-2B
❖ Multiple Trials and Multiple Endpoints—Contributed
Biopharmaceutical Section, Biometrics Section, ENAR
Chair(s): Shuguang Huang, Eli Lilly and Company

2:05 p.m. Analysis of a Composite Endpoint with Missing Data in Components—
❖ Hui Quan, sanofi-aventis; Daowen Zhang, sanofi-aventis; Ji Zhang, sanofi-aventis; Laure Devlaminck, sanofi-aventis

2:20 p.m. A Multivariate Median-Based Robust Procedure To Analyze Multiple Endpoints—
❖ Kao-Tai Tsai, Organon; Harji Patel, Georgia Southern University

2:35 p.m. On O’Brien’s OLS and GLS Tests for Multiple Endpoints—
❖ Sergei Leonov, GlaxoSmithKline; James Roger, GlaxoSmithKline/Merck Research Laboratories

2:50 p.m. Floor Discussion

26 CC-210
❖ Mortgages and Auctions—Contributed
Business and Economics Statistics Section
Chair(s): J. Keith Ord, Georgetown University

2:05 p.m. Loss and Prepayment Modeling in the Context of Subprime Mortgage Loans—
❖ Deniz Senturk, GE Global Research; Huaiyu Ma, GE Global Research; Greg Ratkovsky, WMC

2:20 p.m. Credit Rating Transition of U.S. Corporate Bonds—
❖ Weijian Liang, New York University; Halina Frydman, New York University; Stephen Figlewski, New York University
2:35 p.m. Credit Risk Analysis for Taiwan Electronic Industrial— Yi-Kuan Jong, St. John’s University
2:50 p.m. Statistical Validation of a Credit Risk Model— Lydian Medema, University of Groningen
3:05 p.m. A Semiparametric Investigation of the Effect of Reserve Prices on Selling Prices Using Identical Auctioned Items from eBay— Dawit Zerom, University of Alberta; Peter Popkowski Leszczyc, University of Alberta
3:20 p.m. A Statistical Approach to Controlling Sniping in Electronic Auctions— Dawn Porter, Georgetown University; J. Keith Ord, Georgetown University
3:35 p.m. A New Model for Forecasting Credit Spread Changes: Model Estimation, Prediction, and Inference Procedures— Yang Wang, The Pennsylvania State University

27 CC-213
Software—Contributed
Section on Statistical Computing
Chair(s): Morteza Marzjarani, Saginaw Valley State University
2:05 p.m. The Carapace Environment— Gary Oehlert, University of Minnesota
2:20 p.m. Enterprise Automatons with R— Zubin Dowlaty, InterContinental Hotels Group; Dean Mao, InterContinental Hotels Group; Simon Urbanek, AT&T Labs-Research
2:35 p.m. Estimation and Inference in Parametric Stochastic Frontier Models: a SAS/IML Procedure for a Maximum Likelihood Bootstrap Method— Sylvie Tchumtchoua, University of Connecticut
2:50 p.m. A New Program for Computing Percentage Points for Pearson Distributions— Wei Pan, University of Cincinnati; Haiyan Bai, University of Cincinnati
3:05 p.m. Statistical Inference Package (SIP)— Esa Uusipaikka, University of Turku
3:20 p.m. Floor Discussion

28 CC-214
Testing—Contributed
Section on Statistical Computing
Chair(s): Faming Liang, Texas A&M University
2:05 p.m. Testing the Equality of Two Normally Distributed Populations— Charles Dunn, Miami University

2:20 p.m. Generation of the Distribution of the Test for a Latin Square Design with Heterogeneous Variances— Miin-Jye Wen, National Cheng Kung University; Hubert Chen, National Cheng Kung University
2:35 p.m. On Testing the Bioequivalence of Several Treatments Using the Measure of Distance— Hubert Chen, National Cheng Kung University; Miin-Jye Wen, National Cheng Kung University
2:50 p.m. An Exact Test for Testing the Equality of Parameter Matrices in Two Multivariate Linear Models— Jinadasa K. Gamage, Illinois State University; Malwane M. A. Ananda, University of Nevada, Las Vegas
3:05 p.m. Performance of Robust and Nonrobust Roy-Bargmann Stepdown Follow-up to a Significant MANOVA under a Variety of Conditions: a Simulation Study— Holmes Finch, Ball State University
3:20 p.m. Comparisons of Sets of Multivariate Time Series— Jaydip Mukhopadhyay, University of Connecticut; Nalini Ravishanker, University of Connecticut; Jonathan Hosking, IBM Research
3:35 p.m. Iterated BH Procedure— Nasrine Bendjilali, Lehigh University; Wei-Min Huang, Lehigh University

29 CC-603
Likelihood-Based Inference—Contributed
IMS
Chair(s): Siobhan Everson-Stewart, University of Washington
2:05 p.m. Testing of Rate Ratio under Inverse Sampling— Hon Keung T. Ng, Southern Methodist University; Man Lai Tang, Hong Kong Baptist University; Yijie Liao, Hong Kong Baptist University; Ping Shing Chan, The Chinese University of Hong Kong
2:20 p.m. A Bivariate Interval Censorship Model for Partnership Formation— Qiqing Yu, Binghamton University; Linda Wong, Binghamton University
2:35 p.m. The Likelihood Ratio Test of Mixture Hypotheses and the Tube Volume Problem— Yong Lin, University of Medicine & Dentistry of New Jersey; Bruce G. Lindsay, The Pennsylvania State University
### GENERAL PROGRAM SCHEDULE

#### Themed Session
- **2:50 p.m.** On Hinkley’s Estimator: Inference about the Change-Point—Stergios B. Fotopoulos, Washington State University; Venkata Jandhyala, Washington State University

#### Applied Session
- **3:35 p.m.** Bayesian Modeling of Noncompliance in Folic Acid Dosing Studies—Owen Devine, Centers for Disease Control and Prevention

#### Presenter CC-Washington State Convention & Trade Center H-Grand Hyatt Seattle S-Sheraton Seattle Hotel & Towers

#### 30 CC-211
**Bayesian Biomedical Modeling—Contributed**
Section on Bayesian Statistical Science, Biometrics Section, WNAR, ENAR
*Chair(s): Edwin S. Iversen, Jr., Duke University*

- **2:05 p.m.** Monitoring Event Times in Early-Phase Clinical Trials: Practical Issues—Leiko H. Wooten, M. D. Anderson Cancer Center; Peter F. Thall, M. D. Anderson Cancer Center; Nizar M. Tannir, M. D. Anderson Cancer Center

- **2:20 p.m.** Modeling Long-Term HIV Dynamics: a Bayesian Approach—Dacheng Liu, Boehringer Ingelheim; Hulin Wu, University of Rochester; Yangxin Huang Huang, University of South Florida

- **2:35 p.m.** Prior Structures for Surrogate Endpoint Validation Using PTE—Chunyao Feng, Baylor University; John W. Seaman, Baylor University; Stacy Lindborg, Eli Lilly and Company

- **2:50 p.m.** A Bayesian Multivariate PK/PD Model for Analyzing Cortisol Circadian Rhythm in a Depression Study—Niko Kaciroti, University of Michigan; Trivellore E. Raghunathan, University of Michigan; Delia Vazquez, University of Michigan

- **3:05 p.m.** Bayesian Modeling of Correlated Binary Data from the Cryotherapy for Retinopathy of Prematurity (CRYO-ROP) Study—Claudia Pedroza, The University of Texas School of Public Health; Betty Tung, The University of Texas School of Public Health

- **3:20 p.m.** Bayesian Analysis of Age-Adjusted Cancer Rates Using Jointpoint Regression Model—Ram Tiwari, National Institutes of Health; Pulak Ghosh, Georgia State University

#### 31 CC-605
**Consumer Prices and Expenditures—Contributed**
Section on Government Statistics
*Chair(s): Alan R. Tupek, U.S. Census Bureau*

- **2:05 p.m.** A Micro-Level Latent Class Analysis of Underreporting on the Consumer Expenditure Survey—Brian Meekins, Bureau of Labor Statistics; Clyde Tucker, Bureau of Labor Statistics; Paul Biemer, RTI International

- **2:20 p.m.** The Use of Geocoding to Locate Outlets Outside of Sample Area Boundaries to Determine Significant Areas of Commerce—John Schilp, Bureau of Labor Statistics; Fred Marsh, III, Bureau of Labor Statistics

- **2:35 p.m.** Internet Portals and Outlet Selection Issues in the Consumer Price Index—William Larson, Bureau of Labor Statistics


#### 32 CC-612
**Applications for Modeling Health Survey Data—Contributed**
Section on Health Policy Statistics
*Chair(s): David Blough, University of Washington*

- **2:05 p.m.** Modeling of Longitudinal Polytomous Outcomes from Complex Survey Data—Punam Pahwa, University of Saskatchewan; Chandima
2:20 p.m. Statistical Modeling of Longitudinal Mental Distress among the National Population Health Survey Participants: Missing Data Analysis—❖ Chandima Karunanayake, University of Saskatchewan; Punam Pahwa, University of Saskatchewan; Helen H. McDuffie, University of Saskatchewan

2:35 p.m. A Two-Phase Model To Study the Health Care–Seeking Behaviors for Common Cold of People in Taiwan—❖ Hsing-Yi Chang, National Health Research Institutes; Yu-Wen Wen, National Health Research Institutes

2:50 p.m. Alcohol Disorders and Employment Stability: a Longitudinal Study—❖ Richard Bryant, University of Missouri-Rolla; V. A. R. Samaranayake, University of Missouri-Rolla

3:05 p.m. Significance Analysis of Physician Photo Identification Cards Trial—❖ Ye-Ying Cen, Hennepin County Medical Center; Jennings Ryan Staley, United States Air Force; Baolin Wu, University of Minnesota; Scott F. Davies, Hennepin County Medical Center

