

WSS NEWS

November 2005

WASHINGTON STATISTICAL SOCIETY

The 2005 Morris Hansen Lecture

The fifteenth annual Morris Hansen Lecture will be delivered by Donald B. Rubin of Harvard University. The title of his lecture will be "Causal Inference Through Potential Outcomes: Application to Quality of Life Studies with 'Censoring' Due to Death and to Studies of the Effect of Job-Training Programs on Wages." The discussants will be Graham Kalton of Westat, Inc. and Edward L. Korn of the National Cancer Institute. Carol House of the National Agricultural Statistics Service will give opening remarks, and Trena Ezzati-Rice of the Agency for Healthcare Research and Quality will serve as the Chair. The Hansen Lecture series is sponsored by the Washington Statistical Society, Westat, Inc., and the National Agricultural Statistics Service.

The lecture will be held from 3:30 to 5:30 on Wednesday, November 2, 2005 in the Jefferson Auditorium, U.S. Department of Agriculture, South Building, which is located on Independence Avenue, SW, between 12th and 14th Streets. A reception will follow immediately (from 5:30 to 6:30) in the Jamie L. Whitten Building, across Independence Avenue.

Donald B. Rubin is the John L. Loeb Professor of Statistics and former Chairman of the Department of Statistics at Harvard University, where he has taught for over 20 years. Professor Rubin has over 300 publications, including several books, on a variety of topics, including causal inference, missing data, sample surveys, computational methods, Bayesian statistics, and applications in many areas of social and biomedical science; and he is among the most highly cited mathematical scientists in the world. Among his many honors and awards, he is a Fellow of the American Statistical Association, the Institute of Mathematical Statistics, and the American Association for the Advancement of Science, a past John Simon Guggenheim Fellow, a member of the International Statistical Institute and the American Academy of Arts and Sciences, a past Fisher Lecturer at the Joint Statistical Meetings, and a recipient of two of the most prestigious awards available to statisticians: the Samuel S. Wilks Medal of the American Statistical Association and the Emanuel and Carol Parzen Prize for Statistical Innovation. Professor Rubin holds an A.B. degree (psychology) from Princeton University, and M.S. (computer science) and Ph.D. (statistics) degrees from Harvard.

WSS and Other Seminars (All events are open to any interested persons)									
Nover 2	mber Wed.	Morris Hansen Lecture Causal Inference Through Potential Outcomes: Application to Quality of Life Studies with 'Censoring' Due to Death and to Studies of the Effect of Job-Training Programs on Wages							
Decer 1	nber Thurs.	Empirical Bayes Analysis of Bivariate Binary Data: An Application to Small Area Estimation							
8	Thurs.	The Effects of Cell Collapsing in Poststratification							
12	Mon.	Comparing Homeowner and Lender Estimates of Housing Wealth and Mortgage Terms							
15	Thurs.	Data Collection and Statistical Issues in Surveying Cell and Landline Telephone Samples							
Janua 19	ry Thurs.	The Use of Contact History Data for Exploring Survey Nonresponse in Federal Demographic Surveys. (A Joint Seminar)							

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

Announcements

JUDGES FOR THE 2006 SCIENCE FAIRS

Volunteers are needed to represent the Washington Statistical Society next spring as judges in five regional science fairs in Northern Virginia, suburban Maryland, and the District of Columbia. Since 1986, WSS has provided special awards at these fairs to students whose projects demonstrate excellence in data analysis or the application of statistical methods. Those who have participated in this activity have very much enjoyed the opportunity to interact with the students and to observe the widely diverse projects which are presented. The fairs are held on Saturday mornings in mid-March to mid-April. The only time required is that one Saturday morning, plus one weekday lunchtime meeting to discuss judging strategy.

If you would like to be a science fair judge next spring, please e-mail Robert Clickner at Robertclickner@westat.com by January 25, and include your e-mail address, work and home phone numbers, your fax number and your mailing address. If you judged last spring, there is no need to contact Bob unless your e-mail address or phone number has changed. If you have any questions, please call Bob at 301-294-2815.

