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

TUESDAY, AUGUST 8

Tours

9:00 a.m.–1:00 p.m. — CC-Convention Place
TR06 - Historical Seattle Tour (fee event)

1:00 p.m.–5:00 p.m. — CC-Convention Place
TR07 - Glassblowing Tour (fee event)

Committee/Business Meetings & Other Activities

5:15 a.m.–7:00 a.m. — Off Property
Gertrude Cox Scholarship Race

7:00 a.m.–8:30 a.m. — S-Cedar Room
Section on Statisticians in Defense and National Security Business Meeting
Chair(s): Ron Fricker, Naval Postgraduate School

7:00 a.m.–8:30 a.m. — H-Excelsior
***Technometrics* Editorial Board Meeting (closed)**
Chair(s): Randy R. Sitter, Simon Fraser University

7:00 a.m.–8:30 a.m. — S-Spruce Room
Business and Economics Statistics Section Executive Committee Meeting (closed)
Chair(s): Paul Shaman, University of Pennsylvania

7:00 a.m.–8:30 a.m. — H-Discovery
Section on Quality and Productivity Executive Meeting (closed)
Chair(s): Christine M. Anderson-Cook, Los Alamos National Laboratory

7:00 a.m.–8:30 a.m. — CC-302
Committee on Statistics and Disability Annual Meeting (closed)
Chair(s): Joan Turek, U.S. Department of Health and Human Services

7:00 a.m.–8:30 a.m. — H-Chatham
Scientific and Public Affairs Advisory Committee Meeting
Chair(s): David Marker, Westat

7:00 a.m.–10:00 p.m. — CC-Level 4 South Lobby
Cyber Center

7:00 a.m.–10:00 a.m. — S-Metropolitan Ballroom A
Council of Chapters Business Meeting and Breakfast (closed)
Chair(s): Ronald Wasserstein, Washburn University

7:00 a.m.–10:00 a.m. — S-Ballard
Section on Physical and Engineering Sciences Executive Committee Meeting (closed)
Chair(s): Robert Wilkinson, Lubrizol

7:00 a.m.–6:00 p.m. — CC-507, CC-508
Speaker Work Rooms

7:30 a.m.–9:00 a.m. — H-Cayuse
Project on Filming of Distinguished Statisticians (closed)
Organizer(s): Nitis Mukhopadhyay, University of Connecticut

7:30 a.m.–12:00 p.m. — S-Aspen Room
Biopharmaceutical Section Executive Committee Meeting (closed)
Chair(s): Stacy Lindborg, Eli Lilly and Company

7:30 a.m.–4:30 p.m. — CC-Level 4 South Lobby
JSM Main Registration
ASA Membership/Special Assistance Desk

8:00 a.m.–9:30 a.m. — H-Portland
Section on Risk Analysis Executive Committee Meeting (closed)
Chair(s): Susan Sereika, University of Pittsburgh

8:00 a.m.–12:00 p.m. — H-Sherman
Committee of Presidents of Statistical Societies Committee Meeting (closed)
Organizer(s): Linda Young, University of Florida

8:00 a.m.–4:00 p.m. — S-Admiral
ASA/NCTM Beyond AP Statistics (closed)
Chair(s): Roxy Peck, California Polytechnic State University, San Luis Obispo

8:00 a.m.–6:00 p.m. — CC-Exhibit Hall 4B
Career Placement Service

8:00 a.m.–6:00 p.m. — CC-Exhibit Hall 4A
Exhibitor Lounge

Tuesday

GENERAL PROGRAM SCHEDULE

8:00 a.m.–6:00 p.m.   CC-209
Amgen Inc. Interview Room (by invitation only)
Organizer(s): Chander Varma, Amgen Inc.

8:30 a.m.–10:00 a.m.   S-Juniper
Section on Statistical Education Executive Committee Meeting (closed)
Chair(s): Christine Franklin, University of Georgia

9:00 a.m.–10:00 a.m.   CC-302
Mu Sigma Rho Executive Committee
Organizer(s): Marcia Gumpertz, North Carolina State University

9:00 a.m.–5:00 p.m.   CC-Level 4 South Lobby
ASA Marketplace

9:00 a.m.–5:00 p.m.   CC-Level 1
Citywide Concierge Center

9:00 a.m.–6:00 p.m.   CC-Exhibit Hall 4A
EXPO 2006
ASA Communities Booth #101

10:15 a.m.–12:15 p.m.   H-Cayuse
Introduction to Statistics Focus Group
Organizer(s): Liliana Molina, Pearson Education

10:30 a.m.–1:00 p.m.   S-Willow A
New Chapter Officers Meeting with Council of Chapters Vice Chairs
Chair(s): Ronald Wasserstein, Washburn University

12:00 p.m.–1:30 p.m.   H-Excelsior
JCGS Management Committee Meeting (closed)
Chair(s): Dianne Cook, Iowa State University

12:30 p.m.–2:00 p.m.   H-Blewett Suite
***The American Statistician* Editorial Board Meeting (closed)**
Chair(s): Peter Westfall, Texas Tech University

12:30 p.m.–2:00 p.m.   H-Discovery
ASA Defense and Security Task Force Meeting (closed)
Chair(s): Alyson Wilson, Los Alamos National Laboratory

12:30 p.m.–2:00 p.m.   S-Douglas Room
Open Source Textbook Project Planning Meeting
Organizer(s): Beatrix Jones, Massey University

12:30 p.m.–2:00 p.m.   CC-302
Interface Foundation of North America Board Meeting (closed)
Organizer(s): Tim C. Hesterberg, Insightful Corporation

12:30 p.m.–2:00 p.m.   H-Portland
Deming Lectureship Committee Speaker Luncheon (closed)
Chair(s): Lorraine Denby, Avaya Labs Research

12:30 p.m.–4:30 p.m.   H-Stevens Boardroom & Foyer
ENAR RAB/RECOM Luncheon Meeting (by invitation only)
Organizer(s): Kathy Hoskins, ENAR

2:00 p.m.–3:30 p.m.   S-Everett
Council of Chapters Traveling Course
Chair(s): Delray Schultz, Millersville University

2:00 p.m.–3:30 p.m.   S-Spruce Room
ASA Committee Organization and Management Task Force (closed)
Chair(s): Susan J. Devlin, The Artemis Group LLC

2:30 p.m.–4:00 p.m.   H-Cayuse
***JBES* Editorial Board Meeting**
Chair(s): Torben G. Andersen, Northwestern University

3:40 p.m.–4:00 p.m.   CC-3B
Presentation of 2006 Roger Herriot Award with Reception (open)
Chair(s): Lawrence H.Cox, National Center for Health Statistics

4:00 p.m.–5:00 p.m.   H-Sherman
***JASA* Reviews Assistant Editors Meeting (closed)**
Chair(s): Robert Lund, Clemson University

4:00 p.m.–6:00 p.m.   S-Metropolitan Ballroom A
Council of Chapters Workshop and Reception: New and Not So New Methods of Communications for Chapters Featuring Wiki Pages (closed)
Chair(s): J. Lynn Palmer, M. D. Anderson Cancer Center

4:30 p.m.–6:00 p.m.   S-Cedar Room
***Biometrics* Editorial Board (closed)**
Organizer(s): Marie Davidian, North Carolina State University

5:00 p.m.–6:00 p.m.   CC-602
Caucus for Women in Statistics Business Meeting
Organizer(s): Mary W. Gray, American University

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Tuesday

5:00 p.m.–6:00 p.m. CC-601
Business and Economics Statistics Section Business Meeting
Chair(s): Paul Shaman, University of Pennsylvania

5:00 p.m.–6:30 p.m. CC-609
Section on Survey Research Methods Business Meeting
Chair(s): Roger Tourangeau, University of Maryland

5:00 p.m.–6:30 p.m. CC-605
JSM 2008 Program Committee Orientation Meeting (closed)
Chair(s): Russell V. Lenth, University of Iowa

5:00 p.m.–7:00 p.m. S-Willow B
North Carolina State University Reception for Alumni and Friends
Organizer(s): Tom Gerig, North Carolina State University

5:00 p.m.–7:00 p.m. S-Douglas Room
Friends and Alumni of UCLA
Organizer(s): Jason Mesa, University of California, Los Angeles

5:30 p.m.–6:30 p.m. CC-607
Section on Statistics and Marketing Business Meeting
Chair(s): Alan Montgomery, Carnegie Mellon University

5:30 p.m.–6:30 p.m. S-Willow A
Institute of Mathematical Statistics New Member and Student Reception
Organizer(s): Elyse Gustafson, IMS

5:30 p.m.–7:00 p.m. CC-603
Section on Statistical Consulting Business Meeting
Chair(s): Philip Dixon, Iowa State University

5:30 p.m.–7:00 p.m. CC-604
ENAR Business Meeting (open to all ENAR members)
Organizer(s): Kathy Hoskins, ENAR

5:30 p.m.–7:00 p.m. CC-613
Section on Nonparametric Statistics Business Meeting
Chair(s): Pranab K. Sen, The University of North Carolina at Chapel Hill

5:30 p.m.–7:00 p.m. Off Property
University of Washington Department of Biostatistics Alumni Meeting
Organizer(s): Xiao-Hua Andrew Zhou, University of Washington

5:30 p.m.–7:00 p.m. S-Cirrus Ballroom
Section on Bayesian Statistical Science Open Meeting
Chair(s): Dalene Stangl, Duke University

5:30 p.m.–7:00 p.m. CC-4C-1
Section on Government Statistics Business Meeting
Chair(s): Stephanie Shipp, National Institute of Standards and Technology

5:30 p.m.–7:30 p.m. CC-4C-3
Joint Section on Physical and Engineering Sciences and Section on Quality and Productivity Business Meeting and Mixer
Chair(s): Christine M. Anderson-Cook, Los Alamos National Laboratory; Robert Wilkinson, Lubrizol

5:30 p.m.–7:30 p.m. CC-606
Biopharmaceutical Section Business Meeting
Chair(s): Stacy Lindborg, Eli Lilly and Company

5:30 p.m.–7:30 p.m. H-Princessa II Ballroom
University of Michigan Biostatistics and Statistics Departments Joint Alumni Reception
Organizer(s): Jack Kalbfleisch, University of Michigan

5:30 p.m.–7:30 p.m. CC-610
Section on Statistics in Epidemiology Social Mixer
Chair(s): Sander Greenland, University of California, Los Angeles

6:00 p.m.–6:30 p.m. CC-Ballroom 6ABC
2006 ASA New Fellows Group Picture (closed)
Chair(s): M. Elizabeth Halloran, Fred Hutchinson Cancer Research Center

6:30 p.m.–7:30 p.m. CC-607
Joint Mixer for Section on Statistics and Marketing and the Business & Economics Section
Chair(s): Alan Montgomery, Carnegie Mellon University; Paul Shaman, University of Pennsylvania

6:00 p.m.–7:30 p.m. CC-302
Insightful Reception
Organizer(s): Gina Buzzelle, Insightful Corporation

6:00 p.m.–8:00 p.m. H-Leonesa Ballroom I
University of Wisconsin-Madison Department of Statistics Reception
Organizer(s): Jun Shao, University of Wisconsin-Madison

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6:30 p.m.–7:30 p.m.   CC-4C-2

2006 ASA New Fellows Reception (by invitation only)

Chair(s): M. Elizabeth Halloran, Fred Hutchinson Cancer Research Center

6:30 p.m.–8:00 p.m.   S-Aspen Room

Bristol-Myers Squibb Company Presentation and Reception (closed)

Organizer(s): Denise Houghton, Bristol-Myers Squibb Company

6:30 p.m.–8:00 p.m.   S-Ballard

CRC Press/Taylor & Francis Reception (by invitation only)

Organizer(s): David Grubbs, CRC Press

9:30 p.m.–12:00 a.m.   CC-4C-3

JSM Informal Dance Party (all welcome, included in registration fee)

Continuing Education (Fee Events)

CE_23C   CC-310
8:00 a.m.–12:00 p.m.

Adaptive Tests of Significance and Confidence Intervals

The ASA

Instructor(s): Thomas W. O'Gorman, Northern Illinois University

CE_24C   CC-306
8:30 a.m.–5:00 p.m.

Bayesian Analysis of Case-Control Data

The ASA, Section on Bayesian Statistical Science

Instructor(s): Malay Ghosh, University of Florida; Bhramar Mukherjee, University of Florida; Samiran Sinha, Texas A&M University

CE_25C   CC-309
8:30 a.m.–5:00 p.m.

Analysis of Environmental Data with Nondetects

The ASA, Section on Statistics and the Environment

Instructor(s): Dennis R. Helsel, U.S. Geological Survey; Lopaka Lee, U.S. Geological Survey

CE_26C   CC-307 & 308
8:30 a.m.–5:00 p.m.

Models for Discrete Repeated Measures

The ASA, Section on Statistics in Epidemiology

Instructor(s): Geert Verbeke, K.U. Leuven; Geert Molenberghs, Limburgs Universitair Centrum

CE_27C   CC-305
8:30 a.m.–5:00 p.m.

Effective Scientific Writing

The ASA

Instructor(s): Judith A. Swan, Princeton University

CE_28C   CC-304
8:30 a.m.–5:00 p.m.

Bioequivalence and Statistics in Clinical Pharmacology

The ASA

Instructor(s): Scott Patterson, GlaxoSmithKline; Byron Jones, Pfizer Inc.

CE_29C   CC-303
8:30 a.m.–5:00 p.m.

Methods and Computational Tools for the Screening and Classification of Microarray Gene Expression Data

The ASA, Biopharmaceutical Section

Instructor(s): Geoff McLachlan, University of Queensland; Kim-Anh Do, M. D. Anderson Cancer Center

CE_30C   CC-310
1:00 p.m.–5:00 p.m.

Meta-analysis: Statistical Methods for Combining the Results of Independent Studies

The ASA

Instructor(s): Ingram Olkin, Stanford University

Roundtables with Coffee
7:00 a.m.–8:15 a.m.

212   **CC-4C-1**

Section on Bayesian Statistical Science Roundtable with Coffee (fee event)

Section on Bayesian Statistical Science

Organizer(s): Merlise Clyde, Duke University

TL01   Can and Should We Teach Bayesian Inference in Stat 101?—❖Jerome Reiter, Duke University

213   **CC-4C-1**

Section on Statistical Consulting Roundtable with Coffee (fee event)

Section on Statistical Consulting

Organizer(s): Phillip Chapman, Colorado State University

TL02   Bioinformatics Consulting: Keeping up to Date—❖Ann Hess, Colorado State University

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214   **CC-4C-1**

Section on Statistical Education Roundtable with Coffee (fee event)

Section on Statistical Education

Organizer(s): Patti Collings, Brigham Young University

TL03   Motivating the Math Major To Consider a Career in Statistics—❖Carolyn Cuff, Westminster College

215   **CC-4C-1**

Section on Statistics and the Environment Roundtable with Coffee (fee event)

Section on Statistics and the Environment

Organizer(s): Peter Guttorp, University of Washington

TL04   Bayesian Applications in Environmental Science—❖Eric P. Smith, Virginia Polytechnic Institute and State University; Keying Ye, The University of Texas at San Antonio

216   **CC-4C-1**

Section on Physical and Engineering Sciences Roundtable with Coffee (fee event)

Section on Physical and Engineering Sciences

Organizer(s): Winson Taam, The Boeing Company

TL05   Weibull Analysis—❖Fritz Scholz, The Boeing Company

217   **CC-4C-1**

Section on Risk Analysis Roundtable with Coffee (fee event)

Section on Risk Analysis

Organizer(s): Duane Steffey, Exponent, Inc.

TL06   Estimation of Health Risk from Fish Consumption Associated with Fishing in an Urban Industrial Setting—❖Rose Ray, Exponent, Inc.

218   **CC-4C-1**

Section on Teaching Statistics in the Health Sciences Roundtable with Coffee (fee event)

Section on Teaching Statistics in the Health Sciences

Organizer(s): Patrick Tarwater, The University of Texas Health Science Center at Houston

TL07   Productivity versus Professionalism in Biostatistics—❖Lemuel Moye, The University of Texas Health Science Center at Houston

Special Presentation 8:30 a.m.–10:20 a.m.

219   **CC-4C-4**

Introductory Overview Lectures: Computer Experiments—Other

The ASA, ENAR, IMS, SSC, WNAR, Section on Physical and Engineering Sciences

Organizer(s): Thomas M. Loughin, Kansas State University

Chair(s): Andrew J. Booker, The Boeing Company

8:35 a.m.   **What Are Computer Experiments, and How Do We Design Them?**—❖William Notz, The Ohio State University

9:25 a.m.   **The Modeling and Analysis of Data from Computer Experiments**—❖Thomas Santner, The Ohio State University

10:15 a.m.   **Floor Discussion**

Invited Sessions 8:30 a.m.–10:20 a.m.

220   **CC-619**

JBES Invited Session—Invited

JBES-Journal of Business and Economic Statistics

Organizer(s): Torben G. Andersen, Northwestern University

Chair(s): Torben G. Andersen, Northwestern University

8:35 a.m.   **On the Fit and Forecasting Performance of New Keynesian Models**—❖Frank Schorfheide, University of Pennsylvania; Marco Del Negro, Federal Reserve Bank of Atlanta; Frank Smets, European Central Bank; Raf Wouters, National Bank of Belgium

9:20 a.m.   Disc: Larry Christiano, Northwestern University

9:35 a.m.   Disc: A. Ronald Gallant, Duke University

9:50 a.m.   Disc: Christopher Sims, Princeton University

10:05 a.m.   **Floor Discussion**

221   **CC-2B**

● ✪ Six Sigma: What's Missing—Invited

Section on Quality and Productivity, Section on Statistical Education

Organizer(s): Ramon Leon, University of Tennessee

Chair(s): Roger W. Hoerl, GE Global Research

8:35 a.m.   **Improving the Six Sigma Toolkit**—❖Gerald J. Hahn, GE Global Research/RPI; ❖Necip Doganaksoy, GE Global Research

9:05 a.m.   **Six Sigma: What Is Missing?**—❖William C. Parr, University of Tennessee

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9:35 a.m.   **Making Six Sigma Work: Statistics, Semi-Statistics, and Soft Stuff**—❖Blanton Godfrey, North Carolina State University

10:05 a.m.   **Floor Discussion**

222   CC-3A
● ✪ Bayesian Methods in Computational Biology—Invited

Section on Bayesian Statistical Science, Biometrics Section, WNAR, ENAR

Organizer(s): Joseph G. Ibrahim, The University of North Carolina at Chapel Hill

Chair(s): Joseph G. Ibrahim, The University of North Carolina at Chapel Hill

8:35 a.m.   **Evolutionary Sparse Factor Modeling for Subpathway Identification and Characterization**—❖Mike West, Duke University; Carlos Carvalho, Duke University; Quanli Wang, Duke University; Joseph Lucas, Duke University; Joseph Nevins, Duke University; Jeffrey Chang, Duke University

9:00 a.m.   **Bayesian Inference for Biochemical Network Dynamics**—❖Darren J. Wilkinson, University of Newcastle upon Tyne

9:25 a.m.   **Bayesian One-Way and Two-Way Clustering Methods for Genomic Data**—❖Jun Liu, Harvard University

9:50 a.m.   **Statistical Methods for Motif Detection Incorporating Structural Features of DNA**—❖Mayetri Gupta, The University of North Carolina at Chapel Hill

10:15 a.m.   **Floor Discussion**

223   CC-400
● Alternative Approaches for Sample Size Planning—Invited

Section on Statistical Consulting, Section on Statistical Education

Organizer(s): Peter Bacchetti, University of California, San Francisco

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

8:35 a.m.   **Estimating the Minimally Significant Difference for a Clinical Study**—❖Robert A. Parker, Harvard School of Public Health

9:00 a.m.   **A Completely Different Approach to Sample Size Planning**—❖Peter Bacchetti, University of California, San Francisco; Charles E. McCulloch, University of California, San Francisco; Mark R. Segal, University of California, San Francisco

9:25 a.m.   **Sample Size and the Value of Information**—❖Kimberly M. Thompson, Harvard School of Public Health

9:50 a.m.   Disc: Stephen Senn, University of Glasgow

10:10 a.m.   **Floor Discussion**

224   CC-608
● ✪ Statistical Methods for Integrative Genomics—Invited

Biometrics Section, WNAR, ENAR

Organizer(s): Giovanni Parmigiani, The Johns Hopkins University

Chair(s): Kim-Anh Do, M. D. Anderson Cancer Center

8:35 a.m.   **Integrative Correlation: a Gene-Level Measure of Cross-Study Reproducibility**—❖Leslie Cope, The Johns Hopkins University; Liz Garrett-Mayer, The Johns Hopkins University; Edward Gabrielson, The Johns Hopkins University School of Medicine; Giovanni Parmigiani, The Johns Hopkins University

9:00 a.m.   **A Bayesian Model for Cross-Study Differential Expression**—❖Andrew Nobel, The University of North Carolina at Chapel Hill; Haakon Tjelmeland, Norwegian University of Science and Technology; Rob Scharpf, The Johns Hopkins University; Giovanni Parmigiani, The Johns Hopkins University

9:25 a.m.   **Statistical Methods for Analysis of Copy Number and Expression Transcript Data**—❖Debashis Ghosh, University of Michigan

9:50 a.m.   **Integrative Homologous Regulation Analysis between Mouse and Human**—❖Jae K. Lee, University of Virginia

10:15 a.m.   **Floor Discussion**

225   CC-603
● Network Visualization—Invited

Section on Statistical Graphics, Section on Statisticians in Defense and National Security

Organizer(s): Deborah F. Swayne, AT&T Labs-Research

Chair(s): Leland Wilkinson, SPSS Inc.