3:20 p.m. Development, Scaling, and Implementation of a Patient Satisfaction Inventory for Organ Transplant Candidates and Recipients—❖ Irene Feurer, Vanderbilt University Medical Center; Hongxia Liu, Vanderbilt University School of Nursing; Panarut Wisawatapnimit, Vanderbilt University School of Nursing; C. Wright Pinson, Vanderbilt University Medical Center

3:35 p.m. Factor Analysis with Categorical Data: a Methodological Illustration with the GAZA Child Health Survey Data—❖ Dongguang Li, National Cancer Institute of Canada; John D. Pringle, Queen's University; Julio Arboleda-Florez, Queen's University; Heather Stuart, Queen's University

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### 33 CC-212

*Nonparametric Approaches to Regression and Spatial Modeling—Contributed*

Section on Nonparametric Statistics  
*Chair(s): Huiping Jiang, Columbia University*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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</thead>
<tbody>
<tr>
<td>2:05 p.m.</td>
<td>Regression Model-Fitting with Long Memory— Hongwen Guo, Michigan State University; Hira L. Koul, Michigan State University</td>
</tr>
<tr>
<td>2:20 p.m.</td>
<td>Multivariate Theil-Sen Estimators— Xin Dang, University of Mississippi; Hanxiang Peng, University of Mississippi; Xueqin Wang, Yale University School of Medicine</td>
</tr>
<tr>
<td>2:35 p.m.</td>
<td>A Goodness-of-Fit Test for Parametric Regression Models When Some Covariates Are Missing— Lei Jin, Texas A&amp;M University; Suojin Wang, Texas A&amp;M University</td>
</tr>
<tr>
<td>2:50 p.m.</td>
<td>Estimating Prediction Error in Linear Regression by Cross-Validation— Hui Shen, The University of British Columbia; William J. Welch, The University of British Columbia</td>
</tr>
<tr>
<td>3:05 p.m.</td>
<td>On Nonparametric Smoothing Methods for Assessing Climate Change— Patricia Menendez Galvan, Swiss Federal Research Institute WSL/ETHZ; Sucharita Ghosh, Swiss Federal Research Institute WSL</td>
</tr>
<tr>
<td>3:20 p.m.</td>
<td>Evaluation of Spatial Normalization Parameters for SPM: Application to Type 2 Diabetes Data— Bedda Rosario, University of Pittsburgh; Scott Ziolko, University of Pittsburgh; Lisa Weissfeld, University of Pittsburgh; Julie Price, University of Pittsburgh</td>
</tr>
<tr>
<td>3:35 p.m.</td>
<td>Statistical Methods for Proportional Hazards Regression with Missing Covariates— Lihong Qi, University of California, Davis; Ching-Yun Wang, Fred Hutchinson Cancer Research Center; Ross Prentice, Fred Hutchinson Cancer Research Center</td>
</tr>
</tbody>
</table>

### 35 CC-611

*Causal Models and Causal Effects—Contributed*

Section on Statistics in Epidemiology, Biometrics Section, ENAR  
*Chair(s): Abdus Wahed, University of Pittsburgh*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>2:05 p.m.</td>
<td>On Informative Detection Bias in Screening Studies— Arvid Sjölander, Karolinska Institutet; Juni Palmgren, Karolinska Institutet</td>
</tr>
<tr>
<td>2:20 p.m.</td>
<td>Estimating a Class of Causal Treatment Effect for Survival Data— Jing Ning, The Johns Hopkins University; Mei-Cheng Wang, The Johns Hopkins University; Zhiqiang Tan, The Johns Hopkins University</td>
</tr>
<tr>
<td>2:35 p.m.</td>
<td>Path Analysis for Ordinal Variables— Haihong Li, University of Florida; P. V. Rao, University of Florida</td>
</tr>
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### 34 CC-601

*Optimal Experimental Design—Contributed*

Section on Physical and Engineering Sciences  
*Chair(s): Cheryl Dingus, Battelle Memorial Institute*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>2:05 p.m.</td>
<td>A Catalog of Nonisomorphic Indicator Functions— Shao-Wei Cheng, Academia Sinica; Chien-Yu Peng, Academia Sinica</td>
</tr>
<tr>
<td>2:20 p.m.</td>
<td>Certain Orthogonal Arrays with Generalized Minimum Aberration— Aijun Zhang, University of Michigan</td>
</tr>
<tr>
<td>2:35 p.m.</td>
<td>Optimal Fold-over Designs for Three-Level Fractional Factorial Designs— Hong Zhou, University of Memphis; Manohar L. Aggarwal, University of Memphis; Lih Yuan Deng, University of Memphis; Dennis K. J. Lin, The Pennsylvania State University</td>
</tr>
<tr>
<td>2:50 p.m.</td>
<td>(M,S)-Optimality in Selecting Factorial Designs— Xianggui Qu, Oakland University; Robert Kushler, Oakland University; Theophilus Ogunyemi, Oakland University</td>
</tr>
<tr>
<td>3:05 p.m.</td>
<td>Algorithms for Generating Experimental Designs for Irregularly Shaped Regions— Greg Piepel, Battelle-PNNL; Nam-Ky Nguyen, University of New England</td>
</tr>
<tr>
<td>3:20 p.m.</td>
<td>Orthogonal-Maximin Latin Hypercube Designs— Ying Hung, Georgia Institute of Technology; Roshan J. Vengazhiyil, Georgia Institute of Technology</td>
</tr>
<tr>
<td>3:35 p.m.</td>
<td>Optimal Design of an Ion Trapping Experiment— Kevin Coakley, National Institute of Standards and Technology</td>
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</table>
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<th>Time</th>
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<tbody>
<tr>
<td>3:20 p.m.</td>
<td>Signed Directed Acyclic Graphs for Causal Inference—Tyler J. VanderWeele, Harvard School of Public Health; James Robins, Harvard School of Public Health</td>
</tr>
<tr>
<td>3:35 p.m.</td>
<td>Floor Discussion</td>
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**CC-608**

**Unit Nonresponse in Surveys I—Contributed**

Section on Survey Research Methods  
*Chair(s): Karol Krotki, RTI International*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>2:05 p.m.</td>
<td>Nonresponse to a Computer-Assisted Self-Interviewing (CASI) Module—Mick Couper, University of Michigan; Eleanor Singer, University of Michigan; John Van Hoewyk, University of Michigan</td>
</tr>
<tr>
<td>2:20 p.m.</td>
<td>Assessing the Effectiveness of Weighting Cell Adjustments for Longitudinal Nonresponse—Leroy Bailey, U.S. Census Bureau</td>
</tr>
<tr>
<td>2:35 p.m.</td>
<td>Sample Reweighting To Reflect an Initial Population—Julia Bienias, Rush University Medical Center; Phillip S. Kott, National Agricultural Statistics Service; Todd L. Beck, Rush University Medical Center; Denis A. Evans, Rush University Medical Center</td>
</tr>
<tr>
<td>2:50 p.m.</td>
<td>Approaches to Nonresponse Bias Analysis in an Adult Literacy Survey—Wendy Van de Kerckhove, Westat; Thomas Krenzke, Westat; Leyla Mohadjer, Westat</td>
</tr>
<tr>
<td>3:20 p.m.</td>
<td>Adjusting for Nonignorable Missing Data with Nonignorable Sampling Design in Longitudinal Sample Survey—Moh Yin Chang, University of Nebraska-Lincoln</td>
</tr>
<tr>
<td>3:35 p.m.</td>
<td>Estimated Response Propensities as a Means To Evaluate Error Effects Due to Nonresponse—Leela Aertker, The University of North Carolina at Chapel Hill; William D. Kalsbeek, The University of North Carolina at Chapel Hill</td>
</tr>
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**CC-610**

**Estimation and Confidentiality—Contributed**

Section on Survey Research Methods, Section on Health Policy Statistics  
*Chair(s): Andrew A. White, Institute of Education Sciences*

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>2:05 p.m.</td>
<td>Disclosure Avoidance for the 2007 ACS PUMS: a Model-Based Approach for Group-Quarters Data—Rolando Rodriguez, U.S. Census Bureau</td>
</tr>
<tr>
<td>2:20 p.m.</td>
<td>Reporting to Payers, Regulators, and Managers: Issues and Experiences with Confidentiality and Compliance—Richard Carlson, Medica</td>
</tr>
<tr>
<td>2:35 p.m.</td>
<td>The Change-of-Variance Function in Generalized Linear Mixed-Effect Models with Applications to Poisson-Gamma and Beta-Binomial Models—Gabriela Cohen-Freue, The University of British Columbia</td>
</tr>
<tr>
<td>2:50 p.m.</td>
<td>A Bridge between the Greg and the Linear Regression Estimators—Sarjinder Singh, St. Cloud State University; Raghunath Arnab, University of Botswana</td>
</tr>
<tr>
<td>3:05 p.m.</td>
<td>A Generalized Forced Quantitative Randomized Response Model—Oluseun Odumade, St. Cloud State University; Sarjinder Singh, St. Cloud State University</td>
</tr>
<tr>
<td>3:20 p.m.</td>
<td>Global and Hierarchical Linear Regression in Two-Stage Sampling—Dhirendra Ghosh, Synectics for Management Decisions, Inc.; Andrew Vogt, Georgetown University</td>
</tr>
<tr>
<td>3:35 p.m.</td>
<td>Confidentiality in Survey Data: the Lack of Consistent Standards—M. Leann Habte, University of California, Los Angeles; Hongjian Yu, University of California, Los Angeles; Jenny Chia, University of California, Los Angeles; Brandon Traudt, University of California, Los Angeles</td>
</tr>
</tbody>
</table>

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

**CC-4C-4**

**Introductory Overview Lectures: Adaptive Designs/Interim Pilots and Regression Trees—Other**

The ASA, ENAR, IMS, SPAIG Committee, WNAR  
*Organizer(s): Lisa M. LaVange, The University of North Carolina at Chapel Hill*

*Chair(s): Lisa M. LaVange, The University of North Carolina at Chapel Hill*

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<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>4:05 p.m.</td>
<td>Regression Trees—Wei-Yin Loh, University of Wisconsin-Madison</td>
</tr>
</tbody>
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*GENERAL PROGRAM SCHEDULE*

- **Themed Session**
- **Applied Session**
- **Presenter**
- **Location Notes:** CC-Washington State Convention & Trade Center, H-Grand Hyatt Seattle, S-Sheraton Seattle Hotel & Towers
4:55 p.m.  Adaptive and Internal Pilot Designs— 
❖ Christopher S. Coffey, The University of Alabama at Birmingham

5:45 p.m.  Floor Discussion

Invited Sessions 4:00 p.m.–5:50 p.m.