SIGSTAT Topics for November 2005 – March 2006

November 9, 2005: SAS PROC POWER

The new POWER procedure performs prospective power and sample size analyses for a variety of goals, such as the following: determining the sample size required to get a significant result with adequate probability (power); characterizing the power of a study to detect a meaningful effect; and conducting what-if analyses to assess sensitivity of the power or required sample size to other factors. Linda Atkinson will be the speaker.

December 14, 2005: SAS PROC MDC

The MDC (Multinomial Discrete Choice) procedure analyzes models where the choice set consists of multiple alternatives. The procedure supports conditional logit, mixed logit, heteroskedastic extreme value, nested logit, and multinomial probit models. Charlie Hallahan will be the speaker.

January 11, 2006: SAS PROC QUANTREG

The QUANTREG procedure models the effects of covariates on the conditional quantiles of a response variable by means of a quantile regression. Ordinary least-squares (OLS) regression models the relationship between one or more covariates *X* and the *conditional mean* of the response variable *Y* given X=x. Quantile regression extends the regression model to conditional quantiles of the response variable, such as the median or 90th percentile. Charlie Hallahan will be the speaker.

February 8, 2006: SAS PROC ENTROPY

The ENTROPY procedure implements a parametric method of linear estimation based on Generalized Maximum entropy. The ENTROPY procedure is suitable when there are outliers in the data and robustness is required, or when the model is ill-posed or undetermined for the observed data, or for regressions involving small data sets. Charlie Hallahan will be the speaker.

March 8, 2006: SAS PROC GLIMMIX

The GLIMMIX procedure fits statistical models to data with correlations or nonconstant variability and where the response is not necessarily normally distributed. These models are known as generalized linear mixed models (GLMM). The GLMMs, like linear mixed models, assume normal (Gaussian) random effects. Conditional on these random effects, data can have any distribution in the exponential family. In the absence of random effects, the GLIMMIX procedure fits generalized linear models (fit by the GENMOD procedure). Charlie Hallahan will be the speaker.

SIGSTAT is the Special Interest Group in Statistics for the CPCUG, the Capital PC User Group, and WINFORMS, the Washington Institute for Operations Research Service and Management Science. All meetings are in Room S3031, 1800 M St, NW from **12:00 to 1:00** (**note new time**). Enter the South Tower & take the elevator to the 3rd floor to check in at the guard's desk.

First-time attendees should contact Charlie Hallahan, 202-694-5051, <u>hallahan@ers.usda.gov</u>, and leave their name. Directions to the building & many links of statistical interest can be found at the **SIGSTAT** website, **http://www.cpcug.org/user/sigstat/**.

Note from the WSS NEWS Editor

Items for publication in the January issue of the WSS NEWS should be submitted no later than Novebmer 29, 2005. E-mail items to Michael Feil at michael.feil@usda.gov.

The 2005 Morris Hansen Lecture

- Title: Causal Inference Through Potential Outcomes: Application to Quality of Life Studies with 'Censoring' Due to Death and to Studies of the Effect of Job-Training Programs on Wages.
- Speaker: Donald B. Rubin, Harvard University
- Discussants: Graham Kalton, Westat, Inc. Edward L. Korn, National Cancer Institute
- Introduction: Carol House, National Agricultural Statistics Service
- Chair: Trena Ezzati-Rice, Agency for Healthcare Research and Quality
- Date/Time: Wednesday, November 2, 2005 Lecture: 3:30 - 5:30 p.m. Reception: 5:30 - 6:30 p.m.
- Location: Jefferson Auditorium, U.S. Department of Agriculture, South Building, Independence Avenue, SW, between 12th and 14th Streets. A reception follows from 5:30 to 6:30 p.m in the Whitten Building across Independence Avenue. The Independence Avenue exit from the Smithsonian METRO station is at the 12th Street corner of the South Building. The handicapped entrance to the South Building is located also here. Attendees not requiring handicapped access should enter at the Independence Avenue side of the 5th wing. Please bring a photo ID to facilitate entrance to the building.
- Sponsors: Washington Statistical Society, Westat, Inc., and National Agricultural Statistics Service
- Abstract: Causal inference is best understood using potential outcomes, which include all posttreatment quantities. The use of potential outcomes to define causal effects is particularly important in more complex settings, i.e., observational studies or randomized experiments with complications such as noncompliance. This lecture deals with the issue of estimating the casual effect of a treatment on a primary outcome that is "censored" by an intermediate outcome, for example, the effect of a drug treatment on Quality of Life (QOL) in a randomized experiment where some of the patients die before their QOL can be assessed. Because both QOL and death are post-randomization quantities, they both should be considered potential outcomes, and the effect of treatment versus control on QOL is only well-defined for the subset of patients who would live under either treatment or control. Another application is to an educational program designed to increase final test scores, which are not defined for those who drop out of school before taking the test. A further application is to studies of the effect of job-training programs on wages, where wages are only defined for those who are employed, and thus the effect of the jobtraining program on wages is only well-defined for the subset of individuals who would be employed whether or not they were trained. Some empirical results are presented from Zhang, Rubin, and Mealli (2004), which indicate that this framework can lead to new insights because the analysis is not predicated on traditional econometric assumptions.