8:35 a.m.   **Scaling up Graph Visualization**—❖Stephen North, AT&T Labs-Research

9:05 a.m.   **Scalable Drawing of Trees and Graphs**—❖Tamara Munzner, The University of British Columbia

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Tuesday

9:35 a.m. **Visualizing Evolving Graphs by Simultaneous Embeddings**—❖Stephen G. Kobourov, University of Arizona

10:05 a.m. **Floor Discussion**

226   CC-617
● Teaching Biostatistics without Equations to Health Care Professionals—Invited

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

Organizer(s): Janet A. Tooze, Wake Forest University School of Medicine

Chair(s): Janet A. Tooze, Wake Forest University School of Medicine

8:35 a.m. **Teaching Research Design to Health Sciences Professionals**—❖Stephen W. Looney, LSU Health Sciences Center

9:00 a.m. **Teaching Statistical Concepts through Visualization**—❖Edward H. Ip, Wake Forest University School of Medicine; Gary Wolgast, Wake Forest University School of Medicine

9:25 a.m. **Effective Teaching of Applied Biostatistics for Clinicians Enrolled in a Research Training Program**—❖Jodi Lapidus, Oregon Health & Science University

9:50 a.m. Disc: Ralph O'Brien, The Cleveland Clinic

10:10 a.m. **Floor Discussion**

227   CC-607
● Statistical Issues in Diagnostic Medicine—Invited

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

Organizer(s): Estelle Russek-Cohen, U.S. Food and Drug Administration

Chair(s): Estelle Russek-Cohen, U.S. Food and Drug Administration

8:35 a.m. **Evaluating the Predictiveness of a Continuous Marker**—❖Margaret S. Pepe, Fred Hutchinson Cancer Research Center/University of Washington; Ying Huang, University of Washington; Ziding Feng, Fred Hutchinson Cancer Research Center

9:00 a.m. **Double-Semiparametric ROC Regression Analysis**—❖Xiao-Hua Andrew Zhou, University of Washington; Huazhen Lin, University of Washington

9:25 a.m. **Evaluation of Diagnostic Tests in Studies with Verification Bias**—❖Marina Kondratovich, U.S. Food and Drug Administration

9:50 a.m. Disc: Colin B. Begg, Memorial Sloan-Kettering Cancer Center

10:10 a.m. **Floor Discussion**

228   CC-618
● ✪ Statistical Responses to Legislation: the Privacy Rule—Invited

Committee on Privacy and Confidentiality, Section on Health Policy Statistics

Organizer(s): Alvan O. Zarate, National Center for Health Statistics

Chair(s): Laura Zayatz, U.S. Census Bureau

8:35 a.m. **The Statistician's Role in Developing the HIPAA De-identification Standard**—❖Alvan O. Zarate, National Center for Health Statistics

9:00 a.m. **The Federal Statisticians' Response to the HIPAA Privacy Rule**—❖Jacob Bournazian, Energy Information Administration

9:25 a.m. **Statistical Deidentification and the HIPAA Rule**—❖Patrick Baier, National Opinion Research Center

9:50 a.m. Disc: J. Neil Russell, National Center for Education Statistics

10:10 a.m. **Floor Discussion**

229   CC-602
Recent Developments in Nonparametric Survival Analysis Methods—Invited

ENAR, Biometrics Section, WNAR, Section on Nonparametric Statistics

Organizer(s): Haibo Zhou, The University of North Carolina at Chapel Hill

Chair(s): Jianqing Fan, Princeton University

8:35 a.m. **Partially Linear Hazard Regression for Multivariate Survival Data**—❖Jianwen Cai, The University of North Carolina at Chapel Hill; Jianqing Fan, Princeton University; Jiancheng Jiang, Princeton University; Haibo Zhou, The University of North Carolina at Chapel Hill

8:55 a.m. **A General Imputation Methodology for Nonparametric Regression with Censored Data**—❖Daniel Rubin, University of California, Berkeley; Mark van der Laan, University of California, Berkeley

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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

9:15 a.m. **Kernel-Smoothed Profile Likelihood Function in Accelerated Failure Time Model**—❖Donglin Zeng, The University of North Carolina at Chapel Hill; Danyu Lin, The University of North Carolina at Chapel Hill

9:35 a.m. **Nonparametric Analysis of Multivariate Competing Risks Data**—❖Jason P. Fine, University of Wisconsin-Madison

9:55 a.m. **An Additive Modulated Renewal Process**—❖Dorota Dabrowska, University of California, Los Angeles

10:15 a.m. **Floor Discussion**

230   CC-206
● Client-Oriented Perspectives on Small-Area Estimation—Invited

Section on Survey Research Methods, Section on Physical and Engineering Sciences
Organizer(s): Avinash C. Singh, Statistics Canada
Chair(s): Graham Kalton, Westat

8:35 a.m. **Characterization of Cost Structures, Perceived Value, and Optimization Issues in Small-Domain Estimation**—❖John L. Eltinge, Bureau of Labor Statistics

9:00 a.m. **A Small-Area Estimation Approach in Reducing Survey Costs**—❖Partha Lahiri, University of Maryland; Paul D. Williams, National Center for Health Statistics

9:25 a.m. **Some Problems and Possible Solutions in Developing a Small-Area Estimation Product for Clients**—❖Avinash C. Singh, Statistics Canada

9:50 a.m. Disc: Jon N. K. Rao, Carleton University

10:10 a.m. **Floor Discussion**

Topic-Contributed Sessions 8:30 a.m.–10:20 a.m.

231   CC-609
● Missing Data in Clinical Trials: Can We Do Better Than LOCF?—Topic-Contributed

Biopharmaceutical Section, Biometrics Section, ENAR
Organizer(s): Bret Musser, Merck Research Laboratories
Chair(s): Bret Musser, Merck Research Laboratories

8:35 a.m. **Is It Better To Use Random Effects Models in Analysis of Repeated Binary Responses with Missing Data?**—❖Guanghan Liu, Merck Research Laboratories

8:55 a.m. **An Analytic Road Map for Incomplete Longitudinal Clinical Trial Data**—❖Craig Mallinckrodt, Eli Lilly and Company; Shuyi Shen, Eli Lilly and Company; Caroline Beucnkens, Limburgs Universitair Centrum; Geert Molenberghs, Limburgs Universitair Centrum

9:15 a.m. **Mixed-Effects Latent Curve Modeling of Incomplete Longitudinal Cognitive Data**—❖John J. McArdle, University of Southern California

9:35 a.m. **Scope of the Problem, Options Available, and Empirical Performance of Techniques for Handling Missing Data in Randomized Clinical Trials: Focus on Weight Loss Trials**—❖David B. Allison, The University of Alabama at Birmingham

9:55 a.m. Disc: Fanhui Kong, U.S. Food and Drug Administration

10:15 a.m. **Floor Discussion**

232   CC-615
Applications in Seasonal Adjustment—Topic-Contributed

Business and Economics Statistics Section
Organizer(s): Benoit Quenneville, Statistics Canada
Chair(s): Peter Kenny, PBK Research

8:35 a.m. **Balancing SA Series as a Complement to the Direct and Indirect SA of Series**—❖Benoit Quenneville, Statistics Canada

8:55 a.m. **Computing Tasks Associated with Seasonal Adjustment at Statistics Canada: Methods and Software**—❖Susie Fortier, Statistics Canada; Benoit Quenneville, Statistics Canada

9:15 a.m. **Exploring Model-Based Seasonal Adjustment for Industry Employment Statistics**—❖Christopher Manning, Bureau of Labor Statistics; Jeffrey A. Smith, Bureau of Labor Statistics

9:35 a.m. **Variance Estimation for Noise Components in Time Series from a Survey**—❖Daniell Toth, Bureau of Labor Statistics; Stuart Scott, Bureau of Labor Statistics

9:55 a.m. Disc: Estela BeeDagum, University of Bologna

10:15 a.m. **Floor Discussion**

Tuesday

233   CC-210

✪ New Methods for Testing Sensitive Questions Using the National Health Interview Survey—Topic-Contributed

Section on Survey Research Methods

Organizer(s): Peter Meyer, National Center for Health Statistics

Chair(s): Julie Trépanier, Statistics Canada

8:35 a.m.   **Developing New Methods and Questions for Improving Response and Measurement on Sensitive Questions on the National Health Interview Survey—**❖Peter Meyer, National Center for Health Statistics; James Dahlhamer, National Center for Health Statistics; John Pleis, National Center for Health Statistics

8:55 a.m.   **Sampling and Oversampling in the National Health Interview Survey—**❖Chris Moriarity, National Center for Health Statistics

9:15 a.m.   **Unfolding the Answers? Income Brackets and Income Nonresponse in the National Health Interview Survey (NHIS)—**❖John Pleis, National Center for Health Statistics

9:35 a.m.   **Questions People Don't Like To Answer: Wealth and Social Security Numbers—**❖James Dahlhamer, National Center for Health Statistics; Peter Meyer, National Center for Health Statistics; John Pleis, National Center for Health Statistics

9:55 a.m.   Disc: James Chromy, RTI International

10:15 a.m.   **Floor Discussion**

234   CC-211

● ✪ Frontiers in Demographic Coverage Measurement—Topic-Contributed

Social Statistics Section

Organizer(s): Dean H. Judson, U.S. Census Bureau

Chair(s): Jeremy Wu, U.S. Census Bureau

8:35 a.m.   **Demographic Coverage Measurement: Can Information Integration Theory Help?—**❖Dean H. Judson, U.S. Census Bureau

8:55 a.m.   **Demographic Analysis in the UK Census: a Look Back to 2001 and Looking Forward to 2011—**Owen Abbott, Office for National Statistics; ❖Garnett Compton, Office for National Statistics

9:15 a.m.   **Coverage Assessment and Adjustment in the 2011 UK Census—**❖Owen Abbott, Office for National Statistics

9:35 a.m.   **Using the Audit Trail Data To Evaluate the Quality of Collection of the Canadian National Longitudinal Survey of Children and Youth—**❖Bruno Lapierre, Statistics Canada; Scott Meyer, Statistics Canada

9:55 a.m.   **Floor Discussion**

235   CC-214

Climate, Weather, and Spatial-Temporal Models—Topic-Contributed

Section on Statistics and the Environment, Section on Statisticians in Defense and National Security, Section on Bayesian Statistical Science, WNAR

Organizer(s): Stephan Sain, University of Colorado at Denver and Health Sciences Center

Chair(s): Douglas W. Nychka, National Center for Atmospheric Research

8:35 a.m.   **Models for Multivariate Spatial Lattice Data and Assessing Climate Change—**❖Stephan Sain, University of Colorado at Denver and Health Sciences Center

8:55 a.m.   **Spatial Patterns of Global Climate Change Fields—**❖Reinhard Furrer, Colorado School of Mines; Reto Knutti, National Center for Atmospheric Research

9:15 a.m.   **Modeling Precipitation Network Data When Station Reporting Times Are Misaligned—**❖Jarrett Barber, Montana State University; Alan E. Gelfand, Duke University; Douglas W. Nychka, National Center for Atmospheric Research

9:35 a.m.   **Spatial and Temporal Models for Evaluating IPCC Climate Model Outputs—**❖Mikyoung Jun, Texas A&M University; Douglas W. Nychka, National Center for Atmospheric Research; Reto Knutti, National Center for Atmospheric Research

9:55 a.m.   **A Hierarchical Bayesian Spatio-Temporal Model for Tropospheric Carbon Monoxide—**❖Anders Malmberg, National Center for Atmospheric Research

10:15 a.m.   **Floor Discussion**

236   CC-3B

Spatial Modeling—Topic-Contributed

Section on Bayesian Statistical Science, Section on Nonparametric Statistics

Organizer(s): Herbert Lee, University of California, Santa Cruz

Chair(s): Christopher Hans, The Ohio State University

8:35 a.m.   **Gaussian Processes and Limiting Linear Models—**Robert Gramacy, University of

GENERAL PROGRAM SCHEDULE

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

Cambridge; ❖Herbert Lee, University of California, Santa Cruz

8:55 a.m. **Bayesian Model for Dependent Nonparametric Regressions—**❖Abel Rodriguez, Duke University; Alan E. Gelfand, Duke University; David B. Dunson, National Institute of Environmental Health Sciences

9:15 a.m. **Sampling Importance Resampling for Computer Model Inverse Problems—**❖Matt Taddy, University of California, Santa Cruz; Bruno Sanso, University of California, Santa Cruz; Herbert Lee, University of California, Santa Cruz

9:35 a.m. **Bayesian Computational Methods for Models in Geosciences—**❖Alejandro Villagran, University of New Mexico; Gabriel Huerta, University of New Mexico

9:55 a.m. **The Effect of Collinearity on Parameter Estimation in Bayesian Spatially Varying Coefficient Models—**❖David Wheeler, The Ohio State University

10:15 a.m. **Floor Discussion**

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237   CC-401
● Fostering Active Learning in Statistics—Topic-Contributed

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

Organizer(s): Carl Lee, Central Michigan University
Chair(s): Carl Lee, Central Michigan University

8:35 a.m. **How Do You Come up with These Things?—**❖André Michelle Lubecke, Lander University

8:55 a.m. **Using Simulation To Introduce Inference—**❖Sharon Lane-Getaz, University of Minnesota/ Cal Poly; Andrew Zieffler, University of Minnesota

9:15 a.m. **Active Learning in an Online Introductory Statistics Course—**❖Michelle Everson, University of Minnesota

9:35 a.m. **Designing Classroom Activities for Student Learning—**❖Allan Rossman, California Polytechnic State University, San Luis Obispo; Beth Chance, California Polytechnic State University, San Luis Obispo

9:55 a.m. **Evaluation of Students' Learning in Real-Time Online Activities Environment—**❖Felix Famoye, Central Michigan University; Carl Lee, Central Michigan University

10:15 a.m. **Floor Discussion**

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238   CC-204
Health Policy Student Paper Awards—Topic-Contributed

Section on Health Policy Statistics

Organizer(s): Bonnie Ghosh-Dastidar, RAND Corporation
Chair(s): Bonnie Ghosh-Dastidar, RAND Corporation

8:35 a.m. **Understanding Self-Reported Disability among the Elderly: a Novel Use of Anchoring Vignettes—**❖Kate Stewart, Harvard University; Mary Beth Landrum, Harvard Medical School; David M. Cutler, Harvard University

8:55 a.m. **Hierarchical and Joint Site-Edge Methods for Medicare Hospice Service Region Boundary Analysis—**❖Haijun Ma, University of Minnesota; Bradley P. Carlin, University of Minnesota; Sudipto Banerjee, University of Minnesota

9:15 a.m. **Extending the Capture-Recapture Methodology To Estimate Disease Subpopulation Sizes in the Presence of Cross-Classification—**❖Ulysses Diva, University of Connecticut; Dipak Dey, University of Connecticut; Timothy Morse, University of Connecticut Health Center

9:35 a.m. **Methods for Profiling the Value of Hospital Care Following Acute Myocardial Infarction—**❖Justin Timbie, Harvard University

9:55 a.m. **Nonparametric Statistical Methods for a Cost-Effectiveness Analysis—**❖Phillip Dinh, University of Washington; Xiao-Hua Andrew Zhou, University of Washington

10:15 p.m. **Floor Discussion**

Topic-Contributed Panel
8:30 a.m.–10:20 a.m.

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239   CC-2A
● ✪ Responding to Emergency Needs for Data: Developing Population Estimates in the Wake of Hurricane Katrina—Topic-Contributed

Section on Government Statistics

Organizer(s): Wendy Alvey, U.S. Census Bureau; Lisa Blumerman, U.S. Census Bureau
Chair(s): Edward Spar, Council of Professional Associations on Federal Statistics

Panelists: ❖Thomas Nardone, Bureau of Labor Statistics

           ❖Christa Jones, U.S. Census Bureau

GENERAL PROGRAM SCHEDULE

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

Tuesday

❖Lisa Blumerman, U.S. Census Bureau

❖Marc Roemer, U.S. Census Bureau

❖Sally Obenski, U.S. Census Bureau

10:15 a.m. **Floor Discussion**

Regular Contributed Sessions
8:30 a.m.–10:20 a.m.

240   CC-205
Methods for High-Dimensional Data—Contributed

IMS

Chair(s): Elizabeth Koehler, University of Washington

8:35 a.m. **Constrained Dimension Reduction Based on Canonical Correlation**—❖Jianhui Zhou, University of Virginia

8:50 a.m. **Sliced Inverse Regression under Data Contamination**—❖Ulrike Genschel, Iowa State University

9:05 a.m. **Significance and Recovery of Block Structures in Binary and Real Matrices with Noise**—❖Xing Sun, The University of North Carolina at Chapel Hill; Andrew Nobel, The University of North Carolina at Chapel Hill

9:20 a.m. **Some Extensions of a Two-Sample Test under the Effect of High Dimension**—❖Yingli Qin, Iowa State University; Song X. Chen, Iowa State University; Liang Peng, Iowa State University

9:35 a.m. **Detecting Sparse Signals with a Large Scale of SPRTs**—❖Yanhong Wu, University of the Pacific

9:50 a.m. **On the Accuracy of Data Squashing**—❖Atsuyuki Kogure, Keio University; Masahiko Sagae, Gifu University

10:05 a.m. **New Tools for Sparse Inference: the Regime of Moderate Significances**—❖Jiashun Jin, Purdue University

241   CC-601
Construction of Prior Distributions—Contributed

Section on Bayesian Statistical Science

Chair(s): Raphael Gottardo, The University of British Columbia

8:35 a.m. **An Asymptotic Viewpoint on High-Dimensional Bayesian Testing**—❖Dan Spitzner, Virginia Polytechnic Institute and State University

8:50 a.m. **Novel Bayesian Variable-Selection Priors for "Large p Small n" Data Analysis**—❖Joseph Lucas, Duke University

9:05 a.m. **New Priors for Complex System Reliabilities and Trends**—❖Earl Lawrence, Los Alamos National Laboratory; Scott Vander Wiel, Los Alamos National Laboratory

9:20 a.m. **Reference Priors in Linear Models with General Covariance Structures**—❖Xin Zhao, Merck & Co., Inc.; Martin T. Wells, Cornell University

9:35 a.m. **Bayesian Interval Estimation of Attributable Risk Using Probability Matching Prior**—❖Bin Huang, Cincinnati Children's Hospital Medical Center; Siva Sivaganisan, University of Cincinnati

9:50 a.m. **Bayesian Inference with Matching Priors**—❖Ana-Maria Staicu, University of Toronto

10:05 a.m. **A General Approach for Constructing Normalizing Constants for Parameter Selection Priors**—❖Christopher Carter, University of New South Wales

242   CC-213
Classification and Other Correlated Data Problems—Contributed

Section on Physical and Engineering Sciences

Chair(s): EunJoo Lee, Advanced Micro Devices, Inc.

8:35 a.m. **InfoEvolve(TM): a Data Mining Tool Combining Information Theory and Genetic Algorithms**—❖Aaron J. Owens, DuPont; Karen M. Bloch, DuPont

8:50 a.m. **Analysis of Handwritten ZIP Code Digits Using OBSTree**—❖Atina Dunlap Brooks, North Carolina State University; Jacqueline Hughes-Oliver, North Carolina State University

9:05 a.m. **A Nonparametric Approach Based on a Like Markov Property for Classification**—❖Eun Sug Park, Texas Transportation Institute; Clifford Spiegelman, Texas A&M University

9:20 a.m. **Sensitivity Analysis with Correlated Inputs: Application to Kinetic Models**—❖Sebastien Da Veiga, Institut Français du Pétrole; Francois Wahl, Institut Français du Pétrole; Fabrice Gamboa, Université Paul Sabatier

9:35 a.m. **A Structural Equation Method for Modeling Data Center Thermal Distribution**—❖Zhiguang Qian, Georgia Institute of Technology; Yasuo Amemiya, IBM T. J. Watson Research Center

GENERAL PROGRAM SCHEDULE

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

9:50 a.m. **Improved Tolerance Factors for Multivariate Normal**—❖Sumona Mondal, University of Louisiana at Lafayette; Kalimuthu Krishnamoorthy, University of Louisiana at Lafayette

10:05 a.m. **K-Means Clustering: a Novel Probabilistic Formulation, with Some Applications**—❖Samiran Ghosh, University of Connecticut; Dipak Dey, University of Connecticut

243   CC-605
Missing or Censored Data—Contributed
Section on Statistical Computing, Biometrics Section, ENAR
Chair(s): George Terrell, Virginia Polytechnic Institute and State University

8:35 a.m. **Counting the Homeless in Los Angeles County**—❖Brian Kriegler, University of California, Los Angeles; Richard Berk, University of California, Los Angeles; Don Ylvisaker, University of California, Los Angeles

8:50 a.m. **An Investigation of Missing Data Methods for Decision Trees**—❖Yufeng Ding, New York University; Jeffrey Simonoff, New York University

9:05 a.m. **Nonlinear Neural Network Imputation**—❖Safaa Amer, National Opinion Research Center

9:20 a.m. **Using Objective Measures in Combination with Self-Report To Estimate Adherence**—❖Richard Thompson, The Johns Hopkins Bloomberg School of Public Health; Michael Griswold, The Johns Hopkins Bloomberg School of Public Health; Arlene Butz, The Johns Hopkins University; Michele Donithan, The Johns Hopkins Bloomberg School of Public Health

9:35 a.m. **Test of Independence with Incomplete Contingency Table**—❖Shin-Soo Kang, Iowa State University; Kenneth Koehler, Iowa State University; Michael D. Larsen, Iowa State University

9:50 a.m. **A Comparison of Parametric and Semiparametric Methods for Predicting Limited Dependent Variables**—❖Maya Sternberg, Centers for Disease Control and Prevention; Alula Hadgu, Centers for Disease Control and Prevention; Suephy Chen, Emory University School of Medicine

10:05 a.m. **Estimation of Correlation Coefficient in Bivariate Normal Population Based on Concomitants of Order Statistics**—❖Qinying He, The Ohio State University; H. N. Nagaraja, The Ohio State University

244   CC-212
● ✪ Risk Assessment: Disease, Health, and Harm—Contributed
Section on Risk Analysis, Biometrics Section, ENAR
Chair(s): Brian Caffo, The Johns Hopkins University

8:35 a.m. **Characterization of Occupant Anthropometry and Clearance Measures in Passenger Cars**—❖Duane Steffey, Exponent, Inc.; Robert Bove, Jr., Exponent, Inc.; Jacob Fisher, Exponent, Inc.; Lauren Ciccarelli, Exponent, Inc.; Robert Cargill, Exponent, Inc.; Tara Moore, Exponent, Inc.

