



WASHINGTON  
STATISTICAL  
SOCIETY

# WSS NEWS

February 1993

## WSS Members Elected to AAAS

Two WSS members were among eight American Statistical Association members elected Fellows of the American Association for the Advancement of Science (AAAS). Susan Ellenberg, National Institute of Allergy and Infectious Diseases, was honored for her research in cancer and AIDS clinical trials, for service to the statistical profession, and for advancing the role of statisticians in biomedical research. Katherine Wallman, the new Chief Statistician at the Office of Management and Budget, was cited for maintaining and strengthening the federal statistical system (especially while head of the Council of Professional Associations on Federal Statistics) and for service to the statistics profession. Congratulations!

## Short Course on Resampling Methods

The Washington Statistical Society will sponsor a short course on Resampling Methods for Complex Surveys, by J.N.K. Rao, Carleton University, Ottawa, Ontario, Canada. The course will be held on Monday, March 1, 1993, 8:00 AM to 4:00 PM, at the Crystal Ballroom, Hyatt Regency Bethesda. Registrations are still being accepted. See the enclosed flyer for full details.

### WSS Seminars

(All events are open to any interested persons.)

#### FEBRUARY

- |    |       |  |
|----|-------|--|
| 10 | Wed.  | Estimation of the Loss from Failed Savings and Loans for the RTC   |
| 18 | Thur. | The Overestimated Workweek: Alternative Approaches to Estimated Hours at Work                              |
| 22 | Mon.  | Nonresponse on the Farm Costs and Returns Survey (FCRS)  |
| 23 | Tues. | The Effects of Missing Observations in Analyzing