Title:Empirical Bayes Analysis of Bivariate Binary Data: An Application to Small
Area Estimation

- Chair: Van Parsons, National Center for Health Statistics
- Speakers: Malay Ghosh, Department of Statistics, University of Florida
- Date/Time: Thursday, December 1, 2005 / 2:00 3:30 p.m.
- Location: National Center for Health Statistics, room 1407C,3311 Toledo Road, Hyattsville, (Metro: Green Line, Prince George's Plaza and then about a 10 minute walk) Note: please try to arrive 15-30 minutes early because of possible security screening delays.
- Sponsors: WSS Methodology Section and NCHS/Office of Research and Methodology
- Abstract: The paper provides an empirical Bayes (EB) analysis of bivariate binary data with application to small area estimation. Small area estimation is gaining increasing prominence in survey methodology. The need for such statistics is felt in both the public and private sectors. The reason behind its success is that the same survey data, originally targeted towards a higher level of geography (e.g. states) needs to be used also for producing estimates at a lower level of aggregation (e.g. counties, subcounties or census tracts). The direct estimates in such cases are unavailable (e.g. due to zero sample size) and almost always unreliable due to large standard errors and coefficients of variation arising from the paucity of samples in individual areas.

The motivating example in this study is to estimate jointly the proportion of newborns with low birthweight and infant mortality rate at low levels of geography such as districts within a state. The data from the infant mortality study was conducted by NCHS. The original survey was designed to obtain reliable estimates at the state level. The same data needs to be used to produce estimates at the district level. We have used an EB approach for the analysis of such data. We have found second order correct approximations of the mean squared errors (MSE's) of these estimators, and have derived estimators of these MSE's which are also correct up to the second order. The methodology is illustrated with some real data related to low birthweight and infant mortality.

maximum.

2003 National Health Interview Survey.

Program Announcement

Title: The Effects of Cell Collapsing in Poststratification Chair: Shail Butani, U.S. Bureau of Labor Statistics Speakers: Jay J. Kim, National Center for Health Statistics, Centers for Disease Control And Richard Valliant, Survey Research Center, University of Michigan Date/Time: Thursday, December 8, 2005 / 12:30 - 2 p.m. Location: Bureau of Labor Statistics, Conference Center in G440. To be placed on the seminar list attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to 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 Section, WSS Abstract: Poststratification is a common method of estimation in household surveys. Cells are formed based on characteristics that are known for all sample respondents and for which external control counts are available from a census or another source. The inverses of the poststratification adjustments are usually referred to as coverage ratios. Coverage of some demographic groups may be substantially below 100 percent, and poststratifying serves to correct for biases due to poor coverage. A standard procedure in poststratification is to collapse or combine cells when the sample sizes fall below some minimum or the weight adjustments are above some

Collapsing may decrease the variance of an estimate but may

simultaneously increase its bias. We study the effects on bias and variance of this type of dynamic cell collapsing through simulation using a population based on the