39  
Statistics in Biotechnology around the Puget Sound—Invited
ASA, Puget Sound Chapter, Section on Statistical Graphics
Organizer(s): Bruce Peterson, Terastat
Chair(s): Tim C. Hesterberg, Insightful Corporation

4:05 p.m.  Reference Samples and Other Low-Level Choices for the Design and Analysis of Two-Color Microarray Experiments—❖ Kathleen Kerr, University of Washington

4:35 p.m.  Graphs and Networks in Computational Biology—❖ Robert Gentleman, Fred Hutchinson Cancer Research Center

5:05 p.m.  Statistical Methods for Integrating High-Dimensional Genotype, Molecular Profiling, and Clinical Data To Elucidate Human Disease—❖ Eric Schadt, Rosetta Inpharmatics LLC/Merck Research Laboratories

5:35 p.m.  Floor Discussion

40  
Statistical Issues in Genetic Association Studies—Invited
General Methodology, Biometrics Section, ENAR
Organizer(s): Danyu Lin, The University of North Carolina at Chapel Hill
Chair(s): Daniel Schaid, Mayo Clinic College of Medicine

4:05 p.m.  Family Studies in the Age of Association—❖ Nan M. Laird, Harvard School of Public Health

4:35 p.m.  Hybrid Vigor: Family-Based and Population-Based Designs Can Work Together—❖ Clarice R. Weinberg, National Institute of Environmental Health Sciences; David M. Umbach, National Institute of Environmental Health Sciences

4:55 p.m.  Analysis of Complex Pathways in Molecular Epidemiology—❖ Duncan C. Thomas, University of Southern California

5:20 p.m.  Disc: David Clayton, University of Cambridge

5:40 p.m.  Floor Discussion

41  
❖ Statistical Effect Assessment of Environmental Exposure—Invited
ENAR, Biometrics Section, WNAR, Section on Statistics and the Environment
Organizer(s): Li-Shan Huang, University of Rochester
Chair(s): Christopher Cox, The Johns Hopkins University

4:05 p.m.  Bayesian Models for Multiple Outcomes Nested within Domains—❖ Sally W. Thurston, University of Rochester Medical Center; David Ruppert, Cornell University

4:30 p.m.  Analysis of Multivariate Longitudinal Data Using Structural Equation Models—❖ Esben Budtz-Jorgensen, University of Copenhagen; Philippe Grandjean, Harvard University; Frodi Debes, University of Southern Denmark; Pal Weihe, Faroese Hospital System

4:55 p.m.  Double-Smoothing Local Linear Estimation in Partial Linear Models with Application to Environmental Health Data—❖ Li-Shan Huang, University of Rochester; Christopher Cox, The Johns Hopkins University

5:20 p.m.  Synthesizing Data from Multiple Sources for Environmental Risk Assessment—❖ Louise Ryan, Harvard School of Public Health

5:45 p.m.  Floor Discussion

42  
Graphical Models and Variational Methods—Invited
IMS, Section on Bayesian Statistical Science
Organizer(s): Martin Wainwright, University of California, Berkeley
Chair(s): Martin Wainwright, University of California, Berkeley

4:05 p.m.  Variational Methods for Dirichlet Process Mixtures—❖ David M. Blei, Princeton University; Michael I. Jordan, University of California, Berkeley

4:35 p.m.  Structured Prediction, Dual Extragradient, and Bregman Projections—❖ Ben Taskar, University of California, Berkeley

5:05 p.m.  A Variational Inference Procedure Allowing Internal Structure for Overlapping Clusters and Deterministic Constraints—❖ Christopher Meek, Microsoft Research; Dan Geiger, Technion-Israel Institute of Technology

5:35 p.m.  Floor Discussion
43  CC-213
● Statistical Methods in HIV/AIDS Research—Invited
Section on Statistics in Epidemiology, Biometrics Section, ENAR
Organizer(s): Michael G. Hudgens, The University of North Carolina at Chapel Hill
Chair(s): Michael G. Hudgens, The University of North Carolina at Chapel Hill
4:05 p.m. Methods for Determining the Accuracy of Quantitative PCR for Low Levels of HIV-1—
   ✦ Barbra Richardson, University of Washington
4:25 p.m. A Bernoulli/Left-Censored Lognormal Mixture Model for Activity of the Protease of HIV-1 as a Function of Amino Acid Characteristics—
   ✦ Paul W. Stewart, The University of North Carolina at Chapel Hill
4:45 p.m. Evaluating Linked Substitutions in HIV Genomic Sequences—
   ✦ Françoise Seillier-Moiseiwitsch, Georgetown University Medical Center;
   Huwaida Rabie, Georgetown University Medical Center; Rebecca Slack, Georgetown University Medical Center; JaeHyung Ahn, The University of North Carolina at Chapel Hill; Gary Koch, The University of North Carolina at Chapel Hill
5:05 p.m. A Comprehensive Mathematical Model of HIV/STD Spread in Communities—
   ✦ Georgiy V. Bobashev, RTI International; Michael Goedecke, RTI International; Elizabeth Costenbader, RTI International; William Zule, RTI International
5:25 p.m. Disc: Sarah Holte, Fred Hutchinson Cancer Research Center
5:45 p.m. Floor Discussion

44  CC-201
● Global Views on the Role of Statistics in Medical Device Regulation—Invited
Biopharmaceutical Section, ENAR
Organizer(s): Gene Pennello, U.S. Food and Drug Administration
Chair(s): Gene Pennello, U.S. Food and Drug Administration
4:05 p.m. Statistical Regulations in the EU: Do They Exist for Medical Devices?—
   ✦ Bart Gerritse, Medtronic, Inc.
4:30 p.m. Statistics in the Chinese Regulatory Environment of Medical Devices—
   ✦ Li Wei, Cardiovascular Institute and Fu Wai Hospital; Yao Chen, Peking University First Hospital
4:55 p.m. The Global Harmonization Task Force—
   ✦ Larry G. Kessler, U.S. Food and Drug Administration

5:20 p.m. Disc: Greg Campbell, U.S. Food and Drug Administration
5:40 p.m. Floor Discussion

45  CC-3A
Statistical Learning and Data Mining—Invited
International Chinese Statistical Association, Section on Nonparametric Statistics
Organizer(s): Xiaotong Shen, University of Minnesota
Chair(s): Xiao-Li Meng, Harvard University
4:05 p.m. Image Denoising via Solution Paths—
   ✦ Ji Zhu, University of Michigan; Li Wang, University of Michigan; Hui Zou, University of Minnesota
4:35 p.m. Using Input-Dependent Weights for Model Combination and Model Selection with Multiple Sources of Data—
   ✦ Wei Pan, University of Minnesota; Guanghua Xiao, University of Minnesota; Xiaohong Huang, University of Minnesota
5:05 p.m. Binning in Gaussian Kernel Regularization—
   ✦ Bin Yu, University of California, Berkeley; Tao Shi, University of California, Berkeley
5:35 p.m. Floor Discussion

46  CC-614
Statistical Graphics: from Playfair to Bertin and beyond—Invited
Section on Statistical Graphics, Section on Statistical Education
Organizer(s): Michael Friendly, York University
Chair(s): Antony Unwin, Universität Augsburg
4:05 p.m. Graphics in French Statistical Journals during the 19th Century—
   ✦ Antoine de Falguerolles, University Paul Sabatier (Toulouse III)
4:35 p.m. Andre-Michel Guerry and the Rise of Moral Statistics—
   ✦ Michael Friendly, York University
5:05 p.m. William Playfair and the Psychology of Graphs—
   ✦ Ian Spence, University of Toronto
5:35 p.m. Floor Discussion

47  CC-210
● Statistical Methods in Oral Health Research—Invited
Biometrics Section, WNAR
Organizer(s): Elizabeth G. Hill, Medical University of South Carolina
Chair(s): Elizabeth H. Slate, Medical University of South Carolina
4:05 p.m. A Semiparametric Bayesian Model for Inter-Rater Agreement of Probing Pocket Depth—
Statistics from Wiley at JSM!

**Introduction to Linear Regression Analysis, 4th Edition**
Douglas C. Montgomery, Elizabeth A. Peck, G. Geoffrey Vining

The Fourth Edition of Introduction to Linear Regression Analysis describes both the conventional and less common uses of linear regression in the practical context of today's mathematical and scientific research. This popular book blends both theory and application to equip the reader with an understanding of the basic principles necessary to apply regression model-building techniques in a wide variety of application environments.

0-471-75945-1 • July 2006 • 640 pp. • Cloth • $110.00

**Regression Analysis by Example, 4th Edition**
Samprit Chatterjee, Ali S. Hadi

Carrying out a successful application of regression analysis requires a balance of theoretical results, empirical rules, and subjective judgment. Regression Analysis by Example, Fourth Edition explains the principles underlying exploratory data analysis, emphasizing data analysis rather than statistical theory. Completely rewritten, reorganized, and updated, the new edition is expanded and modernized to reflect recent advances in the field, offering in-depth treatment of diagnostic plots, time series regression, multicollinearity, logistic regression, and robust regression and data mining.

