



# WSS NEWS

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## September 2009

WASHINGTON  
STATISTICAL  
SOCIETY

## Congratulations!

The following were elected to the WSS board of directors:

President-elect  
Michael Brick

Methodology Program Chair  
David Judkins

Representative at Large  
Christine Cox  
Robert Santos

Secretary  
Darryl Creel

We congratulate the winners and express our thanks to the other candidates.

## Federal Committee on Statistical Methodology 2009 Research Conference November 2-4, 2009

The 2009 Federal Committee on Statistical Methodology (FCSM) Research Conference will be held November 2-4, 2009 at the Washington Conventions Center, 801 Mount Vernon Place NW, Washington, DC. The Conference provides a forum for experts from around the world to discuss and exchange current research and methodological topics relevant to Federal government statistical programs. Each day of the conference will offer papers on a wide range of topics including the use of advanced technologies for survey design and data collection, processing and dissemination, data mining, data warehousing and metadata, treatment of missing data, improving coverage and response rates, confidentiality and disclosure issues, record linkage, sample design and estimation, cognitive research and usability testing, and data quality.

Technical demonstrations will run concurrently on the second day of the conference during the first morning session. Applications will include demonstrations on Q-Notes, Demonstration of Field Interviewer (FI) Tracker Tool, Statipedia, and a Demonstration of Census Coverage Measurement Clerical Matching Software. Sessions feature papers and demonstrations by government, private sector, and academic researchers from eight countries. Katharine Abraham from the Joint Program in Survey Methodology at the University of Maryland will be our guest speaker in the opening plenary session. All paper sessions will include an open discussion and some sessions will include a formal discussion.

Conference Fee: Registration is \$195. For a copy of the advance program and registration information please refer to <http://www.fcsm.gov/events/>.

## **The 17th Federal Forecasters Conference (FFC/2009)**

Thursday, September 24, 2009  
Washington, DC

The conference theme is "Forecasting and Risk." The conference seeks to highlight how forecasters account for low-probability, but high-cost events. Participants will review how forecasters account for the following risks: economic risk, energy supply risk, food supply risk, health care and epidemic risk, transportation disruptions, and natural disasters. The conference will examine the role of federal forecasters in the evolution of public policies that account for these rare events. For more information, visit [www.federalforecasters.org](http://www.federalforecasters.org) or contact Jeff Busse, 12201 Sunrise Valley Drive, MS988, Reston, VA 20192; (703)648-4914; [jbusse@usgs.gov](mailto:jbusse@usgs.gov)

For more info click here: [www.federalforecasters.org](http://www.federalforecasters.org)

## **WSS and Other Seminars**

(All events are open to any interested persons)

### **September**

- 11 Fri. **Improving differential expression analysis with the consideration of genome-wide co-expression information**
- 22 Tues. **Why is Survey Research 20 Years Behind?**
- 25 Fri. **Some Lessons from Our Collaborative Studies in Esophageal Cancer, Prostate Cancer, Hiv, and Breast Cancer**

### **October**

- 8 Tues. **The Sociolinguistics of Survey Translation**
- 13 Tues. **19<sup>th</sup> ANNUAL MORRIS HANSEN LECTURE**  
**The Care, Feeding and Training of Survey Statisticians**
- 20 Tues. **Racial Profiling Analysis**

Also available on the Web at the following URL: <http://www.scs.gmu.edu/~wss/>

### **Note from the WSS NEWS Editor**

Items for publication in the October issue of the WSS NEWS will be accepted until September 15, 2009. E-mail items to Michael Feil at [michael.feil@ams.usda.gov](mailto:michael.feil@ams.usda.gov).

## Program Announcement

- Title:** **Improving differential expression analysis with the consideration of genome-wide co-expression information**
- Speaker:** Yinglei Lai, Ph.D, Assistant Professor of Statistics, Department of Statistics, George Washington University, Washington D.C.
- Chair:** Grant Izmirlian, National Cancer Institute
- Discussant:** TBA
- Date/Time:** Friday, September 11, 2009 / 10:00-11:00 a.m.
- Location:** Georgetown University Medical Center, Lombardi Comprehensive Cancer Center, 3900 Reservoir Rd., NW, New Research Building, E501, Washington, DC 20007
- Sponsor:** Department of Biostatistics, Bioinformatics and Biomathematics, Georgetown University and the Public Health/Biostatistics section of the Washington Statistical Society
- Abstract:** Microarrays have been widely used in biomedical studies. The differential expression analysis of microarray data is still an interesting topic. The control of false positives in differential expression analysis remains a major challenge although many statistical methods have been proposed for its improvement. Since genes interact with each other during cellular and molecular processes, an efficient incorporation of genome-wide co-expression information may significantly improve the detection of differential expression. We will address our recent research progress in this direction.