Title: Comparing Homeowner and Lender Estimates of Housing Wealth and Mortgage Terms

- Speaker: Brian Bucks, Federal Reserve Board of Governors
- Discussant: Scott Susin, U.S. Census Bureau
- Chair: Linda Atkinson, Economic Research Service, USDA
- Date/time: Monday, December 12, 2005 / 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 <u>wss_seminar@bls.gov</u> (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.
- Sponsor: WSS Economics Section
- Abstract: Much research on housing wealth relies on the assumption that households are able to report these data accurately. In this paper, we test the validity of this assumption by comparing homeowner-reported data on house values and mortgage terms from the Survey of Consumer Finances (SCF) to lender-reported data from the Office of Federal Housing Enterprise Oversight (OFHEO), the Loan Performance Corporation, and the Residential Finance Survey. We test the accuracy of the data in two ways. First, we compare the distributions of key variables in the homeowner- and lenderreported data. Second, we examine the internal edit codes in the SCF to assess respondent confidence in their answers.

We find that homeowners are able to report the broad features of their housing wealth rather well. An index of house value appreciation based on SCF data matches the aggregate OFHEO index fairly closely. This finding is consistent with other studies that suggest that owner assessments of house value are reasonably accurate. Homeowners are also able to report the maturity and type of their mortgage with a fair amount of accuracy. However, homeowners with adjustable-rate mortgages are less certain about many aspects of their mortgages.

These findings imply that homeowner-reported data are more useful for investigating some housing wealth questions than others. Studies of the effects of housing wealth on consumption, for example, can reasonably be based on homeowner-reported data. However, lender-reported data may be preferred for studies of the vulnerability of households to interest rate shocks.

Title:Data Collection and Statistical Issues in Surveying Cell and Landline Telephone
Samples

Chair: Brian J. Meekins, U.S. Bureau of Labor Statistics

- Speaker: Michael Brick, Westat;
- Date/Time: Thursday, December 15, 2005 / 12:30 2:00 p.m.
- Location: Bureau of Labor Statistics, Conference Center in G440. To be placed on the seminar list attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to 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 Section, WSS
- Abstract: As an increasing proportion of the US population use cell phones for most or all of their personal telephone activities, research into conducting surveys that include cell phones is important. This talk reviews a dual frame survey of landline and cell phone numbers conducted in the summer of 2004 for the Joint Program in Survey Methodology. The goal of the survey was to evaluate the feasibility of including cellular phone numbers in a random digit dial telephone survey. As an introduction, a brief background on the status of coverage and usage by telephone service will given, followed by some of the key operational and statistical issues identified as a result of conducting the survey. Special attention is devoted to the statistical biases associated with the dual frame approach.

Title:	The Use of Contact History Data for Exploring Survey Nonresponse in Federal Demographic Surveys. (A Joint Seminar)
Chair:	Richard L Bitzer, U.S. Census Bureau
Speakers:	Nancy Bates, U.S. Census Bureau James M. Dahlhamer, National Center for Health Statistics/Centers for Disease Control and Prevention
Date/Time:	Thursday, January 19, 2006 / 12:30 - 2 p.m.
Location:	Bureau of Labor Statistics, Conference Center Room 9. To be placed on the seminar list attendance list at the Bureau of Labor Statistics you need to e-mail your name, affiliation, and seminar name to 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 Section, WSS

Abstracts:

Reluctance to Participate in Federal Demographic Surveys: An Exploration of the National Health Interview Survey and Consumer Expenditure Survey using Survey Process Data

Nancy Bates and Andrea Piani U.S. Census Bureau

In 2002-2003, the Census Bureau designed an automated contact history data collection system known as the Contact History Instrument or CHI. The CHI was developed to systematically record the number of contact attempts, mode, date and time of attempt and other details behind interim outcomes in personal visit surveys (e.g., reasons for refusals and strategies attempted).