0-471-74696-7 • September 2006 • 416 pp. • Cloth • $105.00

**Visual Statistics:**
*Seeing Data with Dynamic Interactive Graphics*
Forrest W. Young, Pedro M. Valero-Mora, Michael Friendly

Visual statistics accomplishes the goal of bringing the most complex and advanced statistical methods within the reach of those with little statistical training by using animated graphics of the data. This text shows how to make dynamic visualizations that are fully interactive and respond instantly to the user's nudges and prods. The graphics are created from relevant mathematical statistics and the interactive presentation of dynamic graphics promotes perceptual and cognitive understanding of the data's story.

0-471-68160-1 • September 2006 • 448 pp. • Cloth • $84.95

**Statistical Matching: Theory and Practice**
Marcello D'Orazio, Marco Di Zio, Mauro Scapu

There is more statistical data produced in today's modern society than ever before. This data is analyzed and cross-referenced for innumerable reasons. However, many data sets have no shared element and are harder to combine and therefore obtain any meaningful inference from. Statistical matching allows just that: it is the art of combining information from different sources (particularly sample surveys) that contain no common unit. In response to modern influxes of data, it is an area of rapidly growing interest and complexity. Statistical Matching: Theory and Practice introduces the basics of statistical matching, before going on to offer a detailed, up-to-date overview of the methods used and an examination of their practical applications.

0-470-02353-8 • May 2006 • 268 pp. • Cloth • $99.00

**Applied Regression Modeling:**
*A Business Approach*
Iain Pardoe

Applied Regression Modeling: A Business Approach represents a consciously fused effort to put all the building blocks of regression modeling in one place (with chapters on statistical foundations and simple linear regression), before constructing a general framework for building multiple linear regression models. The emphasis is on interesting and challenging applications that provide a unified fabric for business settings. An abundant use of graphics is employed throughout the book in an effort to keep the verbiage to an absolute minimum. SPSS, Excel, and R software discussions are incorporated.

0-471-97033-6 • August 2006 • 320 pp. • Cloth • $99.95

**Linear Model Theory:**
*Univariate, Multivariate, and Mixed Models*
Keith E. Muller, Paul W. Stewart

Fundamentals of Multivariate Linear Models: Theory and Application consists of five parts. Part 1 centers on brief, clear mathematical statements of notation, assumptions, and formulas. Real data examples illustrate and motivate students. Part 2 consists of mathematical prerequisites (matrix algebra and the fundamentals of multivariate statistical theory) and is based on the assumption that some students either have not learned this material already or will need to review it. Part 3 contains chapters on the multivariate Gaussian distribution and quadratic forms. Part 4 focuses on estimation and inference. Part 5 concentrates on study planning. Each section of the book contains homework assignments and exams that instructors may use for their classes, or that students can use to test their own knowledge.

0-471-21486-4 • July 2006 • 480 pp. • Cloth • $84.95

**Bayesian Statistics and Marketing**
Peter Rossi, Greg Allenby, Rob McCulloch

Bayesian Statistics and Marketing describes the basic advantages of the Bayesian approach, detailing the nature of the computational revolution. Examples contained include household and consumer panel data on product purchases and survey data, demand models based on micro-economic theory and random effect models used to pool data among respondents. The book also discusses the theory and practical use of MCMC methods.

0-470-88367-6 • January 2006 • 368 pp. • Cloth • $79.95

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GENERAL PROGRAM SCHEDULE

Themed Session  ●  Applied Session  ❖  Presenter  CC-Washington State Convention & Trade Center  H-Grand Hyatt Seattle  S-Sheraton Seattle Hotel & Towers

Elizabeth G. Hill, Medical University of South Carolina; Elizabeth H. Slate, Medical University of South Carolina

4:30 p.m.  Ensemble Models for Risk Prediction with Survey and Multilevel Data—❖ Stuart A. Gansky, University of California, San Francisco; Nancy F. Cheng, University of California, San Francisco

4:55 p.m.  Spatial Analyses of Periodontal Data Using Conditionally Autoregressive Priors Having Two Classes of Neighbor Relations—❖ Brian Reich, North Carolina State University; James Hodges, University of Minnesota; Bradley P. Carlin, University of Minnesota

5:20 p.m.  Disc: Julie Stoner, University of Nebraska Medical Center

5:40 p.m.  Floor Discussion

Invited Panels 4:00 p.m.–5:50 p.m.

48  CC-617

●❖ Minorities, Environment, and Statistics—Invited
Committee on Minorities in Statistics, Section on Statistical Education
Organizer(s): Nagambal Shah, Spelman College
Chair(s): Calvin L. Williams, Clemson University
Panelists: ❖ Nagambal Shah, Spelman College
❖ William Hunt, North Carolina State University
❖ Julia Bader, The University of Texas at El Paso
❖ Kishi Animashaun Ducre, Syracuse University

5:45 p.m.  Floor Discussion

49  CC-3B

●❖ ‘Bad’ Statistical Methods: What Are the Costs?—Invited
The American Statistician, Section on Statistical Education, Section on Statistical Consulting, Section on Teaching Statistics in the Health Sciences
Organizer(s): Peter Westfall, Texas Tech University
Chair(s): Peter Westfall, Texas Tech University
Panelists: ❖ David Freedman, University of California, Berkeley
❖ S. Stanley Young, National Institute of Statistical Sciences
❖ Mary Foulkes, U.S. Food and Drug Administration
❖ Juliet Shaffer, University of California, Berkeley

5:45 p.m.  Floor Discussion

50  CC-204

● Strengths and Weaknesses of a Megatrial—Topic-Contributed
Biopharmaceutical Section, Biometrics Section, ENAR
Organizer(s): Vipin Arora, Novartis Pharmaceuticals Corporation; Tsushung A. Hua, Novartis Pharmaceuticals Corporation
Chair(s): John E. Connett, University of Minnesota

4:05 p.m.  Megatrials: Not Necessarily Either/Or—❖ Lloyd Fisher, University of Washington

4:25 p.m.  Issues in the Use of a Composite Endpoint in Megatrials—❖ Steven Snapinn, Amgen Inc.

4:45 p.m.  Are Megatrials Worth It?—❖ Barry Davis, The University of Texas School of Public Health

5:05 p.m.  Strengths and Weaknesses of a Megatrial: Complexity of Designing, Handling, and Implementing Megatrials—❖ Timothy Church, University of Minnesota

5:25 p.m.  Disc: Patrick O’Meara, Pat O’Meara Associates, Inc.

5:45 p.m.  Floor Discussion

51  CC-613

●❖ Issues with Open Source Statistical Software in Industry: Validation, Legal Issues, and Regulatory Requirements—Topic-Contributed
Section on Statistical Computing, Biopharmaceutical Section, Section on Statistical Consulting, Section on Statistical Graphics
Organizer(s): Nicholas J. I.Lewin-Koh, Eli Lilly and Company
Chair(s): Stacy Lindborg, Eli Lilly and Company

4:05 p.m.  Open-Source Software and Pharma Development: Computer Systems Validation and Value—❖ Anthony Rossini, Novartis Pharma AG

4:25 p.m.  Open-Source Software in Pharmaceutical Discovery—❖ Gregory Warnes, Pfizer Inc.; A. Max Kuhn, Pfizer Global Research & Development; James Rogers, Pfizer Global Research & Development

4:45 p.m.  Use of Open-Source Software by an Academic Center in a Regulatory Environment—❖ Thomas D. Cook, University of Wisconsin-Madison

5:05 p.m.  Times R A’changin’: FDA Perspectives on Use of Open Source—❖ B. Sue Bell, U.S. Food and
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Drug Administration; Kathleen Morrish, U.S. Food and Drug Administration; Ferrin Harrison, U.S. Food and Drug Administration; David Petullo, U.S. Food and Drug Administration; Laura Thompson, U.S. Food and Drug Administration; Gerry W. Gray, U.S. Food and Drug Administration

5:25 p.m. Software and Code Evaluation: Risk-Based Approaches to Software Integration—Nicholas J. I. Lewin-Koh, Eli Lilly and Company; Robert A. Myers, Eli Lilly and Company

5:45 p.m. Floor Discussion

52 CC-602
Model-Based Seasonal Adjustment: Algorithms and Applications—Topic-Contributed
Business and Economics Statistics Section
Organizer(s): Brian C. Monsell, U.S. Census Bureau
Chair(s): Tucker S. McElroy, U.S. Census Bureau


4:25 p.m. Evaluation of Finite-Sample Diagnostics for Model-Based Seasonal Adjustments and Trends—David Findley, U.S. Census Bureau; Richard Gagnon, U.S. Census Bureau; Tucker S. McElroy, U.S. Census Bureau

4:45 p.m. Aspects of Model Averaging for Seasonal Adjustment—John Aston, Academia Sinica


5:25 p.m. Floor Discussion

53 CC-615
From Sharks to Salmon: Quantitative Tools in Marine Demography and Management for Puget Sound and Alaska Fisheries—Topic-Contributed
Section on Statistics and the Environment
Organizer(s): Loveday Conquest, University of Washington
Chair(s): Loveday Conquest, University of Washington

4:05 p.m. The Management Strategy Evaluation Approach and the Gulf of Alaska Walleye Pollock Fishery—Teresa A’mar, University of Washington; Andre E. Punt, University of Washington; Martin W. Dorn, National Oceanic & Atmospheric Administration

4:25 p.m. Using Mixture Models To Estimate Abundance of Patchy Species—Elizabeth Conners, National Oceanic & Atmospheric Administration

4:45 p.m. Forecasts of Salmon Returns—Saang-Yoon Hyun, Columbia River Inter-Tribal Fish Commission; David H. Salinger, University of Washington