For information, please contact Caroline Wu at 202-687-4114 or [ctw26@georgetown.edu](mailto:ctw26@georgetown.edu)

## Program Announcement

- Title:** Why is Survey Research 20 Years Behind?
- Speaker:** Robert Fay, Senior Statistician, Westat
- Chair:** Brian Meekins, BLS
- Date/Time:** Tuesday, September 22, 2009 / 12:30 - 2:00 p.m.
- Location:** Bureau of Labor Statistics, Conference Center. To be placed on the seminar attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to [wss\\_seminar@bls.gov](mailto:wss_seminar@bls.gov) (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.
- Sponsor:** Methodology Program, WSS
- Abstract:** The principal goal of this talk is to argue the presupposition of its title. More specifically, the claim is that survey research has fallen approximately 20 years behind developments in relevant basic science. I will limit my scope to a single but broad topic, research on memory. A timeline is offered to establish both parts of the claim, namely (1) a qualitative claim that survey research overlooks important basic findings in memory, and (2) a quantitative claim that the gap is approximately 20 years. The timeline comprises papers and books chosen to illustrate advances in the basic science or implications of memory research for other areas of psychology and behavioral science generally. The talk will offer a few examples of key issues in survey research where the effect of the 20-year gap is evident. I will also suggest a few answers to the why question of the title.

## Program Announcement

- Title:** **Some Lessons from Our Collaborative Studies in Esophageal Cancer, Prostate Cancer, Hiv, and Breast Cancer**
- Speaker:** George Bonney, Ph.D.  
Howard University, Washington D.C.
- Chair:** Grant Izmirlian, National Cancer Institute
- Discussant:** TBA
- Date/Time:** Friday, September 25th, 2009/ 10:00 - 11:00 a.m.
- Location:** Georgetown University Medical Center, Lombardi Comprehensive Cancer Center, 3900 Reservoir Rd., NW, New Research Building, E501, Washington, DC 20007
- Sponsor:** Department of Biostatistics, Bioinformatics and Biomathematics, Georgetown University and the Public Health/Biostatistics section of the Washington Statistical Society
- Abstract:** The work of the Statistical Genetics and Bioinformatics Unit of the National Human Genome Center at Howard University involves the use of high level mathematical and statistical computing skills in biomedicine. Here I briefly discuss questions and results from some of our collaborative studies:

Esophageal cancer in Chinese families: Is alcohol really protective?

Multiple cancers in Texas families. Is the association with the p53 mutation causal?

Prostate Cancer in African American Men: Where are the genes?

HIV Prevalence and Incidence among Blacks in Washington DC: Does it make sense to talk of estimation for the whole city using only the data from Howard University Hospital?

A Molecular Index for Breast Cancer Risk Assessment?

Can we really construct such an index for risk of invasive breast cancer?

For information, please contact Caroline Wu at 202-687-4114 or [ctw26@georgetown.edu](mailto:ctw26@georgetown.edu)

## Program Announcement

- Title:** The Sociolinguistics of Survey Translation
- Speaker:** Yuling Pan, Statistical Research Division, Census Bureau
- Discussant:** Eileen O'Brien, Energy Information Administration
- Chair:** Bill McNary, Energy Information Administration
- Date/Time:** Thursday, October 8, 2009 / 12:30 - 2:00 p.m.
- Location:** Bureau of Labor Statistics Conference Center, Room 10. To be placed on the seminar attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to [wss\\_seminar@bls.gov](mailto:wss_seminar@bls.gov) (underscore after wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Take the Red Line to Union Station.
- Sponsors:** WSS Data Collection Methods and DC-AAPOR
- Abstract:** With the increasing diversity in the United States population, there is a growing need to translate survey questionnaires and survey documents from English into languages other than English. Challenges arise concerning the functional equivalence of the translated materials and the methodology in ensuring the quality of survey translation.

This presentation analyzes the challenges for survey translation from the perspective of sociolinguistics, a scientific discipline that focuses on the social function of language, and studies the relationship between language, culture, and society. The talk will illustrate three key components of successful survey translation: linguistic rules, cultural norms, and social practices. In order to highlight the connection between these three components, findings from two Census Bureau multilingual projects will be presented and discussed. The talk will conclude with recommendations for future research on survey translation.

## Program Announcement

### 19<sup>th</sup> ANNUAL MORRIS HANSEN LECTURE

#### The Care, Feeding and Training of Survey Statisticians

Sharon L. Lohr  
Thompson Industries Dean's  
Distinguished Professor of Statistics  
Arizona State University

**Abstract:** The two volumes of *Sample Survey Methods and Theory* by Hansen, Hurwitz, and Madow (1953) have had great influence on the training and practice of survey statisticians. We examine current themes in survey sampling research and relate them to topics taught in classes on survey sampling. We discuss other aspects of university training and background that may help the survey statistician thrive in and adapt to a variety of environments.

Discussants  
James Lepkowski, University of Michigan  
Donsig Jang, Mathematica  
David Morganstein, Westat

Tuesday, October 13, 2009 at 3:30 p.m. in the Jefferson Auditorium of the U.S. Department of Agriculture's South Building (Independence Avenue, SW, between 12<sup>th</sup> and 14<sup>th</sup> Streets); Smithsonian Metro Stop (Blue/Orange Lines). Enter through Wing 5 or Wing 7 from Independence Ave. (The special assistance entrance is at 12<sup>th</sup> & Independence). A photo ID is required.

Please pre-register for this event to help facilitate access to the building. After August 15, Pre-register on line at <http://www.nass.usda.gov/morrishansen/>.

*Sponsors:* The Washington Statistical Society, Westat, and The National Agricultural Statistics Service.