Using CHI data from the 2005 National Health Interview Survey and the 2005 Consumer Expenditure Survey, we explore reasons why some households are reluctant to participate in the interview process. We investigate the extent of reluctance, what the most frequently cited reasons are, and whether these vary by characteristics such as survey topic, household composition, and other auxiliary variables such as region, urbanicity, or mode of contact. We also report how patterns of reluctance may change as the number of contacts increases. Finally we explore whether some reasons are more highly correlated with the decision to refuse the survey. In closing we offer recommendations how CHI data can be used as a feedback mechanism for improving field productivity and understanding the reasons people participate in federal surveys.

Developing Models of Initial Contact in the National Health Interview Survey (NHIS)

James M. Dahlhamer, Barbara J. Stussman, Catherine M. Simile and Beth Taylor National Center for Health Statistics, Centers for Disease Control and Prevention

Response rates in government surveys have been declining over the past two decades raising concerns about the ability of survey estimates to accurately reflect the characteristics of the target population. One of the reasons for declining response rates is the reduced accessibility of households, arising, in part, from increased physical control of access to housing units and

household compositions in which no one is home for long periods of time. In an effort to achieve acceptable rates and quality of response, interviewers need to be as efficient as possible in contacting sample households so as to leave ample time for gaining respondent cooperation. The purpose of this study, therefore, is to identify factors that influence contactability.

The National Health Interview Survey (NHIS), an on-going population-based health survey conducted by the National Center for Health Statistics, Centers for Disease Control and Prevention, recently adopted the stand-alone, Blaise-based Contact History Instrument (CHI). Interviewers use CHI to record critical information on each contact attempt, including mode, date, and time of attempt, features of doorstep interactions, and strategies used for making contact and gaining cooperation. Using core survey and CHI data from the 2005 NHIS, models of initial contact with sample households are developed and tested. In addition to social-environmental (e.g., MSA status, region of residence) and household-level measures (e.g., the presence of children, household size, etc.) known to influence contactability, the role of interviewer strategies (e.g., time and mode of contact attempt, information-seeking behaviors) is assessed. By identifying attributes of difficult-to-contact households and the strategies for improving accessibility, survey procedures can be adjusted to improve the efficiency of field operations.

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 or (703) 387-3032.

WESTAT

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 1,700 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/5001)

Three or more years of relevant experience in sample design and selection, frames development, weighting, imputation, and variance estimation. Must have a master's or doctoral degree in statistics and have excellent writing skills. Coursework in sample survey design 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; FAX: (888) 201-1452. We are an Equal Opportunity Employer.

Tenure Track Assistant Professor in Statistics or Mathematics

American University

The Department of Mathematics and Statistics in the College of Arts and Sciences at American University has an opening for a tenure track assistant professor in Statistics or Mathematics for Fall 2006.

Qualifications: earned doctorate in Mathematics or in Statistics by Fall 2006, as well as evidence of effective teaching and either a record of or the potential for continuing productive scholarship. Responsibilities: teaching undergraduate and graduate level mathematics or statistics courses; conducting research; advising and mentoring students, with particular sensitivity to women and

minority students; institutional service.

Submit letter of application and vitae to Search Committee, Department of Mathematics and Statistics, American University, 4400 Massachusetts Avenue NW, Washington, DC 20016-8050. Have official transcripts and three letters of reference sent directly to the department. At least one letter should specifically mention teaching experience.

All applicants are encouraged to review full application instructions, available at www.mathstat.american.edu/positions, or from the department at (202) 885-3124, or by email at mathstat@american.edu.

American University is an Equal Employment Opportunity / Affirmative Action employer, committed to a diverse faculty, staff, and student body.

Women and minority candidates are strongly encouraged to apply.

STATISTICIAN

www.rti.org

The Statistics Research Division of RTI International seeks a statistician with a BS level with 2 to 3 years or a MS level with 1 to 2 years experience to perform analysis and support work in analyzing homeland security or regulatory issues and policies. Candidate will work with existing survey and other data, as well as data collected through this project on other tasks.

Candidate must have strong quantitative skills and experience with SAS and STATA as well as strong oral communication and writing skills. Contract research and SUDAAN programming are desirable.