5:05 p.m. Using Multivariate Statistics To Resolve Issues of Scale with Salmon Survival and Ocean Environmental Data—Rishi Sharma, University of Washington

5:25 p.m. Reconciling Biological Realities with Statistical Requirements in Fitting Growth Curves with Emphasis on Growth Models for Sharks—Nicole Vega, University of Washington; Vincent Gallucci, University of Washington

5:45 p.m. Floor Discussion

54 CC-620
Overview and Results from the 2005 National Census Test—Topic-Contributed
Section on Survey Research Methods
Organizer(s): Jennifer Tancreto, U.S. Census Bureau
Chair(s): James Treat, U.S. Census Bureau

4:05 p.m. An Overview of the 2005 National Census Test—Jennifer Tancreto, U.S. Census Bureau

4:25 p.m. Effect of Internet Response Mode Designs on Data Quality and Ease of Use—Kelly Allmang, U.S. Census Bureau; Kevin Zajac, U.S. Census Bureau

4:45 p.m. Experimental Treatment Results of the Bilingual Census Form from the 2005 National Census Test—Julie Bouffard, U.S. Census Bureau; Jennifer Tancreto, U.S. Census Bureau

5:05 p.m. Analysis of Self-Response Options and Respondent-Friendly Design from the 2005 National Census Test—Michael Bentley, U.S. Census Bureau

5:25 p.m. Experimental Treatment Results for the Age, Relationship, and Tenure Items from the 2005 National Census Test—Joan Hill, U.S. Census Bureau; Jennifer Tancreto, U.S. Census Bureau; Cynthia A. Rothhaas, U.S. Census Bureau

5:45 p.m. Floor Discussion
55  CC-611

● Statistical Issues in Veterans Administration (VA) Health Services Research—Topic-Contributed
Section on Health Policy Statistics
Organizer(s): Roslyn A. Stone, Veteran’s Affairs Pittsburgh Healthcare System
Chair(s): Xiao-Hua Andrew Zhou, University of Washington

4:05 p.m.  Statistical Issues in Racial/Ethnic Disparities Research—Roslyn A. Stone, Veteran’s Affairs Pittsburgh Healthcare System; Huanyu Chen, VA Pittsburgh Healthcare System; Xiangyan Xu, Veteran’s Affairs Pittsburgh Healthcare System

4:25 p.m.  The Use of Hierarchical Linear Models To Evaluate Methods for the Delivery of Primary Care—Martin Lee, University of California, Los Angeles

4:45 p.m.  Understanding Variation in Patient Safety Measures in the VA: How Bayesian Methods Can Help—Cindy Christiansen, Boston University

5:05 p.m.  A Decision-Theoretic Approach to Identifying Future High-Cost Patients—Kenneth Pietz, U.S. Department of Veterans Affairs; Margaret M. Byrne, University of Miami; Laura A. Petersen, U.S. Department of Veterans Affairs

5:25 p.m.  Disc: Stephan Fihn, University of Washington School of Public Health

5:45 p.m.  Floor Discussion

56  CC-604

● Bayesian Student Paper Competition I—Topic-Contributed
Section on Bayesian Statistical Science
Organizer(s): Steven N. MacEachern, The Ohio State University
Chair(s): Merlise Clyde, Duke University

4:05 p.m.  Bayesian Synthesis—Qingzhao Yu, The Ohio State University; Steven N. MacEachern, The Ohio State University; Mario Peruggia, The Ohio State University

4:25 p.m.  A Bayesian Framework To Combine Multivariate Spatial Data and Physical Models for Hurricane Surface Wind Prediction—Kristen M. Foley, North Carolina State University; Montserrat Fuentes, North Carolina State University

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4:45 p.m. A Bayesian Pooled Analysis of Doubly Censored HIV Data Using the Hierarchical Cox Model— Wei Zhang, Boehringer Ingelheim; Kathryn Chaloner, The University of Iowa; Ying Zhang, The University of Iowa; Mary K. Cowles, The University of Iowa

5:05 p.m. An Adaptive Bayesian Approach to Jointly Modeling Response and Toxicity in Phase I Dose-Finding Trials— Meihua Wang, University of Pittsburgh; Roger Day, University of Pittsburgh

5:25 p.m. Hierarchical State-Space Model for Microarray Short Time Course Experiments— Haiyan Wu, Emory University; Ming Yuan, Georgia Institute of Technology; Susan Kaech, Yale University; M. Elizabeth Halloran, Fred Hutchinson Cancer Research Center

5:45 p.m. Floor Discussion

57 CC-612 ● Student Paper Competition Award Presentations—Topic-Contributed

Section on Government Statistics, Section on Survey Research Methods, Social Statistics Section
Organizer(s): Michael P. Cohen, Bureau of Transportation Statistics Chair(s): Michael P. Cohen, Bureau of Transportation Statistics

4:05 p.m. Robust Model-Based Predictor of Finite Population Total— Yan Li, University of Maryland; Partha Lahiri, University of Maryland

4:25 p.m. Causal Inference Based on Directed Acyclic Graphical Models and the Randomization Distribution: a Probability-Sampling Approach— Joel E. Hanson, University of California, Berkeley

4:45 p.m. Small-Area Estimation for Business Surveys— Hukum Chandra, University of Southampton

5:05 p.m. An Application of Parametric Bootstrap Method in Small-Area Estimation Problem— Huilin Li, University of Maryland

5:25 p.m. Local Polynomial Regression for Small-Area Estimation— Pushpal Mukhopadhyay, Iowa State University; Tapabrata Maiti, Iowa State University

5:45 p.m. Floor Discussion

58 CC-608 ● Going beyond the Law: Ethical Aspects of Privacy in Surveys—Topic-Contributed

Social Statistics Section
Organizer(s): Gerald Gates, U.S. Census Bureau
Chair(s): Virginia A. de Wolf, Consultant
Panelists: Gerald Gates, U.S. Census Bureau
Pamela White, Statistics Canada
Jeffery Rodamar, U.S. Department of Education

5:45 p.m. Floor Discussion

59 CC-609 ● How Is the TI-83 Calculator Changing How We Teach the Introductory Course in Statistics? Or Is It?—Topic-Contributed

Section on Statistical Education
Organizer(s): Marjorie Bond, Monmouth College Chair(s): Marjorie Bond, Monmouth College
Panelists: Dexter Whittinghill, Rowan University
Christopher Mecklin, Murray State University
Carolyn P. Dobler, Gustavus Adolphus College
Madhuri Mulekar, University of South Alabama

5:45 p.m. Floor Discussion


Section on Statistical Consulting, Section on Statistical Education
Organizer(s): John Bartko, Retired Chair(s): Edward D. Rothman, University of Michigan
Panelists: John Bartko, Retired
Thomas Boardman, Colorado State University
Ross Prentice, Fred Hutchinson Cancer Research Center
Gerald van Belle, University of Washington

5:45 p.m. Floor Discussion
61  CC-211
Biopharmaceutical Section
Organizer(s): Alfred Balch, Novartis Pharmaceuticals Corporation
Chair(s): Joga Gobburu, U.S. Food and Drug Administration
Panelists:
❖ Surya Mohanty, Johnson & Johnson Pharmaceutical R&D
❖ Glen Laird, Novartis Pharmaceuticals Corporation
❖ Alfred Balch, Novartis Pharmaceuticals Corporation
❖ Jens Praestgaard, Novartis Pharmaceuticals Corporation

5:45 p.m. Floor Discussion

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

62  CC-205
Measuring Gene Expression—Contributed
Biometrics Section, WNAR, ENAR
Chair(s): Saonli Basu, University of Minnesota

4:05 p.m. Clustering of Time-Course Gene Expression Data Using Functional Data Analysis—❖ Joon Jin Song, University of Arkansas; Ho-Jin Lee, Schering-Plough Corporation; Jeffrey S. Morris, M. D. Anderson Cancer Center; Sanghoon Kang, Oak Ridge National Laboratory

4:20 p.m. Dynamic Network Analysis of Time-Course Gene Expression Data—❖ Donatello Telesca, University of Washington; Lurdes Y. T. Inoue, University of Washington

4:35 p.m. A Bayes Approach to Virus Gene Time Course Expression Data—❖ I-shou Chang, National Health Research Institutes

4:50 p.m. Comparing Distance Measures for Clustering Time-Course Microarray Data—❖ Theresa Scharl, Vienna University of Technology; Friedrich Leisch, University of Munich

5:05 p.m. Bayesian Markov Chain Monte Carlo and Restricted Maximum Likelihood Study of Gene Expression Patterns across Time—❖ Feng Hong, University of Illinois; Sandra Rodriguez-Zas, University of Illinois

5:20 p.m. Semiparametric Analysis of Gene Expression Patterns across Ages—❖ Sandra Rodriguez-Zas, University of Illinois; Bruce Southey, University of Illinois; Gene Robinson, University of Illinois

5:35 p.m. Connectivity, Module-Conformity, and Significance: Understanding Gene Coexpression Network Methods—❖ Jun Dong, University of California, Los Angeles; Steve Horvath, University of California, Los Angeles; Andy Yip, National University of Singapore

63  CC-206
Advances in Analyzing fMRI Studies—Contributed
Biometrics Section, ENAR
Chair(s): Ciprian M. Crainiceanu, The Johns Hopkins University

4:05 p.m. Intrinsic Voxel Correlation in fMRI—❖ Daniel Rowe, Medical College of Wisconsin; Raymond G. Hoffmann, Medical College of Wisconsin

4:20 p.m. Robust Independent Component Analysis in fMRI—❖ Ping Bai, The University of North Carolina at Chapel Hill; Young Truong, The University of North Carolina at Chapel Hill

4:35 p.m. A Semiparametric Approach To Estimate the Family-Wise Error Rate in fMRI Using Resting-State Data—❖ Rajesh Nandy, University of California, Los Angeles