8:50 a.m. **Smallpox and Pandemic Influenza: Modeling Potential Challenges for the U.S. Blood Supply**—❖Steven Anderson, U.S. Food and Drug Administration

9:05 a.m. **A Comparison of Bayesian Networks and MCMC Techniques for Quantitative Risk Assessment**—❖Paola Berchialla, University of Torino; Silvia Snidero, University of Torino; Alexandru Stancu, University of Torino; Cecilia Scarinzi, University of Torino; Roberto Corradetti, University of Torino; Dario Gregori, University of Torino

9:20 a.m. **Risk Assessment of Listeria Monocytogenes on Frankfurters with Organic Acid Salts Surface Treatments**—❖Zheng Lu, Iowa State University; Chunwang Gao, Iowa State University

9:35 a.m. **Generalized Residual Sojourns under Truncation and Censoring**—❖John Hsieh, University of Nevada, Reno

9:50 a.m. **General Indexes for Spatial-Temporal Population Risk Assessment**—❖Chu-Chih Chen, National Health Research Institutes

10:05 a.m. **Public Health Interventions and Transition Probabilities**—❖Paula Diehr, University of Washington

GENERAL **PROGRAM** SCHEDULE

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

245   CC-616
● Misspecifications, Data Quality, and Improvements—Contributed

Business and Economics Statistics Section
Chair(s): Michael Smith, University of Sydney

8:35 a.m.   **Sons, Daughters, and Parents' Labor Supply: New Evidence from Matched CPS Data**—❖James Vere, The University of Hong Kong

8:50 a.m.   **Statistical Modeling: Science versus Business and Domain Expertise**—❖Igor Mandel, Media Planning Group; David Hauser, Media Planning Group

9:05 a.m.   **Estimating Signatures on a Petition with Cis**—❖Mary M. Whiteside, The University of Texas at Arlington; Mark E. Eakin, The University of Texas

9:20 a.m.   **Estimation of Industry Distribution of Statistical Discrepancy in National Income and Product Accounts**—❖Baoline Chen, Bureau of Economic Analysis

9:35 a.m.   **Quantifying the Quality of Macroeconomic Variables**—❖Alex Teterukovsky, Statistics Sweden; Lars-Erik Öller, Statistics Sweden/Stockholm University

9:50 a.m.   **Incorporating EITC Participation into the SAIPE Program's County Poverty Model**—❖Wesley Basel, U.S. Census Bureau; Brian J. O'Hara, U.S. Census Bureau

10:05 a.m.   **Misspecification of Cointegrating Ranks in Seasonal Models**—❖Byeongchan Seong, Pohang University of Science and Technology; Sinsup Cho, Seoul National University; Sung K. Ahn, Washington State University; S. Y. Hwang, Sookmyung Women's University

246   CC-612
● Nonclinical, Nonbiological Drug Development—Contributed

Biopharmaceutical Section
Chair(s): Yanping Wang, Eli Lilly and Company

8:35 a.m.   **Statistical Issues of Two-Stage Delivery Dose Uniformity Test of Orally Inhaled and Nasal Drug Products**—❖Meiyu Shen, U.S. Food and Drug Administration; Yi Tsong, U.S. Food and Drug Administration

8:50 a.m.   **Practical Considerations on Lot Acceptance Sampling Procedures**—❖Boguang Zhen, U.S. Food and Drug Administration

9:05 a.m.   **Assessing the Reproducibility of an Analytical Method**—❖Jason Liao, Merck Research Laboratories

9:20 a.m.   **Imputing Nonignorable Missing Data on Clinical Laboratory Assessments**—❖Kapildeb Sen, Bristol-Myers Squibb Company; Chen-Sheng Lin, Bristol-Myers Squibb Company; Kannan Natarajan, Novartis Pharmaceuticals Corporation; Jun Xing, Bristol-Myers Squibb Company

9:35 a.m.   **Web-Based Interactive Bayesian Multiple-Objective Optimal Designs for Dose Response Studies with Constraints**—❖Xiang-feng Wu, Stony Brook University; Wei Zhu, Stony Brook University; Holger Dette, Ruhr-Universität Bochum; Weng Kee Wong, University of California, Los Angeles

9:50 a.m.   **Teaching Statistics to Clinical Research Staff in a Pharmaceutical Company**—❖Sunil Dhar, New Jersey Institute of Technology; Farid Kianifard, Novartis Pharmaceuticals Corporation

10:05 a.m.   **Floor Discussion**

247   CC-613
● Methods for Agreement and Paired Data—Contributed

Biometrics Section, ENAR
Chair(s): Michael Haber, Emory University

8:35 a.m.   **Concordance Correlation Coefficient for Ordinal Data**—❖Jingyun Yang, The Pennsylvania State University

8:50 a.m.   **Paradoxes Revisited: Comparison of B-Statistic with Kappa**—❖Shankar Viswanathan, The University of North Carolina at Chapel Hill; Shrikant I. Bangdiwala, The University of North Carolina at Chapel Hill

9:05 a.m.   **Interobserver Variability and Intraobserver Variability**—❖Jing Han, St. Francis Hospital

9:20 a.m.   **Assessing Rater Exchangeability and Identifying an Atypical Rater Using a Log-Linear Modeling Approach**—❖Kari Kastango, University of Pittsburgh; Roslyn A. Stone, Veteran's Affairs Pittsburgh Healthcare System

9:35 a.m.   **The Test-Based Exact Confidence Intervals of the Difference between Two Proportions for Small-Sample Paired Binary Data**—❖Hong-Long Wang, National Taipei University; Shiu-Ying Lin, National Taipei University; Xiao-Hua Andrew Zhou, University of Washington

GENERAL PROGRAM SCHEDULE

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

9:50 a.m. **Problems Related to Effect Size Measurement and Analysis**—❖Sibabrata Banerjee, New Jersey Institute of Technology

10:05 a.m. **Confidence Interval of Effect Size in Paired and Parallel-Group Study**—❖Jianrong Wu, St. Jude Children's Research Hospital; Guoyong Jiang, Cephalon, Inc.

248   CC-614
● **Inference for Categorical Data—Contributed**
Biometrics Section
Chair(s): Kenneth Koehler, Iowa State University

8:35 a.m. **Exact Inference for Contingency Tables with Correlated Data**—❖Chris Corcoran, Utah State University

8:50 a.m. **Exact Unconditional Inference for Multinomial Likelihoods with an Example Using 2x3 Contingency Tables**—❖Gerald Crans, Eli Lilly and Company; Jonathan J. Shuster, University of Florida

9:05 a.m. **Measuring Association in Contingency Tables**—❖Shailendra Banerjee, Centers for Disease Control and Prevention

9:20 a.m. **Data Information with the Cochran-Mantel-Haenszel Test**—❖Philip E. Cheng, Academia Sinica

9:35 a.m. **Modified Maximum Likelihood Estimation of the Proportional Odds Model**—❖Evrim Oral, Middle East Technical University

9:50 a.m. **Using Variation Reduction Point To Remove Extraneous Effect in Modeling**—❖Chong Yau Fu, National Yang-Ming University; Shih-Hua Liu, National Yunlin University of Science & Technology

10:05 a.m. **Floor Discussion**

249   CC-610
● **Design of Power and Sample Size in Clinical Trials—Contributed**
Biometrics Section, ENAR
Chair(s): James F. Ward, Sand Point Statistics Group

8:35 a.m. **Blinded Sample-Size Re-estimation in Randomized Block Trials with Continuous Endpoint**—❖Biao Xing, Genentech, Inc.; Jitendra Ganju, BiostatWorks

8:50 a.m. **Sample Size Re-estimation for Time-to-Event Studies**—❖Erinn Hade, The Ohio State University; Soledad Fernandez, The Ohio State University; David Jarjoura, The Ohio State University

9:05 a.m. **Sample Size and Power Calculation with Generalized Mixed Effects Model**—❖Qianyu Dang, University of Pittsburgh; Sati Mazumdar, University of Pittsburgh

9:20 a.m. **Design of Clinical Trials with Flexible Sample Size**—❖Lu Cui, sanofi-aventis; Fang Liu, Merck Research Laboratories; Ray Zhu, sanofi-aventis

9:35 a.m. **Approximate Confidence Intervals for Power in UNIREP Analyses**—❖Matthew Gribbin, The University of North Carolina at Chapel Hill; Keith E. Muller, The University of North Carolina at Chapel Hill; Jacqueline Johnson, The University of North Carolina at Chapel Hill

9:50 a.m. **Designing Standardly Tailored Multicomponent Intervention Trials in Medicine To Yield Unbiased Effect Estimates**—❖Heather G. Allore, Yale University

10:05 a.m. **Evaluation of Several Multiple Comparison Procedures for Noninferiority Trials with Two Doses of a Treatment and a Control with a Binary Success Rate Endpoint**—❖Hongling Zhou, U.S. Food and Drug Administration; Mohammad Huque, U.S. Food and Drug Administration

250   CC-606
✪ **Censoring and Modeling with Censoring—Contributed**
Section on Statistics in Epidemiology, Biometrics Section, ENAR
Chair(s): Kiros Berhane, University of Southern California

8:35 a.m. **Interval Estimation for a Measure of Stochastic Superiority**—❖Euijung Ryu, University of Florida

8:50 a.m. **Estimating Equation Approach for Regression Analysis of Interval-Censored Failure Time Data**—❖HeeJeong Lim, California State University, Fullerton; Xingqiu Zhao, McMaster University; Jianguo Sun, University of Missouri-Columbia

9:05 a.m. **Sensitivity of the Kaplan-Meier Estimate to Nonignorable Censoring**—❖Tao Liu, University of Pennsylvania School of Medicine; Daniel F. Heitjan, University of Pennsylvania

9:20 a.m. **Censoring Point in Logistic ELISA Standard Curves**—❖Ryan E. Wiegand, Medical University of South Carolina; Elizabeth H. Slate, Medical

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Tuesday

University of South Carolina; Elizabeth G. Hill, Medical University of South Carolina; Jyotika K. Fernandes, Medical University of South Carolina

9:35 a.m. **Biases Due to Left Censoring and Left Truncation in Estimating Menopausal Transition Stages from Menstrual Cycle Data**—Kevin Cain, University of Washington; ❖Bin Nan, University of Michigan

9:50 a.m. **Predicting Exposure at a Specified Time Based on an Extended Randomized Regression Model for Interval-Censored Data**—❖Robert Lyles, Emory University; Amita K. Manatunga, Emory University; Renee Moore, Emory University; Michele Marcus, Emory University

10:05 a.m. **Inference for Partially Observed Systems with an Application to Cholera**—Edward L. Ionides, University of Michigan; ❖Carles Breto, University of Michigan; Aaron A. King, University of Michigan

251 CC-604

● ✪ Design and Analysis Issues in Epidemiological Modeling—Contributed
Section on Statistics in Epidemiology
Chair(s): Jonathan Mahnken, The University of Kansas Medical Center

8:35 a.m. **Data Analysis under Case-Cohort Designs with Clustered Binary Outcome Data**—❖Shou-En Lu, University of Medicine & Dentistry of New Jersey; Yong Lin, University of Medicine & Dentistry of New Jersey; Joanna H. Shih, National Cancer Institute

8:50 a.m. **Early, Cost-Effective Identification of High-Risk/Priority Control Areas in Foot-and-Mouth Disease Epidemics**—❖Steven Schwager, Cornell University; Ariel Rivas, Cornell University; Stephen Smith, Cornell University; Antoni Magri, Cornell University

9:05 a.m. **Capture-Recapture Revisited**—❖Lawrence Lessner, SUNY University at Albany

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9:20 a.m. **Heterogeneity on Estimation Size of Hard-to-Reach Population Using Capture-Recapture Data**—❖Shenghai Zhang, Public Health Agency of Canada

9:35 a.m. **Analysis of a Disease and Probability of Exposure Association Using a Replicated Error-Prone Exposure Assessment**—❖Chengxing Lu, Emory University; Robert Lyles, Emory University

9:50 a.m. **A Two-Phase Analysis of Air Pollution and Adverse Birth Outcomes**—❖Katherine Hoggatt, University of Michigan; Sander Greenland, University of California, Los Angeles; Beate Ritz, University of California, Los Angeles

10:05 a.m. **Floor Discussion**

252   CC-201
● **Survey-Based Variance Estimation I—Contributed**

Section on Survey Research Methods

Chair(s): Keith Rust, Westat/University of Maryland

8:35 a.m. **Confidence Intervals for Quantile Estimation from Complex Survey Data**—❖Babubhai V. Shah, SAFAL Institute Inc.; Akhil Vaish, RTI International

8:50 a.m. **Estimating Prevalence When a Subset of the Sample Requires Further Evaluation**—❖David C. Hoaglin, Abt Associates Inc.; K. P. Srinath, Abt Associates Inc.

9:05 a.m. **Variance Estimation for Ordered Categories**—❖Steven Pedlow, National Opinion Research Center; Yongyi Wang, National Opinion Research Center; Kirk Wolter, National Opinion Research Center

9:20 a.m. **Variance Estimation in a Survey for Iowa's State Board of Education**—Michael D. Larsen, Iowa State University; ❖Lu Lu, Iowa State University

9:35 a.m. **Variance Estimation in Complex Survey Sampling for Generalized Linear Models**—❖Sundar Natarajan, New York University Medical Center; Stuart Lipsitz, Brigham and Women's Hospital; Garrett Fitzmaurice, Harvard University; Charity G. Moore, University of South Carolina

9:50 a.m. **Variance Estimation of the Survey-Weighted Kappa Measure of Agreement**—❖Moshe Feder, RTI International

10:05 a.m. **Improved Confidence Intervals for the Bernoulli Parameter**—Wheyming Tina Song, National Tsing Hua University; ❖Chia-Jung Chang, National Tsing Hua University

253   CC-203
● **Survey-Based Estimation II—Contributed**

Section on Survey Research Methods

Chair(s): Elizabeth R. Zell, Centers for Disease Control and Prevention

8:35 a.m. **Methods for Birth Cohort Analysis for the National Immunization Survey**—❖Phil Smith, Centers for Disease Control and Prevention; Kirk Wolter, National Opinion Research Center; James Singleton, Centers for Disease Control and Prevention

8:50 a.m. **Estimation of Regression Coefficients with Unequal Probability Samples**—❖Yu Wu, Iowa State University; Wayne Fuller, Iowa State University

9:05 a.m. **Indirect Sampling and the Problem of Identification of Links**—❖Pierre Lavallée, Statistics Canada; Xiaojian Xu, University of Alberta

9:20 a.m. **A Comparison between Ratio Estimation and Post-Stratification**—❖Chang-Tai Chao, National Cheng Kung University; Tzu-Ching Chiang, National Cheng Kung University

9:35 a.m. **Using Income as an Auxiliary Variable To Improve the Design of Household Expenditure Surveys**—❖Charles Mitchell, Statistics Canada; Christian Nadeau, Statistics Canada

9:50 a.m. **Model Averaging in Survey Estimation**—❖Xiaoxi Li, Iowa State University; Jean D. Opsomer, Iowa State University

10:05 a.m. **Integrating Person and Housing Unit Weighting for the Current Population Survey**—❖Andrew Zbikowski, U.S. Census Bureau; Phawn Letourneau, U.S. Census Bureau

254   CC-620
● **Nonparametric Regression Methods II—Contributed**

Section on Nonparametric Statistics

Chair(s): Yolanda Munoz Maldonado, The University of Texas School of Public Health

8:35 a.m. **Spline Single-Index Prediction Model**—❖Li Wang, Michigan State University; Lijian Yang, Michigan State University

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8:50 a.m. **Testing Lack-of-Fit of Heteroscedastic Nonlinear Regression Models with Local Linear Smoothers—**❖Chin-Shang Li, St. Jude Children's Research Hospital

9:05 a.m. **Local Analytic Curve Estimation—**❖Richard Charnigo, University of Kentucky; Cidambi Srinivasan, University of Kentucky

9:20 a.m. **Nonparametric Regression with Coarsened Predictors—**❖Aurore Delaigle, University of California, San Diego

9:35 a.m. **Asymptotic Approximation to a Nonparametric Regression Experiment with Unknown Variance—**❖Andrew Carter, University of California, Santa Barbara

9:50 a.m. **Floor Discussion**

255   CC-611
● Biomarkers and Joint Models—Contributed
Biometrics Section, WNAR, ENAR
Chair(s): Elizabeth Brown, University of Washington

8:35 a.m. **Mixtures-of-Experts Joint Model for Longitudinal Biomarkers and Recurrent Events—**❖Jun Han, Georgia State University; Elizabeth H. Slate, Medical University of South Carolina; Edsel Peña, University of South Carolina

8:50 a.m. **Joint Analysis of Longitudinal Measurements and Competing Risks Failure Time Data—**❖Ning Li, University of California, Los Angeles; Robert Elashoff, University of California, Los Angeles; Gang Li, University of California, Los Angeles

9:05 a.m. **Joint Modeling of Survival and Longitudinal Data—**Jimin Ding, University of California, Davis

9:20 a.m. **Type I and II Error of Joint Multimarkers Cox Models To Predict Chronic Disease Outcomes—**❖Philimon Gona, Boston University

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9:35 a.m.   **Robust Analysis of Biomarker Data with Informative Missingness Using a Two-Stage Hypothesis Test in an HIV Treatment Interruption Trial: AIEDRP AIN503 /ACTG A5217**—❖Karen Messer, University of California, San Diego; Florin Vaida, University of California, San Diego; Christine Hogan, Columbia University

9:50 a.m.   **Evaluatting Causal Effect Predictiveness of Candidate Surrogate Endpoints**—❖Peter Gilbert, Fred Hutchinson Cancer Research Center/University of Washington; Michael G. Hudgens, The University of North Carolina at Chapel Hill

10:05 a.m.   **A Novel Approach for Proteomic Biomarker Identification Using Mass Spectrometry**—❖Chen Ji, Stony Brook University; Yeming Ma, Brookhaven National Laboratory; Xuena Wang, University of Hawaii; Esther Arkin, Stony Brook University; Joseph Mitchell, Stony Brook University; Wei Zhu, Stony Brook University

Special Presentation
10:30 a.m.–12:20 p.m.

256   CC-400
ASA Stat Bowl Session 1—Other
The ASA, ENAR, IMS, SSC, WNAR
Organizer(s): Mark Payton, Oklahoma State University
Chair(s): Mark Payton, Oklahoma State University

Game 1—❖Upasana Santra, University of Florida; ❖Samiran Ghosh, University of Connecticut; ❖Susanta Tewari, University of Georgia; ❖Xinwei Deng, Georgia Institute of Technology

Game 2—❖Vivekananda Roy, University of Florida; ❖Ying Hung, Georgia Institute of Technology; ❖Dipankar Bandyopadhyay, University of Georgia; ❖Jeffrey Lidicker, Temple University

Game 3—❖Fang Yu, University of Connecticut; ❖Alicia Graziosi, Temple University; ❖Arunava Chakravartty, University of California, Riverside; ❖Rajarshi Dey, Kansas State University

Game 4—❖Ke Zhang, Kansas State University; ❖Tanujit Dey, Case Western Reserve University; ❖Christopher Rigdon, Southern Illinois University; ❖Satrajit Roychoudhury, New Jersey Institute of Technology

Invited Sessions 10:30 a.m.–12:20 p.m.