## Program Announcement

- Title:** **Racial Profiling Analysis**
- Speaker:** Greg Ridgeway, Ph.D.  
Senior Statistician  
Director, Safety & Justice Research Program  
RAND Corporation
- Discussant:** Joel Garner, Ph.D.  
Chief, Law Enforcement Statistics Unit  
Bureau of Justice Statistics
- Organizer:** Dave Judkins, Westat
- Chair:** Brian Meekins, BLS
- Date/Time:** Tuesday, October 20, 2009 / 12:30 - 2:00 p.m.
- Location:** Bureau of Labor Statistics, Conference Center. To be placed on the seminar attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to [wss\\_seminar@bls.gov](mailto:wss_seminar@bls.gov) (underscore after 'wss') by noon at least 2 days in advance of the seminar or call 202-691-7524 and leave a message. Bring a photo ID to the seminar. BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station.
- Sponsor:** Methodology Program, WSS
- Abstract:** Several studies and high profile incidents around the nation involving police and minorities, such as the July arrest of Harvard Professor Henry Louis Gates, have brought the issue of racial profiling to national attention. While civil rights issues continue to arise in other areas such as offers of employment, job promotions, and school admissions, the issue of race disparities in traffic stops seems to have garnered much attention in recent years. Many communities have asked, and at times the U.S. Department of Justice has required, that law enforcement agencies collect and analyze data on all traffic stops. Data collection efforts, however, so far have outpaced the development of methods that can isolate the effect of race bias on officers' decisions to stop, cite, or search motorists.
- In this talk Dr. Ridgeway will describe a test for detecting race bias in the decision to stop a driver that does not require explicit, external estimates of the driver risk set. Second, he'll describe an internal benchmarking methodology for identifying potential problem officers. Lastly, he will describe methods for assessing racial disparities in citation, searches, and stop duration. He will present results from his studies of the Oakland (CA), Cincinnati, and New York City Police Departments.

## Announcement

The Statistics Department at The George Washington University will offer the following Graduate Courses in Fall 2009 (August 31 - December 19, 2009) at the main campus.

Registering as a non-degree student is easy - please visit [www.gwu.edu/~regweb](http://www.gwu.edu/~regweb) for relevant information.

For questions or further information please contact Dr. Reza Modarres, e-mail: [reza@gwu.edu](mailto:reza@gwu.edu), ph: 202-994-6888.

Statistics 201-10. Mathematical Statistics. Thursday, 6:10pm-8:40pm.  
Instructor: Dr. H. Mahmoud.

This is the first part of a two-part graduate level series in Mathematical Statistics. The objective of the course is to introduce students to the concepts of probability that are useful for understanding statistical theory (the course continues on to Stat 202 in Spring, which deals with the theory of statistical inference). Topics to be covered in Stat 201 include basics of probability theory (including conditional probability, Bayes theorem, random variables, density and mass functions), univariate transformations, expected value, moment generating function, common probability distributions (including binomial, normal, uniform), multivariate distributions and transformations, covariance, inequalities and sampling distributions. This is roughly chapters 1 through 5 of the text:

Statistical Inference (2nd Ed.) by Casella, G. and Berger, R. L.; Duxbury Press, CA.

This course is required for MS and Ph.D. students in Statistics, and Biostatistics, and Ph.D. students in Epidemiology. Students from other quantitative fields such as Economics, Finance, Engineering etc. would also find the course very useful and are encouraged to join. Prerequisites: Multivariable Calculus (Math 33), and Linear Algebra (Math 124) or equivalent.

Statistics 214. Applied Linear Models. Tuesday, 6:10pm-8:40pm.  
Instructor: Dr. Z. Li

Data arising from both experimental and observational studies and in a range of applications e.g. biomedical, pharmaceutical, social science, business, reliability etc. can be typically analyzed using linear models. Applied Linear Models is an applied course aiming to provide the methodological background and computational tools for data analysis. Topics covered: Definition, fitting, inference, interpretation of results, meaning of regression coefficients, lack of fit, multicollinearity, ridge regression, principal components regression, variable selection, diagnostics, transformations, influential observations, robust procedures, ANOVA, randomized block and factorial designs. Generalized Linear Models: Binary and binomial response data, logistic regression.

Textbook: Neter, Kutner, Nachtsheim and Wasserman (1996), Applied Linear Statistical Models.

Computing: The statistical software package R will be used. R is free with Windows, Macintosh and Unix versions. Prior experience with the software is not necessary.

Prerequisites: Multivariable Calculus (Math 33), and Linear Algebra (Math 124) or equivalent

Statistics 227. Survival Analysis. Wednesday, 6:10pm-8:40pm.  
Instructor: Dr. Q. Pan.

This course will discuss parametric and nonparametric methods for the analyses of partially censored time to events data (survival data). Topics include: survival distributions, Kaplan-Meier and Breslow-Aalen estimators, Greenwood's formula, logrank and generalized logrank tests, Cox proportional hazards model, Accelerated Failure Time models, and model diagnostic techniques. Prerequisite: Stat 201-2 or permission of instructor.

Stat 231. Categorical Data Analysis. Monday, 6:10pm-8:40pm.  
Instructor: Dr. S. Kundu.