4:50 p.m. Spatio-Temporal Modeling of Functional Magnetic Resonance Imaging Data—❖ Qihua Lin, Southern Methodist University; Patrick S. Carmack, The University of Texas Southwestern Medical Center at Dallas; Richard F. Gunst, Southern Methodist University; William R. Schucany, Southern Methodist University; Jeffrey S. Spence, The University of Texas Southwestern Medical Center at Dallas

5:05 p.m. Interpreting Experience-Based Cognition from fMRI—❖ Rajan Patel, Rice University; F. DuBois Bowman, Emory University; Ying Guo, Emory University; Gordana Derado, Emory University; Lance Waller, Emory University; Amita K. Manatunga, Emory University

5:20 p.m. Detecting Cerebral Activation from Functional Magnetic Resonance Imaging Data—❖ William Baumann, Iowa State University; Ranjan Maitra, Iowa State University

5:35 p.m. Floor Discussion
### CC-214

#### Methodological Issues in Genetics Studies—Contributed

**Section on Statistics in Epidemiology, Biometrics Section, ENAR**  
**Chair(s): Bryan Langholz, Keck School of Medicine of USC**

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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<tbody>
<tr>
<td>4:05 p.m.</td>
<td>An Importance Sampling Procedure for Obtaining Confidence Intervals of Disease Loci with General Pedigree Data—Shuyan Wan, The Ohio State University; Shili Lin, The Ohio State University</td>
</tr>
<tr>
<td>4:20 p.m.</td>
<td>Correcting for Measurement Errors in Structured Association Tests—Jasmin Divers, The University of Alabama at Birmingham; Laura K. Vaughan, The University of Alabama at Birmingham; David Redden, The University of Alabama at Birmingham; Jose R. Fernandez, The University of Alabama at Birmingham; David B. Allison, The University of Alabama at Birmingham</td>
</tr>
<tr>
<td>4:35 p.m.</td>
<td>Genomic Control for Association Studies When the Genetic Model Is Unknown—Gang Zheng, National Heart, Lung, and Blood Institute; Boris Freidlin, National Cancer Institute; Joseph Gastwirth, The George Washington University</td>
</tr>
<tr>
<td>4:50 p.m.</td>
<td>Pedigree Disequilibrium Test for X-Chromosome Markers—Jie Ding, The Ohio State University; Shili Lin, The Ohio State University</td>
</tr>
<tr>
<td>5:05 p.m.</td>
<td>Incorporating Endophenotypes into Allelic Association Studies—Chao Hsiung, National Health Research Institutes</td>
</tr>
<tr>
<td>5:20 p.m.</td>
<td>Allowing for Etiologic Heterogeneity by Disease Subtype Increases the Power of Tests for Genetic Association—Peter Kraft, Harvard University; Sholom Wacholder, National Cancer Institute; Nilanjan Chatterjee, National Cancer Institute</td>
</tr>
<tr>
<td>5:35 p.m.</td>
<td>A Multiple Test Procedure Controlling Type I Error for Genome Scan Association Studies Using HapMap Data—Renfang Jiang, Michigan Technological University; Jianping Dong, Michigan Technological University; Shuanglin Zhang, Michigan Technological University; Qiuying Sha, Michigan Technological University</td>
</tr>
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### CC-618

#### Sample Survey Quality I—Contributed

**Section on Survey Research Methods**  
**Chair(s): Michael P. Battaglia, Abt Associates Inc.**

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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<tr>
<td>4:05 p.m.</td>
<td>Nonresponse Bias Studies: 2003–2004 School and Staffing Survey—Robyn Sirks, U.S. Census Bureau; Bac Tran, U.S. Census Bureau; Phyllis Singer, U.S. Census Bureau</td>
</tr>
<tr>
<td>4:20 p.m.</td>
<td>Call Efforts and Relational Estimates: Preliminary Findings—Chung-tung Lin, U.S. Food and Drug Administration</td>
</tr>
<tr>
<td>4:35 p.m.</td>
<td>Estimation of Low Incidence Rates under Selection Bias—Bin Wang, University of South Alabama; Jiayang Sun, Case Western Reserve University</td>
</tr>
<tr>
<td>4:50 p.m.</td>
<td>Assessment of Diagnostic Tests in the Presence of Verification Bias Using Multiple Imputation and Resampling Methods—Michael P. McDermott, University of Rochester Medical University</td>
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Seattle 73

Themed Session

Applied Session

 Presenter

CC - Washington State Convention & Trade Center
H - Grand Hyatt Seattle
S - Sheraton Seattle Hotel & Towers

GENERAL PROGRAM
SCHEDULE
Thurs-Sun

Introduction to Regression Modeling
BOVAS ABRAHAM and JOHANNES LEDOLTER
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<th>Time</th>
<th>Session</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>5:05</td>
<td>Treatment of Spatial Autocorrelation in Geocoded Crime Data</td>
<td>Krista Collins, Statistics Canada; Colin Babyak, Statistics Canada</td>
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<tr>
<td>5:20</td>
<td>Assessing Population Coverage in a Health Survey</td>
<td>Karen Davis, National Center for Health Statistics; Chris Moriarity, National Center for Health Statistics</td>
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<tr>
<td>5:35</td>
<td>A Study of IRS Administrative Payroll as a Substitute for Missing Payroll</td>
<td>Melvin McCullough, U.S. Census Bureau</td>
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<tr>
<td>4:05</td>
<td>Hierarchical Modeling Using GLMs To Improve Yield</td>
<td>Christina Mastrangelo, University of Washington; Naveen Kumar, University of Washington</td>
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<td>4:20</td>
<td>Sequential Analysis on Misspecified Distributions</td>
<td>Theresa Utlaut, Intel Corporation</td>
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<td>4:35</td>
<td>On Robust Statistics</td>
<td>Kevin Anderson, Intel Corporation</td>
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<tr>
<td>4:50</td>
<td>Robust Analysis of Variance: Process Design and Quality Improvement</td>
<td>Avi Giloni, Yeshiva University; Sridhar Seshadri, New York University; Jeffrey Simonoff, New York University</td>
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<tr>
<td>5:05</td>
<td>Statistical Quality of Loadboards for Electronic Package Testers</td>
<td>Meihui Guo, National Sun Yat-sen University; Yu-Jung Huang, I-Shou University; Ming-Kun Chen, I-Shou University</td>
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<td>5:20</td>
<td>Statistical Monitoring of Multistage Processes</td>
<td>Fugee Tsung, The Hong Kong University of Science and Technology</td>
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<td>5:35</td>
<td>Stochastic Models for Predicting Product Failure Rate of Parenterals Due to Particulate Matter</td>
<td>Chi-Hse Teng, Pfizer Inc.</td>
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<td>4:20</td>
<td>Mixture Models Applied To Reject Inference</td>
<td>Billie Anderson, The University of Alabama; J. Michael Hardin, The University of Alabama; Ana Landeros, The University of Alabama; Michael Conerly, The University of Alabama</td>
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<tr>
<td>4:35</td>
<td>How To Address Click Fraud in Pay-per-Click Programs</td>
<td>Vincent Granville, Authenticlick</td>
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<td>4:50</td>
<td>Application of Kernel Methods to Fraud Detection</td>
<td>Ravi Mallela, Equbits</td>
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<td>5:05</td>
<td>Partial Hedging Using Malliavin Calculus</td>
<td>Lan Nygren, Rider University; Lakner Peter, New York University</td>
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<td>4:05</td>
<td>Finite Elements Methods for Density Estimation</td>
<td>George Terrell, Virginia Polytechnic Institute and State University</td>
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<tr>
<td>4:20</td>
<td>On the Mixture of Multivariate Skew Normal Distributions</td>
<td>Jack C. Lee, National Chiao Tung University; Tsung-I Lin, National Chung Hsing University</td>
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<td>4:35</td>
<td>Latent Regression</td>
<td>Thaddeus Tarpey, Wright State University; Eva Petkova, Columbia University</td>
</tr>
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<td>4:50</td>
<td>Estimation for Finite Mixture Multinomial Models</td>
<td>Nagaraj Neerchal, University of Maryland Baltimore County; Minglei Liu, Medtronic, Inc.; Jorge Morel, Procter &amp; Gamble</td>
</tr>
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</table>
5:05 p.m. Predictive Discrepancy Using Full Cross-Validation for Regression Models—Mark Greenwood, Montana State University

5:20 p.m. On the Nonnegative Garrote Estimator—Ming Yuan, Georgia Institute of Technology; Yi Lin, University of Wisconsin-Madison

5:35 p.m. Latent Transition Analysis: Inference and Estimation—Hwan Chung, Michigan State University

70 CC-603

Bayesian Spatial and Spatio-Temporal Models—Contributed
Section on Bayesian Statistical Science
Chair(s): Peter F. Craigmile, The Ohio State University

4:05 p.m. Bayesian Change Point Analysis for Local Linear Regression: a New Approach to Prior Selection—Rajib Paul, The Ohio State University; L. Mark Berliner, The Ohio State University

4:20 p.m. A Bayesian Dynamic Spatio-Temporal Interaction Model—Jacob Oleson, The University of Iowa; Hoon Kim, California State Polytechnic University, Pomona

4:35 p.m. Multiresolution Hierarchical Dynamical Models for Spatio-Temporal Processes—Ali Arab, University of Missouri-Columbia; Christopher K. Wikle, University of Missouri-Columbia

4:50 p.m. Spatial Bayesian Modeling of fmri Data: a Multiple-Subject Analysis—Lei Xu, University of Michigan; Timothy D. Johnson, University of Michigan; Thomas Nichols, University of Michigan

5:05 p.m. Bayesian Hierarchical Spatially Correlated Functional Data Analysis with Application to Colon Carcinogenesis—Veera Baladandayuthapani, M. D. Anderson Cancer Center; Raymond J. Carroll, Texas A&M University; Bani K. Mallick, Texas A&M University; Mee Young Hong, Texas A&M University