257   CC-4C-4
● ✪ Hurricane Katrina and Economic Data—Invited
Business and Economics Statistics Section
Organizer(s): John L. Eltinge, Bureau of Labor Statistics
Chair(s): John L. Eltinge, Bureau of Labor Statistics

10:35 a.m.   **Current Population Survey Response to the Hurricane Katrina Disaster**—❖Edwin L. Robison, Bureau of Labor Statistics; Anne Polivka, Bureau of Labor Statistics; Diane Herz, Bureau of Labor Statistics; Lawrence Cahoon, U.S. Census Bureau; Richard Ning, U.S. Census Bureau; Maria Reed, U.S. Census Bureau; Greg Weyland, U.S. Census Bureau

11:00 a.m.   **Accounting for Katrina Effects in State Labor Force Estimates**—❖Richard Tiller, Bureau of Labor Statistics; Sharon Brown, Bureau of Labor Statistics

11:25 a.m.   **Effects of Hurricane Katrina on the BLS Payroll Survey**—❖Patricia Getz, Bureau of Labor Statistics; Richard Rosen, Bureau of Labor Statistics; Larry Huff, Bureau of Labor Statistics; Angela Clinton, Bureau of Labor Statistics

11:50 a.m.   **Analysis and Procedures in the Census Bureau's Trade Surveys after Hurricane Katrina**—❖Jock R. Black, U.S. Census Bureau; Ruth E. Detlefsen, U.S. Census Bureau

12:15 p.m.   **Floor Discussion**

258   CC-607
● ✪ Estimation of Treatment Effect for Clinical Trials with Group Sequential Designs—Invited
Biopharmaceutical Section, Biometrics Section, ENAR
Organizer(s): Michael W. Lee, Johnson & Johnson Pharmaceutical R&D; Hui Quan, sanofi-aventis
Chair(s): Daowen Zhang, sanofi-aventis

10:35 a.m.   **Estimation Following Group Sequential Trials: a Bayesian View**—❖Gary L. Rosner, M. D. Anderson Cancer Center

11:10 a.m.   **Conditional Estimation of Treatment Effects for Clinical Trials with Group Sequential Designs**—❖Michael W. Lee, Johnson & Johnson Pharmaceutical R&D; Hui Quan, sanofi-aventis

11:45 a.m.   Disc: Weichung J. Shih, University of Medicine & Dentistry of New Jersey

12:05 p.m.   **Floor Discussion**

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Tuesday

259   CC-2B

● ✪ Advances in Phylogenetic Inference—Invited

IMS, WNAR

Organizer(s): Bret Larget, University of Wisconsin-Madison
Chair(s): Bret Larget, University of Wisconsin-Madison

10:35 a.m.   **Analysis of Comparative Data with Hierarchical Autocorrelation—**❖Cecile Ane, University of Wisconsin-Madison

11:00 a.m.   **Using Bootstrap Support for Splits To Construct Confidence Regions for Trees—**❖Edward Susko, Dahousie University

11:25 a.m.   **The Threshold Model: an Underutilized Resource in Phylogenetic Inference—**❖Joseph Felsenstein, University of Washington

11:50 a.m.   **Algebraic Statistics and Phylogenetic Inference: Establishing Identifiability of Mutation Models—**❖Elizabeth S. Allman, University of Alaska, Fairbanks; John A. Rhodes, University of Alaska, Fairbanks

12:15 p.m.   **Floor Discussion**

260   CC-210

● Personal Networks: Applications Using Data on Social Relationships—Invited

Section on Statistical Computing, Section on Statisticians in Defense and National Security, Section on Statistical Graphics

Organizer(s): Chris Volinsky, AT&T Labs-Research
Chair(s): Deepak K. Agarwal, AT&T Labs-Research

10:35 a.m.   **Design and Analysis of 'How Many Xs Do You Know?' Surveys—**❖Tian Zheng, Columbia University; Andrew Gelman, Columbia University

11:00 a.m.   **Data Mining in Networks—**❖David Jensen, University of Massachusetts

11:25 a.m.   **The Dynamics of Viral Marketing—**Jure Leskovec, Carnegie Mellon University; ❖Lada A. Adamic, University of Michigan; Bernardo Huberman, Hewlett Packard Labs

11:50 a.m.   **Modeling Massive Dynamic Graphs—**❖Chris Volinsky, AT&T Labs-Research

12:15 p.m.   **Floor Discussion**

261   CC-206

● Modeling Behavioral Data from Clinical Research on Smoking—Invited

Section on Health Policy Statistics, Biometrics Section

Organizer(s): E. Paul Wileyto, University of Pennsylvania
Chair(s): Joseph L. Schafer, The Pennsylvania State University

10:35 a.m.   **Modeling Heaping in Self-Reported Cigarette Counts—**❖Daniel F. Heitjan, University of Pennsylvania

11:00 a.m.   **A Cure Mixture Model for Multivariate Time-to-Event Data—**❖E. Paul Wileyto, University of Pennsylvania

11:25 a.m.   **Modeling Variation in the Effects of Smoking Using Intensive Longitudinal Data—**❖Donald Hedeker, University of Illinois at Chicago

11:50 a.m.   **Exploring the Relationship between Adverse Events, Compliance, Dropout, and Abstinence in Pharmacotherapy Smoking Cessation Trials—**❖Joel A. Dubin, University of Waterloo

12:15 p.m.   **Floor Discussion**

262   CC-603

● ✪ Complex Data Structures—Invited

SSC

Organizer(s): James Stafford, University of Toronto
Chair(s): James Stafford, University of Toronto

10:35 a.m.   **Issues Relating to Methods for Analysis of Survey Data—**❖David Binder, Statistical Society of Canada; Georgia Roberts, Statistics Canada

11:05 a.m.   **Spatial-Temporal Modeling for Marine Ecological Systems—**❖Joanna M. Flemming, Dahousie University

11:35 a.m.   **A Stochastic Model for Forest Fire Growth—**❖Willard J. Braun, University of Western Ontario

12:05 p.m.   **Floor Discussion**

263   CC-3A

● ✪ Effective Leadership for Statistical Thinking and Impact—Invited

Council of Chapters, Section on Statistical Education, Section on Statistical Consulting

Organizer(s): James Kenyon, Bristol-Myers Squibb Company
Chair(s): James Kenyon, Bristol-Myers Squibb Company

10:35 a.m.   **Building Statistical Thinking into the School Curriculum: Obstacles and Opportunities—**❖Richard L. Scheaffer, University of Florida

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11:05 a.m. **Seven Habits of Highly Effective Statisticians in Pharmaceutical Industry**—❖Frank Shen, Bristol-Myers Squibb Company

11:35 a.m. **Effective Statistical Leadership in Government and Industry**—❖Fritz J. Scheuren, National Opinion Research Center

12:05 p.m. **Floor Discussion**

264   CC-604
● **Bombs to Bullets, People to Planets: Exploring Imaging Applications with a Statistician's Eye—Invited**

Section on Physical and Engineering Sciences, Section on Statisticians in Defense and National Security, Section on Statistical Graphics

Organizer(s): Kary Myers, Los Alamos National Laboratory
Chair(s): Kary Myers, Los Alamos National Laboratory

10:35 a.m. **Do Guns Transfer Their DNA to Bullets?**—❖William F. Eddy, Carnegie Mellon University

11:00 a.m. **Using Image Grand Tour To Explore Multiangle, Multispectral Satellite Imagery**—❖Amy Braverman, Jet Propulsion Laboratory; Edward Wegman, George Mason University; Wendy Martinez, Office of Naval Research; Juergen Symanzik, Utah State University; Brad Wallet, Automated Decisions

11:25 a.m. **Tomographic Imaging Using Background Cosmic Radiation**—❖Nicolas Hengartner, Los Alamos National Laboratory

11:50 a.m. **Using Statistics To Search and Annotate Pictures**—❖Nuno Vasconcelos, University of California, San Diego; Pedro J. Moreno, Google, Inc.

12:15 p.m. **Floor Discussion**

265   CC-616
● ✪ **Bayesian Spatio-Temporal Models—Invited**

WNAR, Biometrics Section, Section on Bayesian Statistical Science, Section on Statistics and the Environment

Organizer(s): Bruno Sanso, University of California, Santa Cruz
Chair(s): Catherine A.Calder, The Ohio State University

10:35 a.m. **Spatial Dynamic Factor Models**—❖Hedibert F. Lopes, The University of Chicago; Esther S. Salazar, Instituto de Matemática-UFRJ; Dani Gamerman, Instituto de Matemática-UFRJ

11:00 a.m. **Characterizing Invasions with Hierarchical, Rule-Based Systems**—❖Mevin B. Hooten, University of Missouri-Columbia; Christopher K. Wikle, University of Missouri-Columbia

11:25 a.m. **Spatially Varying AR Processes Based on Discrete Convolutions**—❖Bruno Sanso, University of California, Santa Cruz; Alexandra Schmidt, Universidade Federal de Rio de Janeiro; Aline Nobre, Universidade Federal de Rio de Janeiro

11:50 a.m. **Using Computer Models To Inform about Space-Time Fields**—❖Dave Higdon, Los Alamos National Laboratory

12:15 a.m. **Floor Discussion**

266   CC-211
● ✪ **Challenges Facing the Next Generation of Applied Statisticians—Invited**

Social Statistics Section, Committee on Applied Statisticians, Committee on Women in Statistics, Committee on Law and Justice Statistics, Section on Statistical Education, Section on Statistical Consulting

Organizer(s): Kelly H. Zou, Harvard Medical School
Chair(s): Alan M. Zaslavsky, Harvard Medical School

10:35 a.m. **Motivations and Challenges Facing Women Statisticians**—❖Kelly H. Zou, Harvard Medical School

11:00 a.m. **Statistical Tools Employed in Legal Settings**—❖Mary W. Gray, American University

11:25 a.m. **Professional Accreditation for Statisticians**—❖Mary Batcher, Ernst & Young LLP

11:50 a.m. Disc: Kimberly F. Sellers, Georgetown University

12:10 p.m. **Floor Discussion**

Invited Panels 10:30 a.m.–12:20 p.m.

267   CC-2A
● **Practical Issues in Conducting Statistics Education Research—Invited**

Section on Statistical Education

Organizer(s): Joan Garfield, University of Minnesota
Chair(s): Joan Garfield, University of Minnesota

Panelists: ❖Robert DelMas, University of Minnesota

        ❖Beth Chance, California Polytechnic State University, San Luis Obispo

        ❖Sterling Hilton, Brigham Young University

        ❖Lawrence M. Lesser, The University of Texas at El Paso

        ❖Andrew Zieffler, University of Minnesota

12:15 p.m. **Floor Discussion**

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Topic-Contributed Sessions
10:30 a.m.–12:20 p.m.

268   CC-601
● Nonparametric Statistical Process Control Methods—Topic-Contributed

Section on Quality and Productivity, Section on Nonparametric Statistics
Organizer(s): Subha Chakraborti, The University of Alabama
Chair(s): Subha Chakraborti, The University of Alabama

10:35 a.m. **Minimum Control Charts**—❖Willem Albers, University Twente

10:55 a.m. **Distribution-Free Quality Control Charts Based on Signed-Rank-Like Statistics**—❖Saad Bakir, Alabama State University

11:15 a.m. **Dispersion Control Charts Based on Ranks**—❖Raid Amin, University of West Florida

11:35 a.m. **Distribution-Free Multivariate Process Control Based on Log-Linear Modeling**—❖Peihua Qiu, University of Minnesota

11:55 a.m. **A Bayesian Approach in Modeling Shifts of the Mean/Variance of Count Data**—❖Panagiotis Tsiamyrtzis, Athens University of Economics and Business; Douglas M. Hawkins, University of Minnesota

12:15 p.m. **Floor Discussion**

269   CC-609
● ⊘ Bayesian Computational Methods for Biomedical Applications—Topic-Contributed

Section on Bayesian Statistical Science, Biometrics Section, ENAR
Organizer(s): Sujit Ghosh, North Carolina State University
Chair(s): Marina Vannucci, Texas A&M University

10:35 a.m. **Bayesian Hidden Markov Modeling of Array CGH Data**—❖Subharup Guha, Harvard School of Public Health

10:55 a.m. **A Hierarchical Bayesian Analysis of Longitudinal Frequency Data Using Piecewise Linear Regression**—❖John Kern, Duquesne University; Nicholas Bernini, Duquesne University; Sujit Ghosh, North Carolina State University

11:15 a.m. **Bayesian Spatial Modeling of Data from Bird Surveys**—❖Raymond Webster, North Carolina State University; Kenneth Pollock, North Carolina State University; Theodore Simons, North Carolina State University

11:35 a.m. **Bayesian Inference for NLME Models Involving ODEs**—❖Sujit Ghosh, North Carolina State University; Lovely Goyal, North Carolina State University

11:55 a.m. **Bayesian Modeling of Longitudinal Data with Nonignorable Missing Data**—❖Liansheng Zhu, North Carolina State University; Sujit Ghosh, North Carolina State University; Subhashis Ghosal, North Carolina State University

12:15 p.m. **Floor Discussion**

270   CC-617
● Recent Advances in Analyzing Agreement Data—Topic-Contributed

Biometrics Section, ENAR
Organizer(s): Ananda Sen, University of Michigan
Chair(s): Ananda Sen, University of Michigan

10:35 a.m. **Bivariate Modeling of Interobserver Agreement Coefficients**—❖Mohamed Shoukri, King Faisal Specialist Hospital; Allan Donner, University of Western Ontario

10:55 a.m. **A Weighted Kappa for Agreement between Two Ratings with Different Ordinal Scales**—❖Stuart Lipsitz, Brigham and Women's Hospital

11:15 a.m. **Coefficient of Agreement for Binary Data with Replications**—❖Huiman Barnhart, Duke University; Michael Haber, Emory University; Andrzej Kosinski, Duke University

11:35 a.m. **A Permutation Test for Dependent Concordance Correlation Coefficients**—❖John M. Williamson, Centers for Disease Control and Prevention; Hung-Mo Lin, The Pennsylvania State University; Sara Crawford, The Rollins School of Public Health of Emory University

11:55 a.m. Disc: Allan Donner, University of Western Ontario

12:15 p.m. **Floor Discussion**

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271   CC-602

● ✪ Extremes: Methods for Environmental and Meteorological Studies—Topic-Contributed

WNAR

Organizer(s): Daniel Cooley, Colorado State University
Chair(s): Daniel Cooley, Colorado State University

10:35 a.m.   **How Good Are the Air Quality Standards?**—❖Sofia Aberg, Lund University; Peter Guttorp, University of Washington

10:55 a.m.   **A Statistical Approach to North American Rainfall**—❖Jie Zhou, The University of North Carolina at Chapel Hill

11:15 a.m.   **Bayesian Hierarchical Modeling for Extreme Values in Spatio-Temporal Data**—❖Huiyan Sang, Duke University; Alan E. Gelfand, Duke University

11:35 a.m.   **Predicting Extreme Hurricane Winds in the United States**—❖Thomas Jagger, Florida State University

11:55 a.m.   **Statistical Analysis of a POT Model with Time-Varying Extreme Parameters**—❖Marta Nogaj, Commission of Atomic Energy

12:15 p.m.   **Floor Discussion**

272   CC-611

● ✪ Outcome-Dependent Sampling—Topic-Contributed

Section on Statistics in Epidemiology

Organizer(s): Jonathan Wakefield, University of Washington
Chair(s): James Lynch, University of Nebraska Medical Center

10:35 a.m.   **The Combination of Ecological and Individual-Level Data**—❖Jonathan Wakefield, University of Washington; Sebastien Haneuse, Group Health Cooperative

10:55 a.m.   **Two-Phase Methods for Ecological Studies**—❖Sebastien Haneuse, Group Health Cooperative; Jonathan Wakefield, University of Washington

11:15 a.m.   **The Optimal Ratio of Cases to Controls for Estimating the Classification Accuracy of a Biomarker**—❖Holly E. Janes, The Johns Hopkins University; Margaret S. Pepe, Fred Hutchinson Cancer Research Center/University of Washington

11:35 a.m.   **An Efficient Outcome-Dependent Sampling Design for Longitudinal Binary Response Data**—❖Jon Schildcrout, Vanderbilt University Medical Center; Patrick Heagerty, University of Washington

11:55 a.m.   Disc: Patrick Heagerty, University of Washington

12:15 p.m.   **Floor Discussion**

273   CC-201

● The Transition from the Long Form to the American Community Survey: Findings from The National Academies Panel—Topic-Contributed

Section on Survey Research Methods

Organizer(s): Michael L. Cohen, Committee on National Statistics
Chair(s): Michael L. Cohen, Committee on National Statistics

10:35 a.m.   **Functionality and Usability of Information from the American Community Survey**—❖Connie Citro, Committee on National Statistics; Graham Kalton, Westat; Michael L. Cohen, Committee on National Statistics

10:55 a.m.   **The ACS and the Data User Community**—❖Joseph Salvo, New York City Department of City Planning; Nancy Dunton, The University of Kansas Medical Center; Charles Purvis, Oakland Metro Transportation Commission

11:15 a.m.   **Methodological Issues in the ACS**—❖Graham Kalton, Westat; Tim Holt, Retired; Sharon Lohr, Arizona State University; Hal Stern, University of California, Irvine

11:35 a.m.   Disc: Jay Waite, U.S. Census Bureau

11:55 a.m.   Disc: Allen Schirm, Mathematica Policy Research, Inc.

12:15 p.m.   **Floor Discussion**

274   CC-212

Student Paper Award Winners—Topic-Contributed

Section on Statistical Computing, Section on Statistical Graphics

Organizer(s): Jose Pinheiro, Novartis Pharmaceuticals Corporation
Chair(s): Jose Pinheiro, Novartis Pharmaceuticals Corporation

10:35 a.m.   **Efficient Computation and Variable Selection for the L1-Norm Quantile Regression**—❖Youjuan Li, University of Michigan; Ji Zhu, University of Michigan

10:55 a.m.   **An Algorithm for Regression of Scalars on Images**—❖Philip Reiss, Columbia University; R. Todd Ogden, Columbia University

11:15 a.m.   **Clustering with Confidence**—❖Rebecca Nugent, University of Washington; Werner Stuetzle, University of Washington

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Tuesday

11:35 a.m. **Kernel Regularization and Dimension Reduction**—Fan Lu, University of Wisconsin-Madison; Grace Wahba, University of Wisconsin-Madison; Yi Lin, University of Wisconsin-Madison; Sunduz Keles, University of Wisconsin-Madison; Stephen J. Wright, University of Wisconsin-Madison

11:55 a.m. Disc: Charles Roosen, Insightful Corporation

12:15 p.m. **Floor Discussion**

275   CC-205
● Measuring and Improving Data Quality—Topic-Contributed
Section on Government Statistics
Organizer(s): Nancy M. Gordon, U.S. Census Bureau
Chair(s): Nancy M. Gordon, U.S. Census Bureau

10:35 a.m. **How Do We Know If We Aren't Looking? An Investigation of Data Quality in the SCF**—❖Arthur Kennickell, Federal Reserve Board

10:55 a.m. **An Economic Analysis of Survey Response Quality**—❖Julia Lane, National Opinion Research Center; Leslie Athey, National Opinion Research Center; Suzanne Bard, National Opinion Research Center; Judith Petty, National Opinion Research Center

11:15 a.m. **Effects of Late-Stage Completions on Data Quality**—❖Karen Grigorian, National Opinion Research Center; Thomas B. Hoffer, National Opinion Research Center; Ronald S. Fecso, National Science Foundation

11:35 a.m. Disc: Cheryl R. Landman, U.S. Census Bureau

11:55 a.m. **Floor Discussion**

276   CC-608
High-Dimensional Modeling and Model Selection—Topic-Contributed
Section on Bayesian Statistical Science
Organizer(s): Christopher Hans, The Ohio State University
Chair(s): Herbert Lee, University of California, Santa Cruz

10:35 a.m. **Priors for High-Dimensional Covariance Models**—❖Charles Curry, University of California, Santa Cruz

GENERAL PROGRAM SCHEDULE

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

10:55 a.m. **High-Dimensional Modeling and Model Selection—**❖Carlos Carvalho, Duke University

11:15 a.m. **Sparsity in Linear Regression for High-Dimensional Problems—**❖Christopher Hans, The Ohio State University

11:35 a.m. **A Bayesian Nonparametric Approach for Expression Proteomic Analyses—**❖Leanna House, Duke University; Merlise Clyde, Duke University; Robert Wolpert, Duke University

11:55 a.m. **Making Sense of Estimating Integrated Likelihoods: Bridges, Paths, and Other Routes—**❖Russell Steele, McGill University

12:15 p.m. **Floor Discussion**

277 CC-615
✪ Topics in Function Estimation Using Isotonization and Smoothing Techniques—Topic-Contributed

IMS, Section on Nonparametric Statistics

Organizer(s): Moulinath Banerjee, University of Michigan

Chair(s): Jon A. Wellner, University of Washington

10:35 a.m. **Nonparametric Density Estimation from Covariate Information—**❖Ryan Elmore, Colorado State University; Peter G. Hall, Australian National University; Vladimir Troynikov, Department of Primary Industries

10:55 a.m. **Limiting Distribution of the NPMLE for Current Status Data with Competing Risks—**❖Marloes Maathuis, University of Washington

11:15 a.m. **Penalized Likelihood Ratio Method for the Spiking Problem in Nonincreasing Density Estimation—**❖Jayanta Pal, University of Michigan

11:35 a.m. **Fractile Graphical Analysis with Multiple Covariates—**❖Bodhisattva Sen, University of Michigan

11:55 a.m. Disc: Moulinath Banerjee, University of Michigan

12:15 p.m. **Floor Discussion**

Regular Contributed Sessions
10:30 a.m.–12:20 p.m.