The purpose of this course is to provide a broad overview of the statistical procedures for analyzing categorical data. We will begin with analysis of contingency tables. We will talk about traditional methods for two-dimensional tables and then generalize to multidimensional tables. Theoretical bases underlying the analysis of categorical data will be covered. Different topics will include measures and tests of association; Cochran-Mantel-Haenszel procedure; weighted least squares and maximum likelihood estimators in generalized linear models; estimating equations; logistic regression; loglinear models. Computer applications (using SAS) will be considered. Prerequisite: Stat 201-2.

Text: Categorical Data Analysis, 2nd Edition, by Alan Agresti, Wiley.

Statistics 257. Probability. Wednesday, 6:10pm-8:40pm.  
Instructor: Dr. H. Mahmoud

This course will discuss rigorous modern measure-theoretic probability. No prior knowledge of measure theory is assumed; the necessary concepts will be developed as necessary. Topics to be covered include: Sigma fields and Probability measures, Probability Axioms, Lebesgue integration and expectation, Measure-theoretic independence, Borel-Cantelli Lemmas, Modes of probabilistic convergence, Weak and strong laws of large numbers, and Central limit theorems.

Students wishing to move on to the next level of sophistication and mathematical maturity needed for study in fields such as stochastic processes, statistics or advanced applications will find this course useful. Prerequisite: Stat-201 (MS level course in probability).

Textbooks: Karr, A. (1993). Probability. Springer, New York.

Supplemental Texts: Chung, K. (1974). A Course in Probability Theory. Academic Press, Orlando.  
Billingsley, P. (1990). Probability and Measure, 2nd Edition. Wiley, New York.

Statistics 263. Advanced Statistical Theory I. Thursday, 6:10pm-8:40pm.  
Instructor: Dr. T. Nayak.

This is an advanced course on principles and theory of statistical inference. Topics include: sufficiency, ancillarity, completeness, unbiased estimation, Cramer-Rao inequality, Bayesian estimation, admissibility, hypotheses testing.

Prerequisite: Stat 201-2 or permission of instructor.

Stat 265. Multivariate Analysis. Tuesday, 6:10pm-8:40pm.  
Instructor: Dr. R. Modarres.

This course will present mathematical theory of some statistical methods for analyzing multivariate data. Topics to be covered include: characterizations and properties of multivariate normal distribution, multiple correlation, partial correlation, estimation of the mean vector and the covariance matrix, Wishart distribution, Hotelling's T<sup>2</sup> distribution and its applications in hypotheses testing, discrimination and classification, and multivariate analysis of variance. Prerequisite: Stat 201-2.

Statistics 287. Modern Theory of Survey Sampling. Wednesday, 6:10pm-8:40pm.  
Instructor: Dr. M. Larsen

The main objectives of the course are to provide a rigorous treatment of sampling theory and its applications. With this background the student can modify the existing theory, develop new theory, and better understand its applications. Graduate students from quantitative fields such as Statistics, Mathematics, Economics, Finance and Engineering as well as professionals working in government and private-sector companies, with an interest in survey sampling will benefit from this course. The prerequisites for the class are Statistics 91 (Principles of Statistical Methods) or equivalent and Math 32 (Single-Variable Calculus) or equivalent.

This course will introduce the following topics: simple random sampling with and without replacement, systematic sampling, unequal probability sampling with and without replacement, ratio estimation, difference estimation and regression estimation.

Statistics 289-10: A Seminar on Statistics in the Legal Setting, Thursday 6:10-8:40pm  
Instructor: Dr. J.L. Gastwirth

This class will introduce students to the use of statistical analyses in the courtroom environment. Particular emphasis will be on the role of statistical evidence in discrimination cases. The classic jury

discrimination case, *Castenada v. Partida*, which accepted statistical hypothesis testing to analyze data on the racial composition of jury venires, will be discussed. Then more sophisticated methods currently used in employment discrimination cases will be described. The instructor has recently authored a paper on the statistical aspects of the *Ricci v. DeStefano* case, currently before the Supreme Court. Formal statistical analysis of the data will be seen to conflict with the simple guideline, often used by courts. Regression methods used in salary discrimination cases will be covered. Recent developments in the use of local linear regression to analyze wage data will also be described. Depending on the interests of the students and the available time, additional topics will be chosen from:

- Assessing the fairness of the apportionment of state legislatures and related issues
- The use of survey evidence in commercial litigation, especially trademark infringement cases
- The role of epidemiologic studies in product liability cases and occupational health regulation
- Sampling and analysis of environmental data.
- An introduction to the issues related to the analysis of DNA and other forensic evidence
- The standards for the admissibility of an expert report (including statistical analyses) that one must meet, e.g. the guidelines the Supreme Court established in *Daubert* and subsequent opinions.

Pre-requisite: Students should have a previous course in statistics, including some knowledge of simple linear regression and a little exposure to using a statistical package, e.g. SAS, SPSS or R. Each student will choose a project dealing with the analysis of data from a case or regulatory hearing that is appropriate to their background. Thus, doctoral students will be expected to utilize more advanced statistical methods than master's students or advanced undergraduates. Similarly, students with a modest background will only be expected to analyze data using the programs discussed in class. More advanced students will be encouraged to modify or expand on those programs.