71 CC-605

Designs for Clinical Trials and Other Studies—Contributed
IMS, Biometrics Section, ENAR
Chair(s): Rebecca Nugent, University of Washington

4:05 p.m. Identifiability of Placebo Responders via Potential Outcomes—Eva Petkova, Columbia University; Thaddeus Tarpey, Wright State University; Yimeng Lu, Columbia University; Donald Klein, Columbia University

4:20 p.m. Efficient Adaptive Designs for Clinical Trials—Jay Bartroff, Stanford University; Tze Leung Lai, Stanford University

4:35 p.m. Remodeled Continual Reassessment Method and the PBTC Experience—Arzu Onar, St. Jude Children’s Research Hospital; Mehmet Kocak, St. Jude Children’s Research Hospital; James Boyett, St. Jude Children’s Research Hospital

4:50 p.m. D-Optimal Designs for Compartmental Models—Gang Li, GlaxoSmithKline; Dibyen Majumdar, University of Illinois at Chicago

5:05 p.m. Robust Designs for Binomial Data—Adeniyi Adewale, University of Alberta; Douglas P. Wiens, University of Alberta

5:20 p.m. Exact D-Optimal Designs for Second-Order Response Surface Model on a Sphere and with Qualitative Factors—Chuan-Pin Lee, National Sun Yat-sen University; Mong-Na Lo Huang, National Sun Yat-sen University; Ray-Bing Chen, National University of Kaohsiung

5:35 p.m. D-Optimal Designs for Combined Polynomial and Trigonometric Regression on a Partial Circle—Fu-Chuen Chang, National Sun Yat-sen University

72 CC-2A

Clinical Trial Design and Analysis—Contributed
Biopharmaceutical Section, Biometrics Section, WNAR, ENAR
Chair(s): Sheng Feng, Duke University

4:05 p.m. Note on Randomization-Based Inferences for Randomized Clinical Trials—Guohua Pan, Johnson & Johnson Pharmaceutical R&D; Yibin Wang, Novartis Pharmaceuticals Corporation

4:20 p.m. Four Types of Sums of Squares and Estimates of Treatment Differences in Multicenter Clinical Trials—Daozhi Zhang, DOV Pharmaceutical, Inc.

4:35 p.m. Optimal Allocation of Units When Comparing k Treatments to Two Controls of Unequal Importance—Nairanjana Dasgupta, Washington State University

4:50 p.m. A Method for Testing a Prespecified Subgroup in Clinical Trials—Yang Song, Johnson & Johnson Pharmaceutical R&D; George Chi, Johnson &
Johnson Pharmaceutical R&D

5:05 p.m. Some Issues in Fitting Clinical Count Data with Poisson Regression Model—❖ Abdul Sankoh, sanofi-aventis

5:20 p.m. Interval Estimation of Risk Ratio in the Simple Compliance Randomized Trial—❖ Kung-Jong Lui, San Diego State University

5:35 p.m. Floor Discussion

73 CC-2B

73 Phase II Trials—Contributed
Biopharmaceutical Section, Biometrics Section, ENAR
Chair(s): Dennis Cosmatos, Wyeth Research

4:05 p.m. A Parallel Phase I/II Clinical Trial Design for Combination Therapies—❖ Xuelin Huang, M. D. Anderson Cancer Center; Swati Biswas, University of North Texas Health Science Center; Yasuhiro Oki, M. D. Anderson Cancer Center; Jean-Pierre Issa, M. D. Anderson Cancer Center; Donald Berry, The University of Texas

4:20 p.m. Three-Outcome Design for Randomized Comparative Phase II Clinical Trials—❖ Shengyan Hong, Eli Lilly and Company; Yanping Wang, Eli Lilly and Company

4:35 p.m. Optimal Trial Designs for Screening Cancer Therapeutic Agents—❖ Vandana Mukhi, New York University School of Medicine; Yongzhao Shao, New York University; Judith D. Goldberg, New York University School of Medicine

4:50 p.m. Optimal Adaptive Designs in Phase II Trials—❖ Anindita Banerjee, North Carolina State University; Anastasios A. Tsiatis, North Carolina State University

5:05 p.m. Optimal Two-Stage Designs for Phase II Clinical Trials for Continuous Endpoints—❖ Chinfu Hsiao, National Health Research Institutes; Hsiao-Hui Tsou, National Health Research Institutes; Jen-pei Liu, National Taiwan University; Shein-Chung Chow, Duke University

5:20 p.m. Critical Statistical Issues in the Design and Analysis of Proof-of-Concept Clinical Trials in Multiple Sclerosis—❖ Chris Assaid, Merck & Co., Inc.

5:35 p.m. Floor Discussion

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74 Methods for Incomplete Data—Contributed
Biometrics Section
Chair(s): Yichuan Zhao, Georgia State University

4:05 p.m. Semiparametric Models and Sensitivity Analysis of Longitudinal Data with Nonrandom Dropouts—❖ David Todem, Michigan State University; Kyung Mann Kim, University of Wisconsin-Madison; Jason P. Fine, University of Wisconsin-Madison

4:20 p.m. Methods on Longitudinal Data with Dropouts and Mismeasured Covariates—❖ Grace Y. Yi, University of Waterloo

4:35 p.m. Semiparametric Analysis of Longitudinal Data with Potential Right Censoring—❖ Mengling Liu, New York University School of Medicine; Zhiliang Ying, Columbia University

4:50 p.m. A Multiple Imputation Approach for Responders Analysis in Longitudinal Studies—❖ Liqiu Jiang, North Carolina State University; Kai Feng Lu, Merck & Co., Inc.; Anastasios A. Tsiatis, North Carolina State University

5:05 p.m. Estimation of Transition Probabilities in a Discrete-Time Markov Chain with Missing Observations—❖ Hung-Wen Yeh, The University of Texas School of Public Health; Wenyaw Chan, The University of Texas School of Public Health

5:20 p.m. Nonparametric Comparison of Two Survival Functions with Dependent Censoring via Nonparametric Multiple Imputation—❖ Chiu-Hsieh Hsu, University of Arizona; Jeremy M. G. Taylor, University of Michigan

5:35 p.m. Multivariate One-Sided Hypotheses Testing with Complete or Incomplete Data—❖ Tao Wang, The University of British Columbia; Lang Wu, The University of British Columbia

Regular Contributed Posters
4:00 p.m.–5:50 p.m.

75 CC-Level 6 East Lobby

75 Contributed Posters—Contributed
Biometrics Section, Biopharmaceutical Section, General Methodology, Section on Nonparametric Statistics, Section on Physical and Engineering Sciences, Section on Survey Research Methods, Section on Quality and Productivity
Organizer(s): Maura E. Stokes, SAS Institute, Inc.
Chair(s): Maura E. Stokes, SAS Institute, Inc.
Biometrics, biostatistics, epidemiology

01 Examining the Effect of Biomarkers in Terms of Pathological Compartmentalization and a Continuous Variable—♦ Irene Helenowski, Northwestern University; Edward F. Vonesh, Baxter Healthcare Corporation; Ryan J. Deaton, University of Illinois at Chicago; Borko Jovanovic, Northwestern University; Alfred W. Rademaker, Northwestern University; Sally A. Freels, University of Illinois; Vijayalakshmi Ananthanarayanan, University of Illinois at Chicago; Peter H. Gann, University of Illinois at Chicago

Clinical trials, drug discovery

02 Minimum Sample Size in Control Group When Comparing Efficacy Rate with Several Treatment Groups—♦ Alan Davis, Pharmaret; Inder J. Sharma, Sharma Associates, Inc.
03 Exploring the Relationship between Extended Oral Anticoagulant Therapy after a First Episode of Venous Thrombosis and Mortality Using Meta-analysis—♦ Brianna Miller, The University of Oklahoma
04 Interval Estimation of Binomial Proportion in Clinical Trials with a Two-Stage Design—♦ Chen Chia Min, National Cheng Kung University
05 GLUMIP 2.0: Free SAS/IMLÆ Software for Planning Internal Pilots—♦ John Kairalla, The University of North Carolina at Chapel Hill; Christopher S. Coffey, The University of Alabama at Birmingham; Keith E. Muller, The University of North Carolina at Chapel Hill
06 Stroke Clinical Trials and Response-Adaptive Randomization: an Ideal Match—♦ Yuko Palesch, Medical University of South Carolina; Amy Bardeen, Medical University of South Carolina; Renee Martin, Medical University of South Carolina
07 Multivariate Applications in Systems Biology—♦ Amber Anderson, GlaxoSmithKline; Zhu Lei, GlaxoSmithKline; Edit Kurali, GlaxoSmithKline; Amit Bhattacharyya, GlaxoSmithKline; Kwan Lee, GlaxoSmithKline; Michael Durante, GlaxoSmithKline
08 Comparing the Performance of Three Asymptotic Methods in Estimating the Sample Size for a Therapeutic Equivalence Study Based on Difference of Proportions—♦ Xiaoning Li, The University of Oklahoma Health Sciences Center; Sara K. Vesely, The University of Oklahoma Health Sciences Center
09 Recent Development in Exact Inference for Parallel Group Design with Repeated Binary Measurements—♦ Dar-Shong Hwang, B.R.S.I.; James Lee, Sankyo Pharma Development
10 Issues of Covariate Adjustments in Clinical Trials—♦ Moh-Jee Ng, U.S. Food and Drug Administration; Tie-Hua Ng, U.S. Food and Drug Administration
11 Can We Recruit Additional Subjects for a Failed Study?—♦ Paul Hshieh, U.S. Food and Drug Administration; Tie-Hua Ng, U.S. Food and Drug Administration