278 CC-203
● Sample Survey Quality III—Contributed

Section on Survey Research Methods

Chair(s): David Dolson, Statistics Canada

10:35 a.m. **An Evaluation of Methods To Compensate for Noncoverage of Phoneless Households Using Information on Interruptions in Telephone Service and Presence of Wireless Phones—**❖Meena Khare, National Center for Health Statistics; Sadeq Chowdhury, National Opinion Research Center; Kirk Wolter, National Opinion Research Center; Karen Wooten, National Immunization Program; Stephen Blumberg, National Center for Health Statistics

10:50 a.m. **Using Record Linkage Techniques To Improve Online Genealogical Research with Census Records—**❖John Lawson, Brigham Young University

11:05 a.m. **Integrating Culture Industries into Canada's National Economic Surveys Program—**❖Mary March, Statistics Canada; Paddison Wong, Statistics Canada

11:20 a.m. **The Internet Response Method: Impact on the Canadian Census of Population Data—**❖Laurent Roy, Statistics Canada

11:35 a.m. **Good Item or Bad: Can Latent Class Analysis Tell? Examining the Effectiveness of the Latent Class Analysis Approach to Item Evaluation—**❖Frauke Kreuter, University of Maryland; Roger Tourangeau, University of Maryland; Ting Yan, Institute for Social Research

11:50 a.m. **Population Coverage in the National Survey on Drug Use and Health—**Susan R. Hunter, RTI International; ❖Katherine B. Morton, RTI International; James Chromy, RTI International; Peilan C. Martin, RTI International

12:05 p.m. **Floor Discussion**

279 CC-204
● Survey-Based Estimation III—Contributed

Section on Survey Research Methods

Chair(s): Bryan Sayer, Social & Scientific Systems, Inc.

10:35 a.m. **New Cell Collapsing Strategies Based on Collapsing Adjustment Factor—**❖Jay J. Kim, National Center for Health Statistics; Richard

GENERAL **PROGRAM** SCHEDULE

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

Valliant, University of Michigan; Wenxing Zha, National Institutes of Health

10:50 a.m. **Stratification for Radio Listening Estimation—** ❖Richard Griffiths, Arbitron Inc.

11:05 a.m. **Calculating Effect Sizes Using Survey Data—** ❖Jun Liu, Research Triangle Institute

11:20 a.m. **Estimation for Two-Phase Panel Surveys—** ❖Jason Legg, Iowa State University; Wayne Fuller, Iowa State University; Sarah M. Nusser, Iowa State University

11:35 a.m. **Evaluation of Collapsing Criteria in Sample Weighting—**❖Linda Tompkins, National Center for Health Statistics; Jay J. Kim, National Center for Health Statistics; Wenxing Zha, National Institutes of Health

11:50 a.m. **A Pseudo-Empirical Likelihood Approach for Stratified Samples with Nonresponse—**❖Fang Fang, University of Wisconsin-Madison; Quan Hong, Eli Lilly and Company; Jun Shao, University of Wisconsin-Madison

12:05 p.m. **Estimation Methods To Produce Preliminary Statistics in an Employment Survey—**❖Anders Holmberg, Statistics Sweden; Natalie Jansson, Statistics Sweden; Martin Odencrants, Statistics Sweden

280 CC-3B
Hot Topics in Sports—Contributed
Section on Statistics in Sports, Section on Statistical Education
Chair(s): Michael Anderson, Battelle

10:35 a.m. **A Compound Logistic Regression Model for Third Down Efficiency in the NFL—**❖Christopher Rigdon, Southern Illinois University; Steve Rigdon, Southern Illinois University

10:50 a.m. **Using Spatial Analysis as a Coaching Tool in Ice Hockey—**❖Robin Lock, St. Lawrence University; Travis Gingras, St. Lawrence University; Chris Wells, St. Lawrence University; Michael Schuckers, St. Lawrence University

11:05 a.m. **An Interesting Classroom Exercise—**❖Laurence Robinson, Ohio Northern University

11:20 a.m. **Identifying and Evaluating Contrarian Strategies for NCAA Tournament Pools—**❖Jarad Niemi, Duke University; Bradley P. Carlin, University of Minnesota; Jonathan Alexander, Duke University

11:35 a.m. **Improved College Football Scheduling Using a Pseudo-Swiss System—**❖David Annis, Naval

Postgraduate School; Samuel Wu, University of Florida

11:50 a.m. **Regression Modeling Using Multiple Sources To Detect Group-Level Differences in Pitching Performance—**❖Liam O'Brien, Colby College; Matthew Aschaffenburg, Colby College

12:05 p.m. **A Cross-Country Comparison of Efficiency of Soccer-Betting Markets—**❖Ruud H. Koning, University of Groningen

281 CC-614
● ✪ Pedigree/Population Analyses—Contributed
Section on Statistics in Epidemiology, Biometrics Section, ENAR
Chair(s): Jinbo Chen, University of Pennsylvania

10:35 a.m. **Family-Based Liquid Association Analysis on Atherosclerosis in C3H/HeJ.ApoE-/- x C57BL/6J. ApoE-/- Cross-**❖Tun-Hsiang Yang, University of California, Los Angeles; Ker-Chau Li, University of California, Los Angeles; Shinsheng Yuan, University of California, Los Angeles; Aldons J. Lusis, University of California, Los Angeles; Wei Sun, University of California, Los Angeles; Susanna Wang, University of California, Los Angeles

10:50 a.m. **Evaluating the Impact of Family Structure on Estimating Genetic Association Parameters in Family Studies—**❖Stefan Boehringer, National Cancer Institute; Ruth Pfeiffer, National Cancer Institute

11:05 a.m. **Evaluation of Three Approaches To Correct for Ascertainment of Pedigrees for Random-Effects Cox Proportional Hazard Linkage Analysis—** ❖Susan Slager, Mayo Clinic College of Medicine; Shannon K. McDonnell, Mayo Clinic College of Medicine; Vernon S. Pankratz, Mayo Clinic College of Medicine; Antje Hoering, Cancer Research and Biostatistics; Terry M. Therneau, Mayo Clinic College of Medicine; Mariza de Andrade, Mayo Clinic College of Medicine

11:20 a.m. **A Probability Model for Recent Tb Transmissions in Genetic Clusters—**❖Nong Shang, Centers for Disease Control and Prevention

11:35 a.m. **Human Population Structure Detection via Multilocus Genotype Clustering—**❖Xiaoyi Gao, North Carolina State University; Bruce S. Weir, University of Washington

11:50 a.m. **Testing for Familial Aggregation When the Population Size Is Known—**❖Yixin Fang, Columbia University

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

12:05 p.m. **A Study of an Allele-Sharing Statistic on Extended Pedigrees**—❖Saonli Basu, University of Minnesota

282   CC-613

● ✿ Disease Modeling: Theory and Applications—Contributed

Section on Statistics in Epidemiology, Biometrics Section, ENAR

Chair(s): Eric Siegel, University of Arkansas for Medical Sciences

10:35 a.m. **Model Choice in Time Series Studies of Air Pollution and Mortality**—❖Roger Peng, The Johns Hopkins University; Francesca Dominici, The Johns Hopkins University; Thomas A. Louis, The Johns Hopkins University

10:50 a.m. **A Generalized Threshold Mixed Model for Analyzing Non-Normal Nonlinear Time Series: Plague in Kazakhstan as an Illustration**—❖Noelle I. Samia, The University of Iowa; Kung-Sik Chan, The University of Iowa; Nils C. Stenseth, The University of Oslo

11:05 a.m. **Statistical Determination of the Length of Quarantine Periods in an Epidemic**—❖Xiaojun You, The Johns Hopkins University

11:20 a.m. **Bayesian Analysis of the 1918 Influenza Pandemic in Baltimore, MD**—❖Yue Yin, The Johns Hopkins University

11:35 a.m. **Changes in Infant Mortality by Socioeconomic Status: U.S. Residents, 1995–2000**—❖Jay H. Kim, Centers for Disease Control and Prevention; Joe Fred Gonzalez, Jr., National Center for Health Statistics; Paul D. Williams, National Center for Health Statistics

11:50 a.m. **BMI, Race, and Prostate Cancer**—❖Negasi Beyene, National Center for Health Statistics

12:05 p.m. **Standardized Risk and Description of Results from Multivariable Modeling of a Binary Response**—Bong-Rae Kim, University of Florida; ❖Randy L. Carter, University at Buffalo; P. V. Rao, University of Florida

283   CC-401

Portfolios and Derivations—Contributed

Business and Economics Statistics Section

Chair(s): Paul Shaman, University of Pennsylvania

10:35 a.m. **Mimicking Portfolios with Conditioning Information**—❖Andrew Siegel, University of Washington

10:50 a.m. **Population Segmentation for Portfolio Strategies**—❖Timothy H. Lee; Otto Schwalb

11:05 a.m. **Synthesis-Efficient Portfolio of Investment Projects**—❖Alex Fedorov, Novosibirsk State Technical University; Dmitri Shubin, Novosibirsk State Technical University; Anatoly Naumov, Novosibirsk State Technical University

11:20 a.m. **Assessing the Effects of Variability in Interest Rate Derivative Pricing**—❖Michael Crotty, North Carolina State University; Peter Bloomfield, North Carolina State University

11:35 a.m. **Structural Models of Corporate Bond Yields by Nonconvex Penalized Least Squares**—❖Yuejiao Ma, The Pennsylvania State University

11:50 a.m. **Toward Identification of Shocks in State-Space Models: Application to Stochastic Volatility**—❖Nour Meddahi, Montréal University; Stéphane Gregoir, CREST/INSEE

12:05 p.m. **Estimating the Commonality in Volatility-Volume Relationship**—❖Lei Zhang, Syracuse University; Raja Velu, Syracuse University; Tze Leung Lai, Stanford University; Haipeng Xing, Columbia University

284   CC-606

● Preclinical Design and Analysis—Contributed

Biopharmaceutical Section, ENAR

Chair(s): Kannan Natarajan, Novartis Pharmaceuticals Corporation

10:35 a.m. **Some Results Concerning Multiplicities in Animal Carcinogenicity Studies**—❖Mohammad Rahman, U.S. Food and Drug Administration; Karl Lin, U.S. Food and Drug Administration

10:50 a.m. **Predictive Fingerprint Modeling in Systems Biology**—❖Lei Zhu, GlaxoSmithKline; Daniel Parks, GlaxoSmithKline; Xiwu Lin, GlaxoSmithKline; Kwan Lee, GlaxoSmithKline; Amit Bhattacharyya, GlaxoSmithKIine; Edit Kurali, GlaxoSmithKline; Amber Anderson, GlaxoSmithKline; Dilip Rajagopalan, GlaxoSmithKline

11:05 a.m. **Evaluation of a Novel Metric for Quality Control in an RNA Interference High-Throughput Assay**—❖Xiaohua Zhang, Merck Research Laboratories; Namjin Chung, Merck Research Laboratories; Amy Espeseth, Merck Research Laboratories; Marc Ferrer, Merck Research Laboratories

GENERAL PROGRAM SCHEDULE

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

Tuesday

11:20 a.m. **On Methods To Utilize HIV-RNA Data Measured by Two PCR Assays**—❖Joshua Chen, Merck & Co., Inc.; Chunpeng Fan, University of Wisconsin-Madison; Jing Zhao, Merck & Co., Inc.

11:35 a.m. **Consideration of Parallel-Line and Logistic Models for Potency Estimation**—❖Bill Pikounis, Centocor R&D, Inc.; Ken Goldberg, Centocor R&D, Inc.

11:50 a.m. **A Linear Model Approach To Detect Outliers in Quantitative PCR**—❖Michael Man, Pfizer Inc.

12:05 p.m. **Quantification Limits in HIV Clinical Trials**—❖Michael Nessly, Merck Research Laboratories

285   CC-612
● Sample Size—Contributed
Biopharmaceutical Section
Chair(s): Tom Kelleher, Bristol-Myers Squibb Company

10:35 a.m. **Sample Size Considerations in Noninferiority Trials**—❖Qi Jiang, Amgen Inc.; Steven Snapinn, Amgen Inc.

10:50 a.m. **Determining Sample Size for Proportions When the Information on a Prognostic Factor Is Unavailable**—❖Bong S. Kim, Neumann College

11:05 a.m. **Sample Size Re-estimation in a Dose-Response Study**—❖Kazuhiko Kuribayashi, Pfizer Inc.; Mike D. Smith, Pfizer Inc.

11:20 a.m. **Sample-Size Estimation for Repeated Measures Analysis in Randomized Clinical Trials with Missing Data**—Kaifeng Lu, Merck & Co., Inc.; Xiaohui Luo, Merck & Co., Inc.; ❖Pei-Yun Chen, Merck & Co., Inc.

11:35 a.m. **Sample-Size Calculations in Logistic Regression: Comments on Hsieh, Bloch, and Larsen's Method**—❖Mohammed K. Alam, University of Cincinnati; Marepalli Rao, University of Cincinnati; Rupa Mitra, Minnesota State University

11:50 a.m. **Extracting Information from an Ongoing Blinded Trial**—❖Jitendra Ganju, BiostatWorks

12:05 p.m. **Floor Discussion**

286   CC-619
● Clinical Trial and Microarray Design—Contributed
Biometrics Section, ENAR
Chair(s): Daniel Sargent, Mayo Clinic College of Medicine

10:35 a.m. **Adaptive Design on Adjusting Sample Size without Inflating Type I Error**—❖Jialu Zhang,

U.S. Food and Drug Administration; John Lawrence, U.S. Food and Drug Administration

10:50 a.m. **Designs for Phase I Clinical Trials with Multiple Courses of Subjects at Different Doses**—❖Shenghua Fan, California State University, East Bay; You-Gan Wang, CSIRO Mathematical and Information Sciences

11:05 a.m. **Bayesian Decision-Theoretic Adaptive Designs for Clinical Trials**—❖Yi Cheng, Indiana University South Bend

11:20 a.m. **Use of Hadamard Matrices in Designs for Two-Color Factorial Microarray Experiments**—❖Yu Ding, Temple University; Damaraju Raghavarao, Temple University

11:35 a.m. **Minimax Estimation of Means in Large-Scale Experiments**—❖Tiejun Tong, Yale University; Liang Chen, Yale University; Hongyu Zhao, Yale University

11:50 a.m. **Tradeoffs between Power and 'Confounding' in a Small Microarray Experiment**—❖Mary Putt, University of Pennsylvania; Thomas Cappola, University of Pennsylvania

12:05 p.m. **Likelihood Inference for Survival Analysis in Two-Stage Randomization Designs**—❖Abdus Wahed, University of Pittsburgh

287   CC-618
● Statistical Methods in Assays and Cell Line Experiments—Contributed
Biometrics Section, ENAR
Chair(s): Jayawant Mandrekar, Mayo Clinic College of Medicine

10:35 a.m. **Evaluation Parallelism Testing Methods in Immunoassay**—❖Lanju Zhang, MedImmune, Inc.; Harry Yang, MedImmune, Inc.; Iksung Cho, MedImmune, Inc.

10:50 a.m. **Censored Poisson Regression with Normal Random Effects with an Application to a Dilution Assay**—❖Jorge Quiroz, Wyeth Research; Jeffrey R. Wilson, Arizona State University

11:05 a.m. **LD50/IC50 Estimation for in vitro Cytotoxicity**—❖Wenquan Wang, The University of Alabama at Birmingham

11:20 a.m. **Application of Pharmacokinetic Modeling To Guide Clinical Sample Testing**—❖Andrew Chen, MedImmune, Inc.; Harry Yang, MedImmune, Inc.; Lanju Zhang, MedImmune, Inc.; Iksung Cho, MedImmune, Inc.; Ed O'Connor, MedImmune, Inc.

GENERAL PROGRAM SCHEDULE

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

11:35 a.m. **Error Variance Estimation with Few Replicates in Cell Line Experiments**—❖David Jarjoura, The Ohio State University; Soledad Fernandez, The Ohio State University; Keding Hua, The Ohio State University

11:50 a.m. **Theoretical Relationship between Direct and Indirect Potency Assays for Biological Product of Live Virus**—❖Harry Yang, MedImmune, Inc.; Iksung Cho, MedImmune, Inc.

12:05 p.m. **Floor Discussion**

288   CC-620
Analysis of Imaging and Spatial Data— Contributed
Biometrics Section, ENAR
Chair(s): Diana Miglioretti, Group Health Cooperative

10:35 a.m. **Applications of Copulas To Improve Covariance Estimation for PLS**—❖Gina D'Angelo, University of Pittsburgh; Lisa Weissfeld, University of Pittsburgh; Scott Ziolko, University of Pittsburgh; Chester Mathis, University of Pittsburgh; William Klunk, University of Pittsburgh; Steven DeKosky, University of Pittsburgh; Julie Price, University of Pittsburgh

10:50 a.m. **Establishing the Utility of MRI Parameters in Predicting Disease Activity in RRMS Patients Using GMDM**—❖Welfredo R. Patungan, University of the Philippines; Daniel Bonzo, Serono, Inc.

11:05 a.m. **Application of Randomized Singular Value Decomposition Techniques to the Analysis of Imaging Data Using Partial Least Squares**— ❖Scott Ziolko, University of Pittsburgh; Lisa Weissfeld, University of Pittsburgh; Chester Mathis, University of Pittsburgh; William Klunk, University of Pittsburgh; Steven DeKosky, University of Pittsburgh; Julie Price, University of Pittsburgh

11:20 a.m. **A Comparison of Different Methods for Identifying Outliers in MRS Data**—❖Sandra B. Hall, The University of Kansas Medical Center; Mihai Popescu, The University of Kansas Medical Center; Anda Popescu, The University of Kansas Medical Center; Niaman Nazir, The University of Kansas Medical Center; Thomas Malone, The University of Kansas Medical Center; Robin Aupperle, The University of Kansas Medical Center; Allan Schmitt, The University of Kansas Medical Center; JoAnn Lierman, The University of Kansas Medical Center; William M. Brooks, The University of Kansas Medical Center

11:35 a.m. **A Central Limit Theorem for High-Dimensional Spatially Correlated Processes**—❖Danielle Harvey, University of California, Davis; Qian Weng, University of California, Davis; Evan Fletcher, University of California, Davis; Charles DeCarli, University of California, Davis; Laurel Beckett, University of California, Davis

11:50 a.m. **Image Analysis by Spatial Point Process Modeling in Irregular Area**—❖Weimin Zhang, Texas A&M University; Suojin Wang, Texas A&M University

12:05 p.m. **Identifying Risk Factors for Encephalitis from West Nile Virus Infection Using Scan Statistics**— ❖Sarah Baraniuk, The University of Texas School of Public Health; Kristy Lillibridge, The University of Texas School of Public Health

289   CC-213
Robust Methods—Contributed
Section on Statistical Computing
Chair(s): H. N. Nagaraja, The Ohio State University

10:35 a.m. **On Weighted Least Squares for Missing Data**— ❖Sergey Tarima, Medical College of Wisconsin

10:50 a.m. **Testing Equality of Covariance Matrices When Data Are Incomplete**—❖Mortaza Jamshidian, California State University, Fullerton; James Schott, University of Central Florida

11:05 a.m. **Robust Diagnostics for Multivariate Mixed Continuous and Categorical Data**—❖Tsung-Chi Cheng, National Chengchi University; Atanu Biswas, Indian Statistical Institute

11:20 a.m. **A Markov Chain Monte Carlo Approach for Finding the Minimum Volume Ellipsoid**— ❖J. Brian Gray, The University of Alabama; Eric B. Howington, Coastal Carolina University

11:35 a.m. **Clustering of Outlier Structure Using Minimal Spanning Tree Rankings and Minimum Volume Ellipsoids**—❖Mark W. Lukens, George Mason University; James Gentle, George Mason University

11:50 a.m. **Spanning Trees as Data Analysis Tools**—❖Adam Petrie, Rensselaer Polytechnic Institute; Thomas R. Willemain, Rensselaer Polytechnic Institute

Tuesday

12:05 p.m. **A Nonparametric Approach to Descriptive Measures of Multivariate Massive Data Based on Convex Hull Peeling Depth**—❖Hyunsook Lee, The Pennsylvania State University

290   CC-605
● Analysis of Factorial Experiments— Contributed

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

Chair(s): Christopher Malone, Winona State University

10:35 a.m. **Iterative Stepdown Tests: Analysis of Orthogonal Saturated Factorial Designs**—❖Daniel Voss, Wright State University

10:50 a.m. **Error Sum of Squares Comparison for Model Search, Identification, and Discrimination**—❖Hongjie Deng, University of California, Riverside; Subir Ghosh, University of California, Riverside

11:05 a.m. **Power Comparisons for Model Search, Identification, and Discrimination**—❖Ying Luan, University of California, Riverside; Subir Ghosh, University of California, Riverside

11:20 a.m. **A Comparison of Three Approaches to Modeling a Multivariate Response in a Designed Experiment**—❖Steven LaLonde, Rochester Institute of Technology; Peter Bajorski, Rochester Institute of Technology

11:35 a.m. **Bayesian Analysis of Split Plot Failure Amplification Experiments**—❖Oksoun Yee, Schering-Plough Corporation; Robert W. Mee, University of Tennessee

11:50 a.m. **Deriving Optimal Conditions for Large-Scale Controlled Synthesis of Nanostructures Using Statistical Methods**—❖Tirthankar Dasgupta, Georgia Institute of Technology; Christopher Ma, Georgia Institute of Technology; Roshan J. Vengazhiyil, Georgia Institute of Technology; Zhong L. Wang, Georgia Institute of Technology; C. F. Jeff Wu, Georgia Institute of Technology

12:05 p.m. **Application of Two-Level Unreplicated Factorial Designs in Agricultural Field Experiments**—❖Tessema Astatkie, Nova Scotia Agricultural College

291   CC-214
● Spline-Based Methods—Contributed

Section on Nonparametric Statistics, Biometrics Section

Chair(s): Dongfeng Wu, Mississippi State University

10:35 a.m. **Log-Density Functional ANOVA Model Estimation and Nonparametric Graphical Model Building**—❖Yongho Jeon, University of Wisconsin-Madison

10:50 a.m. **Model Selection in Accelerated Failure Time Models with Nonlinear Covariate Effects**—❖Chenlei Leng, National University of Singapore; Shuangge Ma, University of Washington

11:05 a.m. **Efficient Polynomial Spline Estimation of Partially Linear Models for Clustered Data**—❖Lan Xue, Oregon State University; Li Wang, Oregon State University; Lijian Yang, Michigan State University

11:20 a.m. **Shape-Restricted Spline Regression**—❖Xiao Wang, University of Maryland Baltimore County

11:35 a.m. **Smoothing Spline Estimation for Skew-Symmetric Density Function**—❖Sheng-Mao Chang, North Carolina State University; Hao Zhang, North Carolina State University

11:50 a.m. **Multivariate Time-Dependent Spectral Analysis Using Cholesky**—❖Ming Dai, The University of North Carolina at Charlotte; Wensheng Guo, University of Pennsylvania

12:05 p.m. **Bivariate Binomial Spatial Modeling of Loa Loa Prevalence in Tropical Africa**—❖Ciprian M. Crainiceanu, The Johns Hopkins University; Peter Diggle, University of Lancaster; Barry Rowlingson, University of Lancaster

292   CC-610
The Interface of Bayesian and Frequentist Methods—Contributed

Section on Bayesian Statistical Science

Chair(s): Qingzhao Yu, The Ohio State University

10:35 a.m. **Admissibility and Minimaxity of Generalized Bayes Estimators for Spherically Symmetric Family**—❖Yuzo Maruyama, University of Tokyo; Akimichi Takemura, University of Tokyo

10:50 a.m. **Adjusting Frequentist Results for Previous Information by Combining Prior and Objective Posterior Distributions**—❖David Bickel, Pioneer Hi-Bred International, Inc.