Statistics 289-11: Statistical Methods for Bioinformatics. Tuesday, 6:10-8:40pm.  
Instructor: Dr. Y. Lai

Bioinformatics is a rapidly growing field in life sciences. It plays an essential role in the current biological and medical studies. In this course, we will focus on microarray data analysis. Microarray technology is an experimental method by which thousands of genes can be printed on a small chip and their expression can be simultaneously measured. Microarrays have been widely used in many biological and medical studies to understand genome-wide regulation as well as to detect novel disease related genes. However, due to the system noise and small sample size of microarray data, their statistical analysis can be challenging. Microarray data analysis involves many different statistical topics. This seminar course will focus on the following topics: genomics and microarray basics, image processes, data transformation and normalization, differential expression detection, multiple hypothesis testing, classification and cluster analysis, and other microarray related studies.

Prerequisite: Stat 157&158 or equivalent, or permission of instructor.

Statistics 289-12. Reliability and Risk Analysis. Wednesday, 6:10pm-8:40pm.  
Instructor: Dr. N. Singpurwalla

The methods of reliability theory and of life testing provide a mathematical foundation and a statistical technology for survival analysis and for risk analysis. The aim of this course is to provide an overview of this technology from a modern Bayesian perspective. This material is summarized in a recent book written by the instructor, and the course will be based on the material therein. Topics to be covered will be: the quantification of uncertainty, the notion of exchangeability and its role in life data analysis and model building. Univariate and multivariate models for describing the failure of units and systems with interdependent and cascading failures. The elicitation and codification of expert testimonies in reliability and survival analysis. Stochastic process models for dynamic environments, competing risks, and multiple time scales. The course will conclude with a discussion on the relevance of the above to financial mathematics and financial risk.

## Announcement

# JPSM Short Courses

[www.jpsm.org/shortcourses](http://www.jpsm.org/shortcourses)

October 29-30, 2009

An Introduction to Survey Management

Michael F. Weeks

Registration Deadline: October 15, 2009

November 19-20, 2009

Focus Groups from Start to Finish

David Morgan

Registration Deadline: November 5, 2009

December 17-18, 2009

Introduction to Survey Sampling

Colm O'Muircheartaigh and James M. Lepkowski

Registration Deadline: December 3, 2009

January 11-12, 2010

Web Survey Design

Mick P. Couper

Registration Deadline: December 28, 2009

February 1-2, 2010

Experimental Design for Surveys

Roger Tourangeau

Registration Deadline: January 18, 2010

February 23-24, 2010

Balancing Data Confidentiality and Data Quality

Lawrence Cox

Registration Deadline: February 9, 2010

March 3-4, 2010

Introduction to Survey Estimation

David Morganstein and Richard L. Valliant

Registration Deadline: February 17, 2010

March 29-30, 2010

Writing Questions for Surveys: A Workshop

Nora Cate Schaeffer

Registration Deadline: March 15, 2010

April 22-23, 2010

Cognitive Interviewing Methods: A Hands-On Approach

Gordon B. Willis

Registration Deadline: April 8, 2010

May 4-5, 2010

Sampling and Estimation for Establishment Surveys

Richard Valliant and Phillip Kott

Registration Deadline: April 20, 2010

May 26, 2010 (1-Day course)

Introduction to Item Response Theory (IRT) Modeling and Applications

Bryce B. Reeve

Registration Deadline: May 12, 2010

JPSM SHORT COURSES: [www.jpsm.org/shortcourses](http://www.jpsm.org/shortcourses)

SPONSOR AFFILIATE LIST: [projects.isr.umich.edu/jpsm/info.cfm#sponsors](http://projects.isr.umich.edu/jpsm/info.cfm#sponsors)

JPSM HOME PAGE: [www.jpsm.org](http://www.jpsm.org)

Primary Funding for JPSM is from the Interagency Council on Statistical Policy.

## **JPSM Short Course Announcement**

### **WEB SURVEY DESIGN**

A two-day short course sponsored by the Joint Program in Survey Methodology

JANUARY 11-12, 2010

Presented at the Hyatt Regency Bethesda MD

**MICK P. COUPER**

Research Professor

Institute for Social Research, University of Michigan

Joint Program in Survey Methodology, University of Maryland

### **COURSE ABSTRACT**

The course will focus on the design of Web survey instruments and procedures, based on theories of human-computer interaction, interface design, and empirical research on Web survey design and implementation. The course will begin with a review of Web or Internet surveys in the general context of sources of survey error (sampling, coverage, nonresponse, measurement error, and costs). The course will then discuss different approaches to Web survey design (e.g., scrolling versus paging) and discuss various design approaches for developing effective Web surveys. The course will draw on empirical results from experiments on alternative design approaches as well as practical experience in the design and implementation of Web surveys. The course will not focus on the technical aspects of Web survey implementation, such as hardware, software or programming.

### **PREREQUISITES**

A working knowledge of survey research methods will be assumed. No knowledge of Web programming or scripting (HTML, JavaScript) or any particular software package is necessary.