RTI offers a comprehensive package including 4 weeks paid time off, 10 paid holidays, tuition reimbursement, medical/dental benefits, and a generous retirement plan.

Must be a US Citizen. EOE/AA/M/F/H/C

Apply online to position xxxx at <u>www.rti.org</u> or send resume to: Attn: Tara Boyette E-mail: <u>tboyette@rti.org</u> or fax 919-990-8336 RTI, PO Box 12194, RTP, NC 27709-2194

Senior Psychometrician

The American Institutes for Research (AIR) is a well-established research organization specializing in education, assessment, special education, early childhood, and other social policy issues. The Computer and Statistical Sciences Center in AIR's Assessment Program is currently seeking a Senior Psychometrician with expertise in psychometrics to lead both operational and research studies. AIR's Assessment Program offers a comprehensive and distinctive set of services within today's competitive educational assessment landscape. As an integral program within AIR, we offer clients assessment products and services that are enhanced by our position as a leading educational research organization.

This position will provide leadership, technical oversight, and guidance to junior and mid-level staff and other project teams. The successful candidate will bring a solid understanding of the statistical theory, as well as the application of statistical methods, strong writing skills, outstanding programming skills and the ability to work well with interdisciplinary teams.

Qualified Candidates will have a Ph.D. in Statistics plus at least 5-10 years of related experience. Candidates should have experience with assessment systems, sampling theory, item response theory, and must possess excellent interpersonal and communication skills in both written and spoken English, commensurate with that of a research professional. Experience with multilevel modeling

programs and value-added studies involving hierarchical linear models and structural equation models a plus.

Candidate must have excellent computer programming skills and must be especially strong in SAS programming. Experience with other statistical packages, such as STATA, as well as IRT scaling packages such as WINSTEPS, BILOG, PARSCALE or other test scaling and analysis programs is desired.

AIR offers a salary commensurate with experience, plus excellent benefits including 17 days paid time off, tuition reimbursement, and a transportation subsidy. For more information, please visit our website at www.air.org, or to apply directly to this position, please go to: http://jobs-airdc.icims.com and reference job number 4648. EOE

Biostatistician

Job ID: 1892

Location: Rockville, MD

Employment Status: Full-Time Regular

Required Experience: 2-5 years

Required Education: Doctorate Degree or Equivalent

FLSA: Exempt (Salary)

Work Hours Per Week: 40

Required Travel: 0%

Relocation: Yes

Summary/Description:

You are part of an intensive, cutting edge team that is looking for novel ways to improve the drug development clinical trial design process. As a member of the Biostatistics department, you will be responsible for providing statistical and data analyses support to HGS clinical products. You will be an integral member of a clinical team designing clinical protocols and trials, reviewing and preparing statistical data, including analytical plans, case report forms, and clinical study reports. You will be gaining experience and learning within a fast-paced drug development function.

HGS is currently developing novel proteins in several therapeutic areas, including immunology and infectious diseases. LymphoStat-BT is a novel human monoclonal antibody being developed for the treatment of systemic lupus erythematosus and rheumatoid arthritis. AlbuferonT is a novel long-acting form of interferon alpha developed for the treatment of hepatitis C. CCR5 is a human monoclonal antibody to the CCR5 receptor for the treatment of HIV/AIDS. Our CCR5 antibody is intended to block entry of the HIV virus and its subsequent replication by binding to the CCR5 receptor.

Key responsibilities:

- . Provide statistical support to the design, analysis and reporting of pre-clinical and clinical studies
- . Develop statistical methodology to support clinical, pre-clinical studies
- . Actively participate in project teams
- . Write clinical protocol and statistical analysis plans
- . Support Medical Writing in the writing of final clinical study reports

. Be familiar with Federal regulations such as CFRs and ICH- guidelines

Requirements:

. Ph.D. in Statistics, Biostatistics or related field with at least 2 years experience in the biopharmaceutical industry or Masters in Statistics or Biostatistics with at least 5 years experience in the biopharmaceutical industry

- . Knowledge of S-Plus, SAS, R statistical packages
- . Good Verbal and Written communication skills a must
- . Knowledge of computer systems, web technology desirable

Our Culture:

Dedicated to bringing new gene-based treatments and cures to patients who need them, Human Genome Sciences offers the opportunity to combine breakthrough science and business work in a fast-paced and fast-growing organization. HGS places no limits on the career opportunities that employees can pursue as the company realizes its goal of becoming an independent and global biopharmaceutical leader. Committed to supporting employees both professionally and personally, HGS offers tailored education, benefits and personal life support programs to help employees achieve their full potential.