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11:05 a.m. **Relationships between Frequentist and Bayesian Prediction Limits of the Poisson Process: Noninformative Priors**—❖Valbona Bejleri, University of District of Columbia

11:20 a.m. **Reconciling Bayesian and Frequentist Evidence in the One-Sided Scale Parameter Testing Problem**—❖Athanasios Micheas, University of Missouri-Columbia; Dipak Dey, University of Connecticut

11:35 a.m. **Combining Bootstrap and Bayesian Inferences**—❖Yan Zhou, University of Michigan

11:50 a.m. **Higher Order Semiparametric Frequentist Inference Based on the Profile Sampler**—❖Guang Cheng, University of Wisconsin-Madison; Michael Kosorok, University of Wisconsin-Madison

12:05 p.m. **Floor Discussion**

Regular Contributed Posters
10:30 a.m.–12:20 p.m.

293   CC-Level 6 East Lobby
Contributed Posters—Contributed
General Methodology, WNAR, Biometrics Section, Biopharmaceutical Section, Section on Statistics and the Environment, Section on Survey Research Methods
Organizer(s): Maura E. Stokes, SAS Institute, Inc.
Chair(s): Maura E. Stokes, SAS Institute, Inc.

Genetics, bioinformatics, computational biology

01 **Sample Size and Power Calculations in Case-Control Designs for Detecting Gene-Environment Interaction in the Presence of Environmental Correlation**—❖Amy Murphy, Harvard School of Public Health; Peter Kraft, Harvard University

02 **Examining the Multiple Dye-Swap Design for Efficient and Effective Microarray Studies**—❖Theresa Kim, University of Washington

03 **Using the Maximum Cross-Correlation Statistic To Find Significant Voxel-Wise Activations in fMRI Experiments**—❖Kinfemichael Gedif, Southern Methodist University; Richard F. Gunst, Southern Methodist University; Qihua Lin, Southern Methodist University; William R. Schucany, Southern Methodist University

04 **Predict Gene Expression Using Logistic Regression**—❖Lei Guo, Harvard University; Yuan Yuan, Harvard University; Lei Shen, GlaxoSmithKline; Jun Liu, Harvard University

05 **A Nonparametric Method of Background Correction for Microarray Data Analysis**—❖Zhongxue Chen, Southern Methodist University; Monnie McGee, Southern Methodist University; Richard Scheuermann, The University of Texas Southwestern Medical Center at Dallas

06 **A Case Study for Finding Condition-Specific cis-Regulatory Motifs and Modules in the Mouse Genome**—vDongseok Choi, Oregon Health & Science University; Yuan Fang, Oregon Health & Science University; William Mathers, Oregon Health & Science University

07 **Identifying Responder Cells in High-Content Imaging**—❖Shuguang Huang, Eli Lilly and Company; Adeline Yeo, Eli Lilly and Company

08 **Simulation Study Investigating Nonrandom Recombination Events on Single Point LOD Scores**—❖Derek Blankenship, The University of Oklahoma Health Sciences Center

09 **A Method for Computing the Overall Statistical Significance of a Treatment Effect among a Group of Genes**—❖Taewon Lee, National Center for Toxicological Research; Robert Delongchamp, National Center for Toxicological Research; Cruz Velasco, Louisiana State University Health Sciences Center

10 **An Alternative Approach To Estimate Averages in Affymetrix Chips**—❖William R. Schucany, Southern Methodist University; Md. Jobayer Hossain, Southern Methodist University; Julia V. Kozlitina, Southern Methodist University; Kinfemichael Gedif, Southern Methodist University

11 **Near-Infrared (NIR) Spectroscopy Coupled with Molecular Marker Data as a Tool for Gene Discovery**—❖Mervyn Marasinghe, Iowa State University; Paul Scott, Iowa State University/USDA-ARS

Sampling and survey methodology

12 **A Matrix Approach for Comparing Estimates of a Population Total under a Many-to-Many Frame Structure**—Martin Levy, University of Cincinnati; ❖ZhiYuan Dong, University of Cincinnati

13 **Comparison of Alternatives for Controlling Group Quarters Person Estimates in the American Community Survey**—❖Lynn Weidman, U.S. Census Bureau; Michael Ikeda, U.S. Census Bureau; Julie Tsay, U.S. Census Bureau

GENERAL **PROGRAM** SCHEDULE

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

14 **American Community Survey (ACS) Variance Reduction of Small Areas via Coverage Adjustment Using an Administrative Records Match**—❖Donald Malec, U.S. Census Bureau; Elizabeth Huang, U.S. Census Bureau; Jerry J. Maples, U.S. Census Bureau; Lynn Weidman, U.S. Census Bureau

15 **A Comparison of Strategies for Reducing Item Nonresponse in a Web Survey**—❖Jeffrey Kerwin, Westat; Kerry Levin, Westat; Andrew Wang, National Institute of Standards and Technology; Stephen Campbell, National Institute of Standards and Technology; Stephanie Shipp, National Institute of Standards and Technology

16 **Estimating Variance of Double Sampling Using Jackknife and Bootstrap Methods**—❖Jing Wang, Sam Houston State University; Ferry Butar Butar, Sam Houston State University

Speaker Luncheon 12:30 p.m.–1:50 p.m.

294   **CC-4C-1**
Business and Economics Statistics Section Speaker with Lunch (fee event)—Speaker with Lunch
Business and Economics Statistics Section
Organizer(s): Paul Shaman, University of Pennsylvania

TL08 Housing Correction or Crash—❖Mark McMullen, Moody's Economy.com

Roundtables with Lunch 12:30 p.m.–1:50 p.m.

295   **CC-4C-2**
Section on Bayesian Statistical Science Roundtable with Lunch (fee event)
Section on Bayesian Statistical Science
Organizer(s): Merlise Clyde, Duke University

TL09 Objective Bayes Model Selection—❖M. J. Bayarri, University of Valencia

296   **CC-4C-2**
Biopharmaceutical Section Roundtables with Lunch (fee event)
Biopharmaceutical Section
Organizer(s): Amit Bhattacharyya, GlaxoSmithKIine

TL10 Contemporary Issues in Data Monitoring Committees—❖David Kerr, Axio Research

TL11 Controlling Error Rate in Safety Assessments from a Regulatory Perspective—❖Qian Li, U.S. Food and Drug Administration

TL12 The Use of Targeted Designs in Clinical Trials—❖Gerald Crans, Eli Lilly and Company; Matthew Rotelli, Eli Lilly and Company

TL13 Statistical Concerns and Methodology Regarding Cognitive and Psychomotor Endpoints in Early Development (Phase I Trials)—❖Cynthia Gargano, Merck & Co., Inc.

TL14 Preferred Methods of Dealing with Missing Data in Clinical Trials—❖Rukmini Rajagopalan, Abbott Laboratories

TL15 Decision Rules Based on Multiple Endpoints in Clinical Trials—❖Alex Dmitrienko, Eli Lilly and Company

TL16 Patient-Reported Outcomes: Issues Related to the Collection and Analysis, Including Measurement Reliability and Sensitivity—❖Tammy J. Massie, U.S. Food and Drug Administration

TL17 Statistician's Role in PK/PD Modeling and Clinical Trial Simulation—❖Haiyuan Zhu, Merck Research Laboratories

TL18 Retrospective Testing for Baseline Variables Comparability and Subsequent Covariate Adjustments for Significant Imbalance: Good Clinical Practice or Bad Statistical Practice?—❖Abdul Sankoh, sanofi-aventis

TL19 Statistical Issues Regarding Experimental Medicine—❖James Bolognese, Merck Research Laboratories

TL20 Bayesian Dose-Finding Strategies for Phase I Oncology Trials—❖Glen Laird, Novartis Pharmaceuticals Corporation

TL21 On the Evaluation of Benefit and Risk: the Tools We Have and How They Help—❖Yili Pritchett, Abbott Laboratories

TL22 Use of Adaptive Clinical Trial Designs in Clinical Development for Product Registration—❖Laura Meyerson, Biogen Idec

GENERAL PROGRAM SCHEDULE

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

297   CC-4C-3
Section on Statistical Consulting Roundtable with Lunch (fee event)
Section on Statistical Consulting

Organizer(s): Todd Nick, Cincinnati Children's Hospital Medical Center

TL23   Extreme Consulting: a Novel Method of Improving Efficiency of Biostatistical Analysis—❖Daniel Byrne, Vanderbilt University

298   CC-4C-3
Section on Statisticians in Defense and National Security Roundtable with Lunch (fee event)
Section on Statisticians in Defense and National Security

Organizer(s): Lara S. Schmidt, RAND Corporation

TL24   Epidemiology and Education: Using Public Health and National Security in Statistics Education—❖Henry Rolka, Centers for Disease Control and Prevention; Donna Stroup, Centers for Disease Control and Prevention

299   CC-4C-3
Section on Statistical Education Roundtables with Lunch (fee event)
Section on Statistical Education

Organizer(s): Patti Collings, Brigham Young University

TL25   Using Technology in the Classroom and for Distance Education—❖Michael Speed, Texas A&M University

TL26   Teaching Introductory Statistics with (All) Sports Examples—❖Robin Lock, St. Lawrence University

300   CC-4C-3
Section on Statistics in Epidemiology Roundtable with Lunch (fee event)
Section on Statistics in Epidemiology

Organizer(s): Jennifer Clark Nelson, Group Health Cooperative

TL27   Design and Analytic Challenges of Conducting Biomedical Research with Older Populations: Steps Toward a Gerontologic Biostatistics—❖Peter H. Van Ness, Yale University; Heather G. Allore, Yale University

301   CC-4C-3
Section on Government Statistics Roundtables with Lunch (fee event)
Section on Government Statistics, Section on Health Policy Statistics, Committee on Gay and Lesbian Concerns in Statistics

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

TL28   Including Sexual Orientation Questions in Surveys: Issues and Approaches—❖Sarah Boslaugh, Washington University in St. Louis

TL29   ASA and Volunteerism: New Special-Interest Group—❖Roberta Sangster, Bureau of Labor Statistics

302   CC-4C-3
Section on Statistical Graphics Roundtable with Lunch (fee event)
Section on Statistical Graphics

Organizer(s): Simon Urbanek, AT&T Labs-Research

TL30   Are Graphics/Interactive Graphics Useful for Getting Your Work Done?—❖Matthias Schonlau, RAND Corporation; Martin Theus, University of Augsburg

303   CC-4C-3
Section on Health Policy Statistics Roundtables with Lunch (fee event)
Section on Health Policy Statistics

Organizer(s): Bonnie Ghosh-Dastidar, RAND Corporation

TL31   The Role of Prescription Drugs in Health and Disability—❖Michele Connolly, U.S. Social Security Administration

TL32   Peer Grouping Methodology in Hospital Profiling—❖Chintamani Rairikar, BlueCross BlueShield of Illinois

304   CC-4C-3
Section on Physical and Engineering Sciences Roundtable with Lunch (fee event)
Section on Physical and Engineering Sciences

Organizer(s): Winson Taam, The Boeing Company

TL33   What's the Difference between Collaborative Research and Consulting?—❖Roger W. Hoerl, GE Global Research

305   CC-4C-3
Section on Quality and Productivity Roundtable with Lunch (fee event)
Section on Quality and Productivity

Organizer(s): William R. Myers, Procter & Gamble

TL34   Graphical and Numeric Approaches to Selecting Effects in Two-Level Factorial Models—❖Wayne Adams, Stat-Ease

American Statistical Association

Presidential Address & Awards Session

Sallie Keller-McNulty, ASA President

Tuesday, August 8, 2006, 8:00 p.m.
Washington State Convention & Trade Center,
Ballroom 6ABC

Is your associate, professor, student, colleague, friend, or organization being recognized at the Joint Statistical Meetings in Seattle?

Samuel S. Wilks Memorial Award	Edward C. Bryant Scholarship	Gertrude M. Cox Scholarship	Gottfried E. Noether Awards	W. J. Youden Award in Lab Testing

★ *Statistics in Chemistry Award*

★ *ASA Fellows*

★ *Founders Award*

★ *Outstanding Statistical Application Award*

★ *Statistical Partnerships among Academe, Industry, and Government (SPAIG) Award*

Plan to attend the ASA Presidential Address and Awards Session for the recognition of the ASA's most distinguished members.

GENERAL PROGRAM SCHEDULE

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

306   CC-4C-3
Section on Survey Research Methods Roundtables with Lunch (fee event)

Section on Survey Research Methods

Organizer(s): Steven G. Heeringa, University of Michigan

TL35   Sharing Frame Information To Improve Coverage and Reduce Cost and Duplication of Effort—❖Paula Weir, Energy Information Administration

TL36   Bayesian Inference for Complex Sample Surveys—❖Roderick J. Little, University of Michigan

307   CC-4C-3
Social Statistics Section Roundtable with Lunch (fee event)

Social Statistics Section

Organizer(s): Allen Schirm, Mathematica Policy Research, Inc.

TL37   Telephone Surveys: Where Do We Go from Here?—❖Clyde Tucker, Bureau of Labor Statistics

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

308   CC-400
ASA Stat Bowl Session 2—Other

The ASA, ENAR, IMS, SSC, WNAR

Organizer(s): Mark Payton, Oklahoma State University

Chair(s): Mark Payton, Oklahoma State University

Round 2—❖Winners from Session 1, Six players will advance from Round 1 to Round 2

Invited Sessions 2:00 p.m.–3:50 p.m.

309   CC-3A
● Modern Statistics at Land Grant Institutions: Memorial Session for Holly Fryer—Invited

Memorial, Section on Statistical Education

Organizer(s): Thomas M. Loughin, Kansas State University

Chair(s): Thomas M. Loughin, Kansas State University

2:05 p.m.   **The Life and Times of Holly Fryer**—❖John E. Boyer, Kansas State University

2:30 p.m.   **Recent Developments on Multiplicative Interaction Models**—❖Dallas E. Johnson, Kansas State University

2:55 p.m.   **Estimating Genetic Relatedness**—❖Bruce S. Weir, University of Washington

3:20 p.m.   **Signals and Noises: Statistical Models Based on Fundamental Tenets of the Environmental and Ecological Sciences**—❖Mark S. Kaiser, Iowa State University

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

310   CC-602
✪ Recent Advances in Resampling Methods for Complex Data Structures—Invited

Section on Nonparametric Statistics

Organizer(s): Soumendra N. Lahiri, Iowa State University

Chair(s): Shuxia Sun, Wright State University

2:05 p.m.   **A Nonparametric Plug-in Rule for Smoothing Parameter Selection**—❖Soumendra N. Lahiri, Iowa State University

2:30 p.m.   **A Blockwise Empirical Likelihood for Spatial Data**—❖Daniel J. Nordman, Iowa State University

2:55 p.m.   **The Limit of Finite Sample Size and a Problem with Subsampling**—❖Donald W. K. Andrews, Yale University

3:20 p.m.   **Unit Root Testing via the Tapered Block Bootstrap**—❖Cameron Parker, University of San Diego; Dimitris Politis, University of California, San Diego

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

311   CC-606
● ✪ Computational Challenges of Massive Datasets and Sources—Invited

Section on Statistical Computing, Section on Statisticians in Defense and National Security, Section on Statistical Graphics

Organizer(s): Karen Kafadar, University of Colorado

Chair(s): Karen Kafadar, University of Colorado

2:05 p.m.   **Statistical and Computational Issues Associated with Massive Public Health Databases for Detecting Adverse Events**—❖Kathe E. Bjork, Colorado Department of Public Health and Environment

2:35 p.m.   **Dimension Reduction of Large Datasets in the Atmospheric Sciences**—❖Barbara A. Bailey, University of Colorado

3:05 p.m.   **Automated Metadata**—Edward Wegman, George Mason University; ❖Faleh Alshameri, George Mason University

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

GENERAL **PROGRAM** SCHEDULE

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

Tuesday

312   CC-4C-4
● ✪ Statistical Models in Evolutionary Biology—Invited
IMS, Biometrics Section, WNAR
Organizer(s): Christopher Genovese, Carnegie Mellon University
Chair(s): Cecile Ane, University of Wisconsin-Madison

2:05 p.m.   **Introductory Discussion**—❖Christopher Genovese, Carnegie Mellon University

2:25 p.m.   **Mathematical Models of Speciation**—❖Sergey Gavrilets, University of Tennessee

3:05 p.m.   **Fitness Value of Information**—❖Carl Bergstrom, University of Washington; Michael Lachmann, Max Planck Institute for Mathematics in the Sciences

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

313   CC-611
Biometrics Editor Invited Session—Invited
ENAR, WNAR
Organizer(s): Xihong Lin, Harvard School of Public Health; Mike Kenward, University of London
Chair(s): Naisyin Wang, Texas A&M University

2:05 p.m.   **Are Flexible Designs Sound?**—❖Carl-Fredrik Burman, AstraZeneca Pharmaceuticals; ❖Christian Sonesson, AstraZeneca Pharmaceuticals

2:45 p.m.   Disc: Christopher Jennison, University of Bath

2:55 p.m.   Disc: Michael Proschan, Biostatistics Research Branch, NIAID

3:05 p.m.   Disc: Peter Bauer, University of Vienna

3:15 p.m.   Disc: Marianne Frisén, Göteborg University

3:25 p.m.   Rejoiner(s): Carl-Fredrik Burman, AstraZeneca Pharmaceuticals; Christian Sonesson, AstraZeneca Pharmaceuticals

3:40 p.m.   **Floor Discussion**

314   CC-607
● Challenges for Early Detection of Cancer Using Genomic or Proteomic Profiles—Invited
General Methodology, Biometrics Section, WNAR, ENAR
Organizer(s): Larry G. Kessler, U.S. Food and Drug Administration
Chair(s): Larry G. Kessler, U.S. Food and Drug Administration

2:05 p.m.   **Analytic Opportunities: Moving New Diagnostics to the Clinic**—❖Robert Lipshutz, Affymetrix

2:35 p.m.   **Platforms for the Early Detection of Cancer**—❖Andrew Quong, Thomas Jefferson University

3:05 p.m.   **Comparing Adaptive and Nonadaptive Algorithms for Cancer Early Detection with Novel Biomarker**—❖Martin W. McIntosh, Fred Hutchinson Cancer Research Center

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

315   CC-3B
● ✪ Statistical Careers in Government Agencies—Invited
Section on Government Statistics, Section on Statistical Education
Organizer(s): John L. Eltinge, Bureau of Labor Statistics
Chair(s): Carol C. House, National Agricultural Statistics Service

2:05 p.m.   **Growing Challenges Facing Federal Statisticians and Agencies**—❖William G. Barron, Princeton University

2:30 p.m.   **Recruitment, Training, and Retention of Government Statisticians**—❖Clyde Tucker, Bureau of Labor Statistics

2:55 p.m.   **Meeting the Challenges of Science at the Frontiers: Statistics in a Government Science Agency**—❖Nell Sedransk, National Institute of Statistical Sciences

3:20 p.m.   Disc: John L. Eltinge, Bureau of Labor Statistics

3:40 p.m.   **Floor Discussion**

316   CC-203
● Multilevel Modeling of Complex Survey Data—Invited
Section on Survey Research Methods, Section on Health Policy Statistics
Organizer(s): Milorad Kovacevic, Statistics Canada
Chair(s): David Binder, Statistical Society of Canada

2:05 p.m.   **Multilevel Modeling with Multistage Survey Samples**—❖Tihomir Asparouhov, Muthén & Muthén; Bengt Muthen, University of California, Los Angeles

2:30 p.m.   **Adjusting for Unequal Selection Probability in Multilevel Models: a Comparison of Software Packages**—❖Kim Chantala, The University of North Carolina at Chapel Hill; C. M. Suchindran, The University of North Carolina at Chapel Hill

2:55 p.m.   **Bootstrapping for Variance Estimation in Multilevel Models Fitted to Survey Data**—❖Milorad Kovacevic, Statistics Canada; Rong Huang, Statistics Canada; Yong You, Statistics Canada

GENERAL PROGRAM SCHEDULE

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

3:20 p.m. Disc: Michael Sverchkov, Bureau of Labor Statistics/BAE Systems IT

3:40 p.m. **Floor Discussion**

317 CC-610
● ✿ The Use of Quality Control Charts in Biosurveillance and Prospective Public Health Surveillance—Invited

Section on Statistics in Epidemiology, ENAR

Organizer(s): William H. Woodall, Virginia Polytechnic Institute and State University; J. Michael Hardin, The University of Alabama

Chair(s): Landon Sego, Virginia Polytechnic Institute and State University

2:05 p.m. **The Use of Control Charts in Health Care Monitoring and Public Health Surveillance—** ❖ William H. Woodall, Virginia Polytechnic Institute and State University

2:30 p.m. **Cumulative Sum Methods for Spatial Surveillance—** ❖ Peter A. Rogerson, University of Buffalo

2:55 p.m. **Performance of Residual-Based Control Charts Using Generalized Exponential Smoothing of Syndromic Data for Routine Health Surveillance—** ❖ Howard S. Burkom, The Johns Hopkins University Applied Physics Laboratory; Galit Shmueli, University of Maryland; Sean Murphy, The Johns Hopkins University Applied Physics Laboratory

3:20 p.m. **A Neural Network Approach to Control Charts with Applications to Health Surveillance—** ❖ Benjamin M. Adams, The University of Alabama; Kidakan Saithanu, The University of Alabama; J. Michael Hardin, The University of Alabama

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

318 CC-401
● Technometrics Invited Session—Invited

Technometrics, Section on Physical and Engineering Sciences

Organizer(s): Randy R. Sitter, Simon Fraser University

Chair(s): Randy R. Sitter, Simon Fraser University

2:05 p.m. **Simultaneous Variable Selection—** ❖ Berwin A. Turlach, The University of Western Australia; William N. Venables, CSIRO Mathematical and Information Sciences; Stephen J. Wright, University of Wisconsin-Madison

2:55 p.m. **A New Strategy for Variable Selection—** Xiaohui Luo, Merck & Co., Inc.; Leonard A. Stefanski, North Carolina State University; ❖ Dennis A. Boos, North Carolina State University

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

319 CC-617
● ✿ Statistical Challenges in Natural Resource Management—Invited

Section on Statistics and the Environment

Organizer(s): Estelle Russek-Cohen, U.S. Food and Drug Administration

Chair(s): Gretchen Moisen, U.S. Forest Service

2:05 p.m. **Bayesian Analysis of Animal Community Structure—** ❖ Jeffrey A. Royle, U.S. Geological Survey/Patuxent Wildlife Research Center

2:30 p.m. **A Vision for Forest Inventory—** ❖ Ronald E. McRoberts, U.S. Department of Agriculture

2:55 p.m. **Challenges in Modeling Associations between Streams and Their Watersheds—** ❖ John Van Sickle, U.S. Environmental Protection Agency

3:20 p.m. **What Is a Realistic Fisheries Stock Assessment Model?—** ❖ Terrance Quinn, University of Alaska

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

Topic-Contributed Sessions
2:00 p.m.–3:50 p.m.