### **THE INSTRUCTOR**

Mick Couper is a Research Professor in the Survey Research Center at the Institute for Social Research and in the Joint Program in Survey Methodology at the University of Maryland. He received a Ph.D. in sociology from Rhodes University, an M.A. in applied social research from the University of Michigan and an M.Soc.Sc. from the University of Cape Town. He is co-author of *Nonresponse in Household Interview Surveys*, chief editor of *Computer Assisted Survey Information Collection*, co-author of *Survey Methodology* (all published by Wiley), and author of *Designing Effective Web Surveys* (Cambridge). His current research interests focus on aspects of technology use in surveys, whether by interviewers or respondents.

### **SUBMIT QUESTIONS, TOPICS AND EXAMPLES**

The instructor would like to provide an opportunity for those who will be attending the Web Survey Design course to raise specific questions or provide examples to be discussed in class. If there are specific topics you want addressed, or if you have examples of Web surveys you would be willing to share in exchange for specific discussion on these issues in class, please send these (either as an attachment or as a link to the survey) to [jpsmshort@isr.umich.edu](mailto:jpsmshort@isr.umich.edu), and the instructor will do his best to address these issues during the course. Please send these by 5 PM on Monday, January 4th, at the latest. The instructor cannot provide personal feedback on any submissions, and this is not an offer of free consulting, but rather an attempt to make the course more relevant to the specific needs of participants.

### **COURSE MATERIALS**

Registrants will be provided with a copy of the book "Designing Effective Web Surveys" and a course lecture notebook.



**MEALS**

JPSM group continental breakfasts, lunches and refreshments are included in the course fee.

**TENTATIVE COURSE SCHEDULE****MONDAY, JANUARY 11, 2010**

- 8:00 - 9:00 Registrant Check-in and Continental Breakfast  
 9:00 - 10:00 Introduction and Overview.  
                   Sources of error in Web surveys; types of Web surveys.  
 10:00 - 10:30 Break  
 10:30 - 12:00 Importance of Design.  
                   Types of Web surveys (continued); implications for Design.  
 12:00 - 1:00 Lunch  
 1:00 - 2:30 Designing Questions – The Basic Building Blocks of a Web Survey.  
                   Basic HTML tools for creating survey questions; radio buttons, check boxes,  
                   drop boxes, text fields, text areas, etc.; going beyond HTML: multimedia,  
                   graphics, Web 2.0, other tools.  
 2:30 - 3:00 Break  
 3:00 - 4:30 General Layout and Design.  
                   Typography, font size and style; background design; layout and screen design;  
                   use of grids or matrices.  
 4:30 Adjourn

**TUESDAY, JANUARY 12, 2010**

- 7:30 - 8:30 Registrant Check-in and Continental Breakfast  
 8:30 - 10:00 General Layout and Design. Continued.  
 10:00 - 10:30 Break  
 10:30 - 12:00 Putting the Questions Together to Create a Questionnaire.  
                   Instructions; skips, edit checks and routing;  
                   progress and movement through the instrument; error messages.  
 12:00 - 1:00 Lunch  
 1:00 - 2:30 Putting the Questions Together to Create a Questionnaire. Continued.  
 2:30 - 3:00 Break  
 3:00 - 4:30 Implementing the Web Survey.  
                   The e-mail invitation; access control and login; the welcome screen;  
                   follow-up reminders and repeat access; wrap up.  
 4:30 Adjourn

**FEES**

The course fee is \$665 for JPSM sponsor affiliates, \$665 for full-time university students, and \$875 for other participants. JPSM Sponsor Affiliate List:  
<http://projects.isr.umich.edu/jpsm/info.cfm#sponsors>.

**REGISTRATION**

Online registration is required. Short Courses: [www.jpsm.org/shortcourses](http://www.jpsm.org/shortcourses). Confirmation of acceptance will be sent after the registration form has been processed. Registration is not firm until you receive an acceptance email. The email will include directions to the course. The automatic web registration number is not an acceptance letter. The registration deadline is December 28, 2009.

**PAYMENT**

Payment by credit card is required. Payment may be done online during registration. Post registration payment may be done online at [www.jpsm.org/shortcourses](http://www.jpsm.org/shortcourses) using the registration number or by calling (800) 937-9320. Payment is required by December 28, 2009.

**CANCELLATION**

Please notify JPSM as soon as possible if you need to cancel your registration. Cancellation requests should be done online. You will be fully reimbursed if you cancel by December 28, 2009. Cancellation December 29, 2009-January 3, 2010 will require a \$100 administrative fee, the remainder will be reimbursed. Cancellation on or after January 4, 2010 is subject to the full fee amount.

## FELLOWSHIP

The Joint Program in Survey Methodology strives to increase the number of survey professionals from groups traditionally under-represented in the field. As part of this effort, a limited number of competitive fellowships are available to African-Americans, Latinos, Hispanic Americans, and Native American Indians for the short course. The registrant must be a US citizen or permanent resident.

The applicants should submit:

1. The online registration form.
2. A 500-word essay describing their reasons for wanting to attend this short course and how their participation will enhance their chosen career path. The essay should indicate the applicant's background (i.e. African-American, Latino, Hispanic American, or Native American Indian) and why the fellowship support is needed.
3. A letter of recommendation written by a person knowledgeable about the applicant's aptitude and interest in survey methodology.