Incomplete data analysis, imputation methods

12 Multiple Imputation by Chained Equations: Predictive Mean Matching—♦ Gerald Kolm, Emory University; Deborah Ehrenthal, Christiana Care Health System; Edward Ewen, Christiana Care Health System
13 Weighted Logrank-Type Tests Based on Doubly Truncated Data—♦ Su Pei Fang, National Cheng Kung University
14 Kernel-Assisted EM Algorithm—♦ Suzanne Dubnicka, Kansas State University

Pharmacokinetics and pharmacodynamics

15 The Analysis of Mixed-Effects Compartmental Systems Using Bayesian and non-Bayesian Methods—♦ Yi Wang, University of Nebraska-Lincoln; Kent M. Eskridge, University of Nebraska-Lincoln; Shunpu Zhang, University of Nebraska-Lincoln

Reliability and survival modeling

16 An Application of Accelerated Lifetime Design/Analysis for Estimating the Lifetime of CDs and DVDs—♦ James J. Filliben, National Institute of Standards and Technology; Adriana Hornikova, National Institute of Standards and Technology; Frederick R. Byers, National Institute of Standards and Technology
17 Parametric Distance Estimators versus Maximum Likelihood Estimators in Estimating Quantiles with Misclassified Data—♦ Elliott Nebenzahl, California State University, East Bay; Dean Fearn, California State University, East Bay
18 A Hyperbolastic Model for Survival Data—♦ Zoran Bursac, University of Arkansas for Medical Sciences; Mohammad Tabatabai, Cameron University; David K. Williams, University of Arkansas for Medical Sciences; Karan P. Singh, University of North Texas Health Science Center
19 Survival Analysis on Recurrent Event Data: an Application to Alcoholism Study—♦ Jian Han, Bristol-Myers Squibb Company
20 Exact Test for an Epidemic Chance in a Sequence of Exponentially Distributed Random Variables—♦ Ping Shing Chan, The Chinese University of Hong Kong; Kim Fung Lai, The Chinese University of Hong Kong
Semiparametric and nonparametric methods

21  **Locally Efficient Estimators for Semiparametric Models with Measurement Error** — Yanyuan Ma, Texas A&M University; Raymond J. Carroll, Texas A&M University

22  **A Graphical Method for Testing the Equality of Regression Curves** — Kee-Hoon Kang, Hankuk University of Foreign Studies; Cheolwoo Park, University of Georgia

23  **A Permutation Test for Compound Symmetry** — Tracy Morris, Oklahoma State University; Mark Payton, Oklahoma State University

Regular Contributed Posters
8:00 p.m.–9:50 p.m.

76  **CC-Level 6 East Lobby Contributed Poster Session with Opening Mixer: a Look at the Richness of Statistical Interests**

ENAR, Section on Statistical Computing, Section on Statistics in Epidemiology, Biometrics Section, Biopharmaceutical Section, Business and Economics Statistics Section, General Methodology, Section on Government Statistics, Section on Physical and Engineering Sciences, Social Statistics Section, Section on Survey Research Methods, Section on Statistical Education, Section on Statistics and the Environment

Organizer(s): Maura E. Stokes, SAS Institute, Inc.
Chair(s): Maura E. Stokes, SAS Institute, Inc.

Bayesian statistics, hierarchical models

01  **A Bayesian Approach to Semicontinuous Longitudinal Data** — Bing Han, The Pennsylvania State University; Wei Huang, Temple University

Biometrics, biostatistics, epidemiology

02  **Survival Instantaneous Log-Odds Ratio from Empirical Functions** — JungAh Jung, Novartis Pharmaceuticals Corporation; J. Wanzer Drane, University of South Carolina

03  **LTAS.NET: a NIOSH Life Table Analysis System for the Windows Environment** — Mary Schubauer-Berigan, National Institute for Occupational Safety and Health; William R. Raudabaugh, Constella, Inc.; Avima Ruder, National Institute for Occupational Safety and Health; Misty Hein, National Institute for Occupational Safety and Health; Sharon R. Silver, National Institute for Occupational Safety and Health; Patricia Laber, National Institute for Occupational Safety and Health; Kathleen Waters, National Institute for Occupational Safety and Health; Jinghui Liu, Westat; Steven Spaeth, Kyle Steenland, Emory University

Safety and Health; Jinghui Liu, Westat; Steven Spaeth, Kyle Steenland, Emory University

04  **Estimating Lifetime Prevalence Using Data from Disease Registries** — Limin X. Clegg, National Cancer Institute

05  **Epidemiology of Herpes Zoster (Shingles)** — Peter Wollan, Olmsted Medical Center; Patricia Saddier, Merck Research Laboratories; Lina Sy, Merck Research Laboratories; Barbara P. Yawn, Olmsted Medical Center

Business, financial, marketing statistics

06  **What We Know about Unsuccessful and Successful High-Risk R&D Projects and What We Can Learn from Them** — Stephanie Shipp, National Institute of Standards and Technology

Clinical trials, drug discovery

07  **Data Simulation Methodologies for Determining Sample Size Requirements To Test Gene-Drug Interactions in Genetically Pre-Screened Populations** — Kimberly Lowe, University of Arizona College of Public Health; James Ranger-Moore, University of Arizona College of Public Health; Patricia Thompson, Arizona Cancer Center

Computational statistics, numerical methods

08  **Wavelet-Based Functional Mixed Model Data Analysis: Computational Considerations** — Richard Herrick, M. D. Anderson Cancer Center; Jeffrey S. Morris, M. D. Anderson Cancer Center

Engineering and physical sciences, chemometrics

09  **Hierarchical Bayesian Calibration of Untested Devices** — Reid Landes, University of Arkansas for Medical Sciences

Environmetrics, ecology, agriculture, wildlife management

10  **Strip Transect Sampling To Estimate Object Abundance in Homogeneous and Nonhomogeneous Poisson Fields: a Simulation Study of the Effects of Transect Width and Number** — Timothy C. Coburn, Abilene Christian University; Sean A. McKenna, Sandia National Laboratories; Hirotaka Saito, University of California, Riverside; Orlando T. Garcia, Sandia National Laboratories

General

11  **The Impact of Computer Programming Languages on Statistics** — Morteza Marzjarani, Saginaw Valley State University
Thurs-Sun

**GENERAL PROGRAM SCHEDULE**

**Genetics, bioinformatics, computational biology**

12  Analyzing a Metabolomics Dataset— Teresa Norris

13  Inferring Quantitative Trait Loci Using a Bayesian Variable Selection Model and Markov Chain Monte Carlo Convergence Diagnostics— Daniel Shriner, The University of Alabama at Birmingham; Nengjun Yi, The University of Alabama at Birmingham


15  Multivariate Simulation of Gene Expression Data— Rudolph Parrish, University of Louisville; Horace J. Spencer, University of Arkansas for Medical Sciences

**Government statistics**


**Linear models, GLMs, parametric methods**

17  On the Likelihood Ratio Test for the Numbers of Factors in Exploratory Factor Analysis— Kentaro Hayashi, University of Hawaii at Manoa; Peter M. Bentler, University of California, Los Angeles; Ke-Hai Yuan, University of Notre Dame

**Longitudinal data, repeated measurements, cluster data**

18  GEE Models for Longitudinal Analysis of Long-Term Occupational Radiation Exposures in Russian Nuclear Workers— Adina Soaita, University of Pittsburgh; Ada O. Youk, University of Pittsburgh; Richard Day, University of Pittsburgh; Tamara Azizova, Southern Ural Biophysics Institute; Niel Wald, University of Pittsburgh; Mike Kuniak, University of Pittsburgh; David M. Slaughter, University of Utah; Carol K. Redmond, University of Pittsburgh

19  Antioxidant Use Predicts Transitions to Amnestic MCI and Dementia— Marta Mendiondo, University of Kentucky; Richard J. Kryscio, University of Kentucky; Fred A. Schmitt, University of Kentucky

20  Structural Nested Mean Models for Assessing Time-Varying Effect Moderation: a Comparison of Two Estimation Methods— Daniel Almirall, University of Michigan

**Neuroscience, brain imaging**

21  Methods for Assessing Changes in the FMRI Visual Field Map after Surgery— Raymond G. Hoffmann, Medical College of Wisconsin; Paul Savarapian, Marquette University; Mary Jo Maciejewski, Medical College of Wisconsin; Edward A. DeYoe, Medical College of Wisconsin; Daniel Rowe, Medical College of Wisconsin

**Sampling and survey methodology**

22  Design-Based versus Model-Based Methods: a Comparative Study Using Longitudinal Survey Data— Sunita Ghosh, University of Saskatchewan; Punam Pahwa, University of Saskatchewan; Geert Molenberghs, Limburgs Universitair Centrum

23  Hierarchical Generalized Linear Models for Data from Complex Sampling Designs— Prabhu Bhagatatheeswaran, Southern Methodist University; Ian Harris, Southern Methodist University

**Social and behavioral science**

24  Mediation Analysis with Multilevel Data— Jungwha Lee, Institute for Health Research and Policy; EiSuke Segawa, Institute for Health Research and Policy; Sue Curry, University of Illinois at Chicago

**Spatial statistics, time series, spatio-temporal modeling**

25  The Application of the Kalman Filter to Nonstationary Time Series through Time Deformation— Zhu Wang, Fred Hutchinson Cancer Research Center; Henry L. Gray, Southern Methodist University; Wayne A. Woodward, Southern Methodist University

**Teaching, training, consulting**

26  Is It Normal? A Simulation Study of Properties of Some Normality Tests— Daniel M. Sultana, California State University, East Bay; Charlyn J. Suarez, California State University, East Bay; Bruce E. Trumbo, California State University, East Bay

27  Classroom Simulation: False Indications of Outliers in Boxplots of Normal Data— Bruce E. Trumbo, California State University, East Bay; Eric A. Suess, California State University, East Bay; Jacob Colvin, California State University, East Bay
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