320 CC-613
● Beyond Your Parents' Models: Latent Variables as You May Not Yet Have Thought of Them—Topic-Contributed

Biometrics Section, ENAR

Organizer(s): Karen Bandeen-Roche, The Johns Hopkins Bloomberg School of Public Health

Chair(s): Bradley P. Carlin, University of Minnesota

2:05 p.m. **Latent Variable Mixture Modeling with Genetic Applications—** ❖ Bengt Muthen, University of California, Los Angeles

2:25 p.m. **Latent Variable Modeling—** ❖ Katherine Masyn, University of California, Davis; Tihomir Asparouhov, Muthén & Muthén; Bengt Muthen, University of California, Los Angeles

2:45 p.m. **Semiparametric Bayesian Structural Equation Models—** ❖ David B. Dunson, National Institute of Environmental Health Sciences

3:05 p.m. **Penalized Latent Class Regression: Incorporating Scientific Knowledge into Measurement Models—** ❖ Jeannie-Marie Sheppard, The Johns Hopkins Bloomberg School of Public Health; Karen Bandeen-Roche, The Johns Hopkins Bloomberg School of Public Health; Peter Zandi,

The Johns Hopkins Bloomberg School of Public Health; William Eaton, The Johns Hopkins Bloomberg School of Public Health

3:25 p.m. **Principal Stratification Designs To Estimate Outcomes Missing Due to Death**—❖Constantine Frangakis, The Johns Hopkins Bloomberg School of Public Health; Donald Rubin, Harvard University; Ming-Wen An, The Johns Hopkins University

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

321   CC-201

● ✪ **Innovative Uses of the Survey of Income and Program Participation for Social Program Evaluation—Topic-Contributed**

Social Statistics Section

Organizer(s): Carole L. Popoff, U.S. Census Bureau

Chair(s): John Czajka, Mathematica Policy Research, Inc.

2:05 p.m. **Assessing the Effect of Allocated Data on the Estimated Value of Total Household Income in the Survey of Income and Program Participation (SIPP)**—❖Patricia Fisher, U.S. Census Bureau

2:25 p.m. **Welfare Reform Revisited: Leavers and Cyclers—How Are They Doing under the New Restrictive Time Limits?**—❖Carole L. Popoff, U.S. Census Bureau; Qi Wang, U.S. Census Bureau

2:45 p.m. **Assessing Estimates of Program Participation: an Analysis of Matched SIPP and Administrative Data**—❖Scott Cody, Mathematica Policy Research, Inc.; Julie Sykes, Mathematica Policy Research, Inc.

3:05 p.m. **Accounting for SIPP Design Effects: Testing Four Approaches with the 2004 Panel**—❖Arthur F. Jones, U.S. Census Bureau; Robert Nielsen, U.S. Census Bureau; Michael Davern, University of Minnesota; John Boies, U.S. Census Bureau

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

322   CC-608

POC/Adaptive Design—Topic-Contributed

Biopharmaceutical Section

Organizer(s): James Bolognese, Merck Research Laboratories

Chair(s): James Bolognese, Merck Research Laboratories

2:05 p.m. **Impact of Pharmacometrics Reviews on Drug Approval and Labeling Decisions**—❖Joga Gobburu, U.S. Food and Drug Administration

2:25 p.m. **Adaptive by Design in Exploratory Development**—❖Brenda Gaydos, Eli Lilly and Company

2:45 p.m. **Comparison of Bayesian and Frequentist Adaptive Designs for Combination Proof-of-Concept/Dose Response Modeling Trials in Phase II**—❖Nitin Patel, Cytel Inc.; James Bolognese, Merck Research Laboratories; Jerald Schindler, Cytel Inc.; Scott Berry, Berry Consultants; Yannis Jemiai, Cytel Inc.; Vipul Suru, Cytel Inc.

3:05 p.m. **Bayesian Modeling of Safety Data Using Databases of Placebo Patients**—❖Jose Pinheiro, Novartis Pharmaceuticals Corporation; Chyi-Hung Hsu, Novartis Pharmaceuticals Corporation

3:25 p.m. Disc: Sue-Jane Wang, U.S. Food and Drug Administration

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

GENERAL PROGRAM SCHEDULE

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

323   CC-205

● Quality Initiatives in Establishment Surveys—Topic-Contributed

Section on Survey Research Methods

Organizer(s): Shawna Waugh, Energy Information Administration
Chair(s): Nicolas Hengartner, Los Alamos National Laboratory

2:05 p.m.   **A Methodology for Evaluating Sufficiency of Survey Frames—**❖Howard Bradsher-Fredrick, Energy Information Administration

2:25 p.m.   **An Evaluation of the 2002 MECS Measure of Size—**❖William Gifford, Energy Information Administration

2:45 p.m.   **Quality Issues in a Regulatory Data Collection System—**❖Alan K. Jeeves, Bureau of Transportation Statistics

3:05 p.m.   Disc: Eugene Burns, Bureau of Transportation Statistics

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

324   CC-214

✪ Statistical Methods on Networks and Graphs—Topic-Contributed

Section on Statisticians in Defense and National Security, Section on Statistical Graphics

Organizer(s): Patricia H. Carter, Naval Surface Warfare Center
Chair(s): David Marchette, Naval Surface Warfare Center

2:05 p.m.   **Graphs for Streaming Text—**❖Elizabeth Hohman, Naval Surface Warfare Center

2:25 p.m.   **Graph Theoretic Methods for the Identification of Article Associations—**❖Jeffrey L. Solka, Naval Surface Warfare Center; Avory Bryant, Naval Surface Warfare Center; Nicholas Tucey, Naval Surface Warfare Center

2:45 p.m.   **Anomaly Detection in Genetic Networks—**❖Christopher Overall, George Mason University; Jeffrey L. Solka, Naval Surface Warfare Center; J. W. Weller, George Mason University; Carey Priebe, The Johns Hopkins University

3:05 p.m.   **Network Traffic Profiling—**❖Patricia H. Carter, Naval Surface Warfare Center

3:25 p.m.   Disc: John Rigsby, Naval Surface Warfare Center

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

325   CC-2B

✪ Spatial and Spatio-Temporal Bayesian Inference—Topic-Contributed

Section on Bayesian Statistical Science

Organizer(s): Michele Guindani, M. D. Anderson Cancer Center
Chair(s): Christopher Carter, University of New South Wales

2:05 p.m.   **Multivariate Spatial Modeling in Bayesian Hierarchical Settings—**❖Sudipto Banerjee, University of Minnesota

2:25 p.m.   **Flexible Spatial Modeling for Multivariate Geological Data Using Convolved Covariance Functions—**❖Anandamayee Majumdar, Arizona State University; Alan E. Gelfand, Duke University

2:45 p.m.   **Gaussian Process Models for a Sphere with Application to Faraday Rotation Measures—**❖Margaret Short, Los Alamos National Laboratory; Dave Higdon, Los Alamos National Laboratory; Philipp Kronberg, Los Alamos National Laboratory

3:05 p.m.   **A Comprehensive Spatial-Temporal Analysis of Breast Cancer: First Primary, Second Primary, and Breast Cancer Survival—**❖Song Zhang, M. D. Anderson Cancer Center

3:25 p.m.   **Bayesian Nonparametric Mixture Modeling for Spatial Processes—**❖Michele Guindani, M. D. Anderson Cancer Center; Alan E. Gelfand, Duke University; Sonia Petrone, Università Commerciale Luigi Bocconi

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

326   CC-604

Least Angle Regression—Topic-Contributed

Section on Statistical Computing

Organizer(s): Tim C. Hesterberg, Insightful Corporation
Chair(s): Trevor Hastie, Stanford University

2:05 p.m.   **New Methods and Software for Variable Selection in Regression—**❖Chris Fraley, Insightful Corporation; Tim C. Hesterberg, Insightful Corporation

2:25 p.m.   **Penalized Cox Regression Analysis in the High-Dimensional and Low Sample Size Settings with Application to Microarray Gene Expression Data—**❖Jiang Gui, University of Pennsylvania; Hongzhe Li, University of Pennsylvania

2:45 p.m.   **Grouped and Hierarchical Model Selection through Composite Absolute Penalties (CAPs)—**❖Guilherme Rocha, University of California,

GENERAL PROGRAM SCHEDULE

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

Tuesday

Berkeley; Peng Zhao, University of California, Berkeley; Bin Yu, University of California, Berkeley

3:05 p.m. **Determination of Regularization Parameter Using L-Curve by LARS-LASSO Algorithm—**❖Leming Qu, Boise State University; Partha Routh, Boise State University

3:25 p.m. Disc: Greg Ridgeway, RAND Corporation

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

327   CC-211
Proper Compensation for Statistical Consulting Services Provided in a University Setting— Topic-Contributed
Section on Statistical Consulting, Section on Statistical Education
Organizer(s): H. Dean Johnson, Washington State University
Chair(s): H. Dean Johnson, Washington State University

2:05 p.m. **Successes (and Challenges) in Funding Campus Consulting Facilities—**❖Murray Clayton, University of Wisconsin-Madison

2:25 p.m. **An Overview of The Ohio State University Statistical Consulting Service—**❖Christopher Holloman, The Ohio State University

2:45 p.m. **Multiple Solutions to Funding Statistical Consulting within a University—**❖Linda Young, University of Florida

3:05 p.m. **Compensation Is More Than Money: Life as an Internal Statistical Consultant in a Medical School—**❖Sarah Boslaugh, Washington University in St. Louis

3:25 p.m. Disc: Barbara Mann, Wright State University

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

Regular Contributed Sessions
2:00 p.m.–3:50 p.m.

328   CC-612
● ✿ Approaches for Handling Missing Data and Measurement Issues—Contributed
Section on Statistics in Epidemiology, Biometrics Section
Chair(s): Betsy Gunnels, Centers for Disease Control and Prevention

2:05 p.m. **Missingness Screens and Regression Modeling in Clinical Aging Research—**❖Peter H. Van Ness, Yale University

2:20 p.m. **Deletion Approach To Handling Missing Data in Longitudinal Data—**❖Cuiling Wang, Albert Einstein College of Medicine; Myunghee C. Paik, Columbia University

2:35 p.m. **Impact of Missing Data on Building Prognostic Models and Summarizing Models across Studies—**❖Mahtab Munshi, Takeda Global Research and Development Center; Daniel McGee, Sr., Florida State University

2:50 p.m. **Using Multiple Imputation To Improve Race-Specific Disease Rate Reporting in a National Active Surveillance System—**❖Elizabeth R. Zell, Centers for Disease Control and Prevention

3:05 p.m. **Efficacy Studies of Malaria Treatments in Africa: Efficient Estimation with Missing Indicators of Failure—**❖Rhoderick Machekano, University of California, Berkeley; Alan Hubbard, University of California, Berkeley

3:20 p.m. **Application of Errors-in-Variables to Model Variation between Studies in Regression Equations for GFR—**❖Tom Greene, The Cleveland Clinic; Liang Li, The Cleveland Clinic

3:35 p.m. **Dose-Response Errors and Detection of Biological Thresholds—**❖Michael E. Ginevan, Exponent, Inc.; Deborah K. Watkins, Exponent, Inc.

329   CC-204
● Mode Considerations—Contributed
Section on Survey Research Methods
Chair(s): Sarah M. Nusser, Iowa State University

2:05 p.m. **Color, Labels, and Interpretive Heuristics for Response Scales—**❖Roger Tourangeau, University of Maryland; Mick Couper, University of Michigan; Frederick G. Conrad, Institute for Social Research

2:20 p.m. **Efficient Multimode Data Collection—**❖David Dolson, Statistics Canada

2:35 p.m. **Improved Evaluation of the Quantitative Survey Response Variance—**❖Patrick Flanagan, U.S. Census Bureau

2:50 p.m. **Comparing Performance and Self-Reported Data on Ease of Use of Surveys—**❖Christine Rho, Bureau of Labor Statistics

3:05 p.m. **Estimation of Measurement Error and Identification of Causes in the Absence of Validation Data—**❖Andy Peytchev, University of Michigan

GENERAL PROGRAM SCHEDULE

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

3:20 p.m. **An Alternative Estimator for Multi-Frame Sample Designs**—❖Charles D. Palit, University of Wisconsin

3:35 p.m. **Is There a Homogeneity in Value Orientations within European Societies?**—❖Peter P. Mohler, ZUMA

330   CC-2A
● ✿ Bayesian Methods in the Social Sciences—Contributed

Section on Bayesian Statistical Science

Chair(s): Sanjib Basu, Northern Illinois University

2:05 p.m. **Latent Space Models for Irish Voting Data**—❖Isobel Claire Gormley, Trinity College Dublin; Thomas B. Murphy, Trinity College Dublin

2:20 p.m. **A Bayesian Approach to Correct Sample Selection Bias in Hierarchical Linear Models**—❖Jun Lu, American University; Labeed Mokatrin, American University

2:35 p.m. **Exploring Teacher by Student Interactions in Longitudinal Achievement Data**—❖J. R. Lockwood, RAND Corporation; Daniel McCaffrey, RAND Corporation

2:50 p.m. **An Item Response Model for Balancing Personalization and Privacy in Online Browsing**—❖Steven L. Scott, University of Southern California; Ramnath Chellappa, Emory University

3:05 p.m. **Modeling Student Ability in Low-Stakes Settings**—❖Eric Loken, The Pennsylvania State University

3:20 p.m. **A Bayesian Approach to the Calibration of New Test Items**—❖Tiandong Li, Westat; Chinfang Wong, University of Maryland; Ru Lu, University of Maryland

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

331   CC-618
Distribution and Robustness Theory—Contributed

IMS, Section on Nonparametric Statistics

Chair(s): Debashis Mondal, University of Washington

2:05 p.m. **A New Approach to Robust Parameter Estimation against Heavy Contamination**—❖Hironori Fujisawa, The Institute of Statistical Mathematics

2:20 p.m. **Minimax Asymptotic Mean-Squared-Error of L-estimators of Scale Parameter**—❖Daniela Szatmari-Voicu, The University of Texas at El Paso

2:35 p.m. **Order Statistics of Concomitants of Subsets of Order Statistics and Applications**—❖Ke Wang, The Ohio State University; H. N. Nagaraja, The Ohio State University

2:50 p.m. **Power Transformation Toward a Linear Regression Quantile**—❖Yunming Mu, Texas A&M University

3:05 p.m. **Some Moment Relationships for Skew-Symmetric Distributions**—❖Dale Umbach, Ball State University

3:20 p.m. **On the Decomposition of the Skew-Symmetric Family of Probability Distributions**—❖Jose A. Sanqui, Appalachian State University; Arjun K. Gupta, Bowling Green State University; Truc T. Nguyen, Bowling Green State University

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

332   CC-210
Estimation for Government Data Collection—Contributed

Section on Government Statistics

Chair(s): Frank Potter, Mathematica Policy Research, Inc.

2:05 p.m. **New Models for Estimating Health Insurance Coverage for Small Areas**—❖Donald M. Bauder, U.S. Census Bureau

2:20 p.m. **Small-Area Estimation of Health Insurance Coverage at the Sub-State Level: a Hierarchical Bayes Model**—❖Steven Riesz, U.S. Census Bureau; Robin Fisher, U.S. Census Bureau

2:35 p.m. **Estimation of Standardized State-Level Food Stamp Participation Rates**—❖Elizabeth Stuart, Mathematica Policy Research, Inc.; Allen Schirm, Mathematica Policy Research, Inc.; Alan M. Zaslavsky, Harvard Medical School; Laura Castner, Mathematica Policy Research, Inc.; Scott Cody, Mathematica Policy Research, Inc.