The online registration form, essay, and letter of recommendation are due December 14, 2009. JPSM will evaluate the applications and inform the successful applicants by December 21, 2009. The fellowship covers the registration fee, materials to be distributed during the course and the JPSM group continental breakfasts, lunches and refreshments. The registration must be done online. The essay and letter of recommendation may be faxed to (734) 764-8263 or emailed to [jpsmshort@isr.umich.edu](mailto:jpsmshort@isr.umich.edu).

## HYATT REGENCY BETHESDA

One Bethesda Metro Center, 7400 Wisconsin Avenue, Bethesda, MD 20814

Front Desk: (301) 657-1234 Web: <http://bethesda.hyatt.com/property/index.jhtml>

The course will be held at the Hyatt Regency Bethesda. The hotel is located at the intersection of Wisconsin Avenue and Old Georgetown Road in Maryland. The hotel is in the heart of Maryland's high-tech corridor, just 6 miles from downtown Washington, D.C., with convenient access to the Capital Beltway and Metro Subway.

## OVERNIGHT ROOMS

Individuals are responsible for making their own overnight room reservations and for payment.

## PARKING

There is a parking garage located directly underneath the Hotel which offers both valet and self-parking. The garage is not owned or operated by the Hyatt Regency Bethesda. There are numerous parking garages near the hotel.

## METRO RAIL

Bethesda Metro Stop: Red

## AIRPORTS

Ronald Reagan National Airport (11 Miles)

Dulles International Airport (24 Miles)

Baltimore/Washington Airport (35 Miles)

## JPSM CITATION PROGRAM

The citation programs are built around the JPSM short courses. The JPSM Citation in Introductory Survey Methodology is designed to provide the working professional and interested students with state-of-the-art knowledge about current principles and practices for conducting complex surveys combined with practical skills of day-to-day utility. The JPSM Citation in Introductory Economic Measurement is designed for professional staff requiring a grounding in the principles and practices of economic measurement. Completion of the citation programs involves taking a semester-length JPSM credit-bearing course and eight JPSM short courses, of which four are specified core courses. For information on the Certificate and Citation Programs visit the website at <http://www.jpsm.org> or call (301) 314-7911.

## INQUIRIES

Questions for this course should be directed to the JPSM Short Course, Institute for Social Research, University of Michigan, 426 Thompson Street, Room 4050, Ann Arbor, MI 48104-2321, Phone: (800) 937-9320, Fax: (734) 764-8263, Email: [jpsmshort@isr.umich.edu](mailto:jpsmshort@isr.umich.edu).

Short Courses: [www.jpsm.org/shortcourses](http://www.jpsm.org/shortcourses)

Sponsor Affiliate List: [projects.isr.umich.edu/jpsm/info.cfm#sponsors](http://projects.isr.umich.edu/jpsm/info.cfm#sponsors)

JPSM Home Page: [www.jpsm.org](http://www.jpsm.org)

Tax Identification Number (University of Michigan): 38-6006309

Primary Funding for JPSM is from the Interagency Council on Statistical Policy.

## Employment

As a service to local statisticians, *WSS News* provides notification of employment opportunities and description of those seeking employment here in the Washington, DC, area. Readers are encouraged to take advantage of this feature of the newsletter. The deadline for inserting notices is five (5) weeks before the publication date. Those interested should email or call Anne Peterson, at [apeterson@insightpolicyresearch.com](mailto:apeterson@insightpolicyresearch.com) or (703) 373-6645.

### **WESTAT AN EMPLOYEE-OWNED RESEARCH CORPORATION**

WESTAT is an employee-owned corporation headquartered in the suburbs of Washington, DC (Rockville, Maryland). We provide statistical consulting and survey research to the agencies of the U.S. Government and to a broad range of business and institutional clients. With a strong technical and managerial staff and a long record of quality research, Westat has become one of the leading survey research and statistical consulting organizations in the United States.

Our company was founded in 1961 by three statisticians. The current staff of more than 1,900 includes over 60 statisticians, as well as research, technical, and administrative staff. In addition, our professional staff is supported by data collection and processing personnel situated locally and in field sites around the country. The work atmosphere is open, progressive, and highly conducive to professional growth.

Our statistical efforts continue to expand in areas such as the environment, energy, health, education, and human resources. Westat statisticians are actively involved in teaching graduate-level courses in statistical methods and survey methodology in collaborative arrangements with area colleges and universities.

We are currently recruiting for the following statistical position:

#### Survey Sampling Statistician (Job Code WSS/DRM/90001)

A total of 3 or more years of relevant experience in sample design and selection, frames development, weighting, imputation, and variance estimation. Applicant must have a master's or doctoral degree in statistics and have excellent writing skills. Coursework in sample survey design is highly desirable.

Westat offers excellent growth opportunities and an outstanding benefits package including life and health insurance, an Employee Stock Ownership Plan (ESOP), a 401(k) plan, flexible spending accounts, professional development, and tuition assistance. For immediate consideration, please send your cover letter, indicating the Westat Job Code, and resume, by one of the following methods to:

Job Code is **REQUIRED** to apply.