P.O. Box 752 Suitland, MD 20752

NON-PROFIT ORG. U.S. POSTAGE PAID FALLS CHURCH, VA PERMIT NO. 186

Washington Statistical Society

President Clyde Tucker		202-691-7371 J		P ast President John Czajka		P 85 Ji	President-Elect Jill Montaquila		301-517-4046				
	Sec Tor	rerary 1 Broene	202-287-17	/15	Treasurer John Finame	ore 3	01-763-59	93					
Vice Chair Carolee Bu	C ouncil of Chapt -997-2264	l of Chapters 264			Council of Chapters Repre Glenn White 202		epresentative 202-327-641	4					
	Leslie Wallace Nancy Bates		Representative-at-Large 301-738-3543 Michator 301-763-5248 Larry		inclair		202-693-1153 301-458-4000						
WSS Program Chairs													
Agriculture and Natura Mel Kollander Mike Fleming	al Resources 202-537-6700 202-720-8951	Econom Linda At Karen Pe	ics kinson ence	202-694-50 202-452-23	46 42	Methodology Don Malec Jonaki Bose		301-763-171 202-366-997	8 9				
Public Health and Bios Grant Izmirlian Jai Choi	Public P Brian A.	Public Policy Brian A. Harris-Kojetin 202-395-			Quality Assur Amrut Champ Eugene Burns	rance and paneri	l Physical Sciences 202-366-5998 202-366-3491						
Defense and National S Wendy Martinez	Human Myron K Wendy F Robie Sa	Human Rignts Myron Katzoff Wendy Rotz Robie Sangster		07 22 17	Alan Jeeves		202-366-419	4					
Short Courses Sylvia Dohrmann Trena Ezzati-Rice	301-610-5119 301-427-1478	Social a Judy Dro Kevin Do	nd Demograph bitcour eardorff	ic Statistics 202-512-91 301-763-60	45 33	Statistical Co Brigid Brett-E Dean H. Judso	mputing Soborn	202-327-594 301-763-205	6 7				
Electronic Mail Comm Michael Greene S.V. (Vince) Massimini	ittee 301-504-7335 703- 883-5893	Data Co Sameena	llection Metho Salvucci	ds 202-484-42	15	Membership Fritz Scheuren John Dixon Timothy Kenn	n nel	202-320-344 202-691-751 301-736-679	6 6 5				
Webmaster Dan Jacobs	301- 403-4220	WSS NE Michael	E WS Editor Feil	202-690-31	30	Curis Jacobs Amy Luo Anthony Why	Award	202-327-666 301-763-608	7 6				
Employment Anne Peterson	703-979-1191	Quantita Carolyn	ative Literacy Carroll	703-379-45	00	Local Arrang Kevin Cecco	gements	202-874-046	4				
Video Librarian Mel Kollander	202-537-6700	Quantit a Archana Ryan Pet	ative Literacy I Joshee Iska	Poster Comp 202-327-68 202-327-72	etition 59 45	Quantitative Mark Otto	Literacy V	Workshop 301-497-587	2				
Social Arrangements Yves Thibaudeau	Social Arrangements Yves Thibaudeau 301-763-1706		WSS Committee on ASA Fe Michael L. Cohen 202 Fritz Scheuren 202		A Fellows 202-334-3765 202-320-3446 202-200-4222		WSS Historian & Financial Advisor Michael P. Cohen 202-366-9949		9				
Video Coordinator John Dixon	202-691-7516	Steve Co Dwight I	hen Brock	202-720-43 301-427-14 301-517-40	66 26	Science Fair Bob Clickner	Coordinat	or 301-294-281	5				