2:50 p.m. **Estimating School District Poverty with Free and Reduced Priced Lunch Data**—❖Craig Cruse, U.S. Census Bureau; David S. Powers, U.S. Census Bureau

3:05 p.m. **An Analysis of Gender Differences in Vehicle Miles Traveled Using Nonparametric Methods**—❖Brian Sloboda, Bureau of Transportation

GENERAL **PROGRAM** SCHEDULE

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

Statistics; Wenxiong V. Yao, University of Arkansas at Little Rock

3:20 p.m. **Improved Preliminary Estimation of Total Employment Change for the U.S. Current Employment Statistics Survey—**❖Bogong Li, Bureau of Labor Statistics; Partha Lahiri, University of Maryland

3:35 p.m. **Analysis of Recall Effect on the Reporting of Expenditures for the Consumer Expenditure Interview Survey—**❖Barry Steinberg, Bureau of Labor Statistics; Boriana Chopova, Bureau of Labor Statistics; Lucilla Tan, Bureau of Labor Statistics; Jared Ogden, Bureau of Labor Statistics; Pierre Bahizi, Bureau of Labor Statistics; Geoffrey Paulin, Bureau of Labor Statistics

333 CC-206
● New Approaches to Modeling Costs and Other Health Outcomes—Contributed
Section on Health Policy Statistics, Biometrics Section
Chair(s): Mark Glickman, Boston University

2:05 p.m. **Performance of Statistical Models To Predict Mental Health and Substance Abuse Cost—**❖Maria Montez, Boston University; Cindy Christiansen, Boston University; Susan L. Ettner, University of California, Los Angeles; Susan Loveland, Boston University; Amy K. Rosen, Boston University

2:20 p.m. **Use of Risk-Adjustment Models To Predict Future High Medical Cost Cases: Is the Model Performance Sensitive to the Time Intervals in Claims Data?—**❖Ya-Chen Tina Shih, M. D. Anderson Cancer Center; Lirong Zhao, M. D. Anderson Cancer Center; Ying Xu, M. D. Anderson Cancer Center

2:35 p.m. **Two-Stage Samples and the Minimum Sum Method for Medicare Fraud Investigations—**❖Iliana Ignatova, University of South Carolina

2:50 p.m. **Experiences with a Virtual Regionalization Model for Cardiac Surgery—**❖Edward Wegman, George Mason University; Yasmin H. Said, The Johns Hopkins University; Shabib A. Alhadheri, SUNY Upstate Medical University

3:05 p.m. **The LASSO-Patternsearch Algorithm and Its Application to Data from the Beaver Dam Eye Study—**❖Weiliang Shi, University of Wisconsin-Madison; Grace Wahba, University

of Wisconsin-Madison; Kristine Lee, University of Wisconsin-Madison; Ronald Klein, University of Wisconsin-Madison; Barbara E. K. Klein, University of Wisconsin-Madison

3:20 p.m. **On the Equivalence of Medical Cost Estimators with Censored Data—**Heejung Bang, Cornell University; ❖Hongwei Zhao, University of Rochester; Phillip E. Pfeifer, University of Virginia; Hongkun Wang, University of Virginia

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

334 CC-620
✪ Degradation Models and Other Topics in Reliability—Contributed
Section on Physical and Engineering Sciences
Chair(s): Jave Pascual, Washington State University

2:05 p.m. **A Statistical Method for Crack Detection in Thermal Acoustics Nondestructive Evaluation Data—**❖Chunwang Gao, Iowa State University; William Q. Meeker, Jr., Iowa State University

2:20 p.m. **Estimation of Flaw Size Distribution Parameters under Correlated Random Censoring—**❖Peter Hovey, University of Dayton; Alan Berens, Retired

2:35 p.m. **Modeling Unit Degradation from Exceedance Time Data—**❖Hui Fan, Rensselaer Polytechnic Institute; Brock Osborn, GE Global Research; Thomas R. Willemain, Rensselaer Polytechnic Institute; Pasquale Sullo, Rensselaer Polytechnic Institute

2:50 p.m. **A Discrete Degradation Model for Ultra-Thin Gate Oxide Data—**❖Shuen-Lin Jeng, Tunghai University; Min-Hsiung Hsien, Tunghai University

3:05 p.m. **Bayesian Degradation Modeling with Covariate-Dependent Box-Cox Transformation of the Response Variable—**❖Fridtjof Thomas, VTI; Arzu Onar, St. Jude Children's Research Hospital; Bouzid Choubane, Florida Department of Transportation; Tom Byron, Florida Department of Transportation

3:20 p.m. **Recurrent Events: Modeling and Inference—**❖Edsel A. Peña, University of South Carolina

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

GENERAL PROGRAM SCHEDULE

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

335   CC-601

● Classification Methods and Functional Data Analysis—Contributed

Section on Nonparametric Statistics

Chair(s): Martina Pavlicova, Columbia University

2:05 p.m.   **Scrambling Method for Cluster Analysis Using Supervised Learning**—❖Oksana Shcherbak, Union Bank of California

2:20 p.m.   **Finding an Approximate Solution Path of Support Vector Machines for Large Datasets**—❖Zhenhuan Cui, The Ohio State University; Yoonkyung Lee, The Ohio State University

2:35 p.m.   **Bandwidth Selection for RBF Kernel in Kernel-Based Classification**—❖Jeongyoun Ahn, The University of North Carolina at Chapel Hill

2:50 p.m.   **Multivariate Functional ANOVA for Kriging Model in Computer Experiments**—❖Zhe Zhang, The Pennsylvania State University

3:05 p.m.   **Bootstrap Investigation of the Median Curve of a Functional Dataset**—❖David B. Hitchcock, University of South Carolina

3:20 p.m.   **Analysis of Panic-Relevant Experimental Tidal Volume Curves: Wavelet-Based Functional Hypothesis Testing**—❖Sang Han Lee, Texas A&M University; Marina Vannucci, Texas A&M University; Eva Petkova, Columbia University; Maurice Preter, Columbia University; Donald Klein, Columbia University

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

336   CC-605

Categorical Data and Experimental Design—Contributed

Section on Statistical Computing, Section on Quality and Productivity

Chair(s): Zenaida F. Mateo, University of Manitoba

2:05 p.m.   **A Simple Method for Generating Multivariate Categorical Variates**—❖Hyunjip Choi, Kyonggi University

2:20 p.m.   **Testing Multinomial Categories with Sequential Sampling: Is a Wheel of Fortune Fair?**—❖Hokwon Cho, University of Nevada, Las Vegas; Hai Zhen, University of Nevada, Las Vegas

2:35 p.m.   **A Comparison of Approximations for Logistic Regression**—❖Charity J. Morgan, Harvard University; Donald Rubin, Harvard University

2:50 p.m.   **Construction Methods for Balanced Incomplete Block Designs**—❖Jeffrey Shaffer, Tulane University; Sudesh Srivastav, Tulane University

3:05 p.m.   **Asymptotic Properties of Effective Experimenting Strategies**—❖Anatoly Naumov, Novosibirsk State Technical University

3:20 p.m.   **Misspecification Tests for Binomial and Beta-Binomial Models**—❖Marinela Capanu, Memorial Sloan-Kettering Cancer Center; Brett Presnell, University of Florida

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

337   CC-212

● Teaching Statistics to Specific Audiences—Contributed

Section on Statistical Education, Section on Statistical Graphics

Chair(s): Marvin Gruber, Rochester Institute of Technology

2:05 p.m.   **Teaching Effective Graph and Table Construction Needs More Attention in Statistical Education**—❖Thomas E. Bradstreet, Merck Research Laboratories; Michael Nessly, Merck Research Laboratories; Thomas H. Short, Indiana University of Pennsylvania

2:20 p.m.   **What Do M&Ms, Dahlias, Soil Erosion, and Data Analysis across the Curriculum Have in Common?**—❖Jerry Moreno, John Carroll University

2:35 p.m.   **Instructional Tools in Educational Measurement and Statistics (ITEMS) for School Personnel: Evaluation of Two Web-Based Training Modules**—❖Rebecca Zwick, University of California, Santa Barbara; Jeffrey C. Sklar, California Polytechnic State University, San Luis Obispo; Graham Wakefield, University of California, Santa Barbara

2:50 p.m.   **Interactive Animation for Learning IRT and Misfit Identification in Item Response Theory**—❖Chong Ho Yu, Arizona State University; Roger Freeman, Paradise Valley Unified School District; Angel Jannasch-Pennell, Arizona State University; Samuel DiGangi, Arizona State University; Chang Kim, Arizona State University; Victoria Stay, Arizona State University; Wenjuo Lo, Arizona State University; Lori Long, Arizona State University

3:05 p.m.   **An Education Model for Secondary Students**—John Aleong, University of Vermont; ❖Chandra Aleong, Delaware State University

Tuesday

3:20 p.m. **A Pilot Survey on Ways Practicing Engineers Learn Statistics—**❖Jorge Romeu, Syracuse University

3:35 p.m. **Presenting Statistics Online to Nontraditional Business Students—**❖William Livingston, Baker College Center for Graduate Studies

338 CC-213
● Innovative Approaches to Introductory Statistics—Contributed

Section on Statistical Education

Chair(s): James Grady, The University of Texas Medical Branch

2:05 p.m. **Statistics: Telling the Whole Story—**❖Nancy Pfenning, University of Pittsburgh

2:20 p.m. **Teaching a Writing-Centered Course in Introductory Statistics—**❖Deborah Lurie, Saint Joseph's University

2:35 p.m. **Assessing the Gains from Concept Mapping in Introductory Statistics—**❖David Doorn, University of Minnesota, Duluth; Maureen O'Brien, University of Minnesota, Duluth

2:50 p.m. **Further Assessment of Materials for Engaging Students in Statistical Discovery—**❖W. Robert Stephenson, Iowa State University; Amy Froelich, Iowa State University; William M. Duckworth, Iowa State University

3:05 p.m. **Sequencing of Topics in an Introductory Course: Does Order Make a Difference?—**❖Christopher Malone, Winona State University; John Gabrosek, Grand Valley State University

3:20 p.m. **A Geometrical Approach to Introductory Statistics—**❖Daniel Kaplan, Macalester College

3:35 p.m. **Toward Statistical Literacy: Statistics in Everyday Life—**❖Hoke Hill, Jr., Clemson University; William Bridges, Jr., Clemson University; Rose Martinez-Dawson, Clemson University

339 CC-603
Regression and Time Series—Contributed

Section on Statistical Computing

Chair(s): Brian Gray, The University of Alabama

2:05 p.m. **Automatic Detection of Outliers Based on the Forward Search—**Matilde Bini, University of Florence; Bruno Bertaccini, University of Florence; ❖Franco Polverini, University of Florence

2:20 p.m. **A Novel Statistical Approach to Identifying and Limiting the Effect of Influential Observations—**❖Tamekia Jones, The University of Alabama at Birmingham; David Redden, The University of Alabama at Birmingham

2:35 p.m. **Robust Winsorized Regression Using Bootstrap Approach—**Deo Kumar Srivastava, St. Jude Children's Research Hospital; ❖Jianmin Pan, St. Jude Children's Research Hospital; Ila Sarkar, Louisiana Health Care Review, Inc.

2:50 p.m. **Bent-Cable Regression with Autoregressive Noise—**❖Grace Chiu, University of Waterloo; Richard Lockhart, Simon Fraser University

3:05 p.m. **Multiresolution Outlier Detection for Long-Range Dependent Time Series—**❖Lingsong Zhang, The University of North Carolina at Chapel Hill; Zhengyuan Zhu, The University of North Carolina at Chapel Hill

3:20 p.m. **Restricted Error Regression—**❖James Cochran, Louisiana Tech University

3:35 p.m. **Local Linear Estimation for Single-Index Conditional Quantiles—**❖Zhou Wu, University of Cincinnati; Yan Yu, University of Cincinnati; Keming Yu, Brunel University

340 CC-614
● Misclassification and Measurement Error: Problems and Solutions—Contributed

Biometrics Section, ENAR

Chair(s): Tom Braun, University of Michigan

2:05 p.m. **Measurement Error Correction Methods Based on Cumulative Average Intake for Nutritional Data—**❖Weiliang Qiu, Harvard Medical School; Bernard Rosner, Harvard Medical School

2:20 p.m. **A Robust Likelihood-Based Approach to Nonlinear Measurement Error Models with Application to Radiation Dose Effects on Leukemia-Specific Hazard Rate among A-Bomb Survivors—**❖Antara Majumdar, University at Buffalo; Randy L. Carter, University at Buffalo

2:35 p.m. **Varying Coefficient Model with Measurement Error—**❖Liang Li, The Cleveland Clinic; Tom Greene, The Cleveland Clinic

2:50 p.m. **Conditional Score Methods for Regression Models with Poisson Surrogates—**❖Alvin Van Orden, North Carolina State University; Leonard A. Stefanski, North Carolina State University

GENERAL PROGRAM SCHEDULE

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

3:05 p.m. **Effects of Misclassification on Exposure-Disease Association with Odds Ratio**—❖Jun-mo Nam, National Cancer Institute

3:20 p.m. **Adjusting for Misclassification in Binary Response Variables**—❖Jun Zhai, Duke University; John Olson, Duke University; Mike West, Duke University

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

341 CC-609
● QT/QTc—Contributed
Biopharmaceutical Section
Chair(s): Yun-Ling Xu, U.S. Food and Drug Administration

2:05 p.m. **Noninferiority Testing in Thorough QT/QTc Studies**—❖Balakrishna Hosmane, Northern Illinois University; Charles Locke, Abbott Laboratories

2:20 p.m. **Bias in Estimates of QTc Prolongation by Timepoint-Wise Treatment Comparison**—❖Yibin Wang, Novartis Pharmaceuticals Corporation; Guohua Pan, Johnson & Johnson Pharmaceutical R&D

2:35 p.m. **Tolerance Regions for Multivariate Random Effects Model with Application to Beat-to-Beat QT-TQ Interval Data**—❖Kimberly Crimin, Pfizer Inc.; Joseph McKean, Western Michigan University

2:50 p.m. **A New Method for Sample Size Calculation of the Thorough QT/QTc Study**—❖Shu Zhang, Sepracor, Inc.

3:05 p.m. **Bayesian Measurement Error Approach to QT Interval Correction/Prolongation**—❖Jie Chen, Merck Research Laboratories; Xin Zhao, Merck & Co., Inc.

3:20 p.m. **Designing and Analyzing Covariate-Adjusted Response Adaptive Randomized Clinical Trials**—❖Ayanbola Ayanlowo, The University of Alabama at Birmingham; David Redden, The University of Alabama at Birmingham

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

342 CC-615
● Methods for Design and Analysis of Microarrays—Contributed
Biometrics Section, ENAR
Chair(s): Wei Zhao, University of California, Los Angeles

2:05 p.m. **Detecting Differential Expressions in GeneChip Microarray Studies: a Quantile Approach**—❖Huixia Wang, University of Illinois at Urbana-Champaign

2:20 p.m. **Gene Selection Using a Modified Mahalanobis Distance**—❖Xiwen Ma, University of Wisconsin-Madison

2:35 p.m. **Analysis of Microarray Data: Two Examples**—❖Meng Du, University of Toronto; Muni Srivastava, University of Toronto

2:50 p.m. **Multidimensional Local False Discovery Rate for Microarray Studies**—❖Yudi Pawitan, Karolinska Institutet; Alex Ploner, Karolinska Institutet

3:05 p.m. **Optimal Cross-Validation for Estimating Small Sample Classification Error Rate**—❖Wenjiang Fu, Michigan State University; Suojin Wang, Texas A&M University

3:20 p.m. **Gene Expression (Microarray) Analysis by Neural Networks**—❖David Booth, Kent State University; David Zhu, Kent State University; Richard Geoke, Kent State University; David Baker, Kent State University; James Hamburg, Kent State University

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

343 CC-616
● Analysis of Correlated Data and Mixed Models—Contributed
Biometrics Section
Chair(s): Jon Schildcrout, Vanderbilt University Medical Center

2:05 p.m. **Regression Analysis of Panel Count Data with Dependent Observation Times**—❖Xin He, University of Missouri-Columbia; Jianguo Sun, University of Missouri-Columbia; Xingwei Tong, University of Missouri-Columbia

2:20 p.m. **Modeling Variability in Longitudinal Data Using Random Changepoint Models**—❖Annica Dominicus, Karolinska Institutet; Samuli Ripatti, Karolinska Institutet; Juni Palmgren, Karolinska Institutet

2:35 p.m. **Semiparametric Modeling with Correlated Data**—❖Chun Han, The University of Kansas

2:50 p.m. **Marginal Mixture Analysis of Correlated Bounded-Response Data with an Application to Ultrasound Risk Assessment**—❖Yan Yang, University of Illinois at Urbana-Champaign; Douglas Simpson, University of Illinois at Urbana-Champaign

3:05 p.m. **On the Analysis of Mouse Preference Data**—❖Yang Yang, University of Western Ontario; Willard J. Braun, University of Western Ontario

GENERAL PROGRAM SCHEDULE

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

3:20 p.m. **Equality of REML and ANOVA Estimators of Variance Components in Unbalanced Models—**❖Shaun Wulff, University of Wyoming

3:35 p.m. **Measuring the Mean Squared Error of the EBLUP in Linear Mixed Models—**❖Jamie McClave Baldwin, Info Tech, Inc.; Ramon Littell, University of Florida

344   CC-619
● ○ Quality Applications and Approaches—Contributed

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

Chair(s): Jennifer Van Mullekom, DuPont Quality Management and Technology

2:05 p.m. **Economic Decisionmaking Challenges in Quality Applications—**❖John Barrett, University of North Alabama

2:20 p.m. **Methods of Data Quality—**❖Thomas Herzog, U.S. Department of Housing and Urban Development; William E. Winkler, U.S. Census Bureau; Fritz J. Scheuren, National Opinion Research Center

2:35 p.m. **Quality Techniques in the Mill Benefit Young Trees in the Field—**❖Bonnie P. Dumas, MeadWestvaco Corporation

2:50 p.m. **Interlaboratory Study of DEA Proficiency Test Using RExcel—**❖Hung-kung Liu, National Institute of Standards and Technology; Adriana Hornikova, National Institute of Standards and Technology

3:05 p.m. **Statistical Data Processing of GC-MS Data—**❖Shiying Wu, RTI International; Jun Liu, Research Triangle Institute; Robert J. Morris, RTI International; James Raymer, RTI International; Ye Hu, RTI International; Larry Michael, RTI International

3:20 p.m. **Dynamic Calibration for Instruments—**❖Charles Hagwood, National Institute of Standards and Technology

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

Regular Contributed Posters
2:00 p.m.–3:50 p.m.

345   CC-Level 6 East Lobby
Contributed Posters—Contributed

Section on Physical and Engineering Sciences, Section on Statistics in Epidemiology, Section on Statistics and the Environment, Biopharmaceutical Section, Business and Economics Statistics Section, Section on Statistical Computing, IMS, Section on Survey Research Methods

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

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

Engineering and physical sciences, chemometrics

01 **A Monte Carlo Method To Simulate the Stochastic Behavior of a Field of Forces—**❖Elizabeth Martinez Gomez, National Autonomous University of Mexico; Hector A. Perez de Tejada Jaime, National Autonomous University of Mexico; Hector J. Durand Manterola, National Autonomous University of Mexico

02 **Examples of Estimating Confidence Intervals for the Arithmetic Means of Lognormally Distributed Data from Mixed or Random Effects Linear Models—**❖Stanley Shulman, National Institute for Occupational Safety and Health

03 **Statistical Design of Computer Experiments for a 3D Chemical Microanalysis Imaging System—**❖Juan Soto, National Institute of Standards and Technology; James J. Filliben, National Institute of Standards and Technology; John H. Scott, National Institute of Standards and Technology

Environmetrics, ecology, agriculture, wildlife management

04 **A Study of the Type I and Type II Error Rates of Tests for Species Diversity Based on Shannon and Simpson's Indexes of Diversity—**❖Lewis VanBrackle, Kennesaw State University; Kristina Corts, Kennesaw State University

05 **Projecting the Risk of Future Climate Shifts—**❖Luis Cid, Universidad de Concepción; David B. Enfield, National Oceanic & Atmospheric Administration

Experimental design

06 **Equivalence of Fractional Factorial Designs—**❖Tena Katsaounis, The Ohio State University; Angela Dean, The Ohio State University

07 **The Oklahoma Oral Health Needs Assessment: Comparison of Sampling Methods Using Monte Carlo Simulations—**❖Emily Leary, The University of Oklahoma Health Sciences Center

GENERAL PROGRAM SCHEDULE

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

08 **Design of Experiments for Parameter Estimation in Compartmental Models—**❖Michael DeVasher, The University of Alabama; J. Michael Hardin, The University of Alabama

QC, operation research, risk assessment

09 **Validation of the K-Statistic for Accelerometer Data Quality—**❖James Slaven, National Institute for Occupational Safety and Health; Michael Andre, National Institute for Occupational Safety and Health; John Violanti, SUNY University at Buffalo; Cecil Burchfiel, National Institute for Occupational Safety and Health; Bryan Vila, Washington State University

10 **The Relationship between the T-Square Statistics of a Phase I and Phase II Operation—**❖John Young, McNeese State University; Robert L. Mason, Southwest Research Institute; Youn-Min Chou, The University of Texas at San Antonio

11 **Number of Replications Required in Control Chart Monte Carlo Simulation Studies—**❖Jay Schaffer, University of Northern Colorado; Myoung-Jin Kim, University of Northern Colorado

12 **Is Average Run Length a Good Measure of Performance?—**Jay Schaffer, University of Northern Colorado; ❖Chad Eshelman, University of Northern Colorado

Spatial statistics, time series, spatio-temporal modeling

13 **A MATLAB Software Implementation for Time-Series Analysis by State-Space Methods—**❖Jyh-Ying Peng, Academia Sinica; John Aston, Academia Sinica

14 **An Interpolated Periodogram-Based Metric for Comparison of Time Series with Unequal Lengths—**❖Jorge Caiado, CEMAPRE/ISEG and IPS; Nuno Crato, CEMAPRE/Technical University of Lisbon; Daniel Peña, Universidad Carlos III de Madrid

15 **Recent Developments in Seasonal Adjustment Software at the U.S. Census Bureau—**❖Brian C. Monsell, U.S. Census Bureau

16 **Elevators as an Excitation Source for Structural Health Monitoring in Buildings—**❖Jong-ho Baek, University of California, Los Angeles

17 **Predicting Integrals of Transformed Gaussian Random Fields—**❖Zhengyuan Zhu, The University of North Carolina at Chapel Hill; Alf Harbitz, Institute of Marine Research, Observation Methodology

18 **Analysis of Mixed Frequency Data: a Bayesian Model Averaging Approach—**❖Gavino Puggioni, Duke University; Abel Rodriguez, Duke University

19 **Data Augmentation within a Conditionally Specified Gaussian Spatial Model—**❖Brooke Fridley, Mayo Clinic College of Medicine; Philip Dixon, Iowa State University

20 **Spatio-Temporal Precipitation Modeling Based on a Hidden Random Field—**❖Oleg Makhnin, New Mexico Tech

21 **Real-Time Multivariate Analysis Onboard a Wi-Fi–Controlled Vehicle—**❖Jason Minter, Sam Houston State University; Cecil Hallum, Sam Houston State University

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Invited Sessions 4:00 p.m.–5:50 p.m.

346   **CC-Ballroom 6ABC**
Deming Lecture—Invited
Deming Lectureship Committee, The ASA, ENAR, WNAR, IMS, SSC, Section on Statistical Consulting
Organizer(s): Lorraine Denby, Avaya Labs Research
Chair(s): Lorraine Denby, Avaya Labs Research

4:05 p.m.   **Making Another World: a Holistic Approach to Performance Improvement—**❖Ronald D. Snee, Tunnell Consulting

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

Invited Sessions 8:00 p.m.–9:30 p.m.

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ASA Presidential Address and Awards—Invited
The ASA
Organizer(s): Sallie Keller-McNulty, Rice University
Chair(s): Fritz J. Scheuren, National Opinion Research Center

8:00 p.m.   **Presentation of Awards—**❖Fritz J. Scheuren, National Opinion Research Center

8:30 p.m.   **From Data to Policy: Scientific Excellence Is Our Future—**❖Sallie Keller-McNulty, Rice University

9:00 p.m.   **Presentation of Founders Awards and New ASA Fellows—**❖Fritz J. Scheuren, National Opinion Research Center