Westat

Attn: Resume System

1650 Research Boulevard

Rockville, MD 20850-3195

Email: [resume@westat.com](mailto:resume@westat.com) / FAX: (888) 201-1452

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[www.westat.com](http://www.westat.com)

## ASSOCIATE TO FULL PROFESSOR OF STATISTICS OR BIostatISTICS

The Department of Statistics (DOS) and The Biostatistics Center (BSC) of The George Washington University are recruiting a tenured faculty position at the Associate Professor or Professor level. Basic Qualifications are a PhD in Statistics or Biostatistics, an established program of research, and a strong national and international reputation. Core responsibilities of the position will be to serve as Principal Investigator or co-Investigator on one or more BSC major projects; to teach 1 course per year in the DOS and to advise PhD students in Statistics and Biostatistics. The position will be tenured and funded 100% in Year 1. Salary support will decrease to 25% over a 5-year period. The remaining salary will be funded by sponsored projects (either at the BSC, or other external funding secured by the faculty member). Review of applications will begin May 1, 2008 and will continue until the position is filled. For additional information and the application procedure, please see <http://www.gwu.edu/~stat/>.

The George Washington University is an Equal Opportunity/Affirmative Action Employer

## CLINICAL TRIAL BIostatISTICIANS

The Biostatistics Center of The George Washington University is currently recruiting biostatisticians to serve as Co-Investigator or Principal Investigator (Project Director) and to provide statistical direction of the design, conduct and analysis of studies and the conduct of methodologic research to meet the projects needs.

**Basic Position Requirements:** Doctorate in Biostatistics, Statistics or Epidemiology, or alternatively an M.D. or Ph.D. in Biological Science, Physical Science or Computer Science **with** a Masters in Biostatistics or Statistics, 1-5 years' experience with clinical trials, especially study design and statistical analysis of study results using SAS, excellent oral and written English communication skills, and supervisory experience. All interested applicants at the rank of Assistant Professor in Biostatistics or Statistics may apply for the **Samuel W. Greenhouse Biostatistics Research Enhancement Award**. For a period of 1 year, the award will provide 20% effort for methodological research, professional activities and travel. Review of applications is ongoing until the positions are filled. For complete information and application procedures, please visit our website at: [www.bsc.gwu.edu](http://www.bsc.gwu.edu). Only complete applications will be considered

The George Washington University is an Equal Opportunity/Affirmative Action Employer.

**Faculty Position: Director of Biostatistics, Infectious Disease Clinical Research Program (IDCRP) in the Department of Preventive Medicine and Biometrics (PMB) at Uniformed Services University of the Health Sciences in Bethesda, MD**

### Responsibilities

Seeking a Director of Biostatistics for the Infectious Disease Clinical Research Program (IDCRP) in the Department of Preventive Medicine/Biometrics (PMB) at Uniformed Services University of the Health Sciences in Bethesda, MD. The incumbent reports to the Director of the IDCRP. Responsibilities are to coordinate and provide biostatistical support for clinical and/or laboratory research, oversee statistical support and collaborations in clinical research protocols carried out in the IDCRP, and coordinate IDCRP data management activities within IDCRP and with senior personnel at the collaborating data management activity. Oversee coordination of statistical review requirements to support scientific review board and data monitoring board activities. Direct and lecture in graduate level courses on clinical research and lecture to medical students. Mentors graduate students, residents, and fellows conducting clinical research. Mentors junior biostatisticians and promotes additional publications and presentations of applications/methods for problems motivated by clinical research collaborations. Must have knowledge of medical science and research; knowledge of statistics relevant to clinical research; ability to communicate effectively; ability to make effective presentations and publish; excellent verbal, written and

interpersonal skills. This involves performing statistical analysis on data collected from clinical trials, laboratory / translational research experiments, and/or epidemiologic observational research studies.

Incumbent provides senior management of statistical analysis and data management activities within IDCRP. Coordinates with senior personnel at collaborating data coordinating/analysis organizations to work toward and address research program goals. Recommends and advises on the design of biomedical research protocols. Provides statistical support via statistical consultation and data analyses throughout the courses of studies and prepares statistical reports for presentations and publications. Provides relevant statistical and project status updates to research staff. Recommends and implements changes as needed. Coordinates statistical review requirements to support scientific review board and data monitoring board activities. Works with research staff to achieve the goals of the research program. Supervises junior biostatisticians and data analysts. Direct and lecture in graduate level courses on clinical research and lecture to medical students. Mentors graduate students, residents, and fellows conducting clinical research. Performs other duties as required.

Required Knowledge, Skills, and Abilities: experience in the design, monitoring, and analysis of clinical trials and/or epidemiologic observational studies; experience in organizing and tracking multiple statistical support activities; experience in research administration, including supervision of statistical and/or data management personnel; knowledge of medical science and research; collaborative/ participatory decision-making skills; skills for identifying and addressing statistical issues in applications for extramural research; ability to communicate effectively; ability to make effective presentations and publish; excellent verbal, written and interpersonal skills.

Minimum Education/Training Requirements: Ph.D. in Biostatistics, Statistics or related field

Minimum Experience: At least 10 years experience, having progressed to the level of senior statistician managing a data coordinating and analysis center for 1 or more clinical research contract(s)/grant(s)/program(s).

Physical Capabilities: extended periods of sitting

Supervisory Responsibilities/Controls: supervises junior biostatisticians

Work Environment: office or laboratory environment

Any qualifications to be considered as equivalents, in lieu of stated minimums, require the prior approval of the Director of Human Resources, Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. (HJF)



**P.O. Box 2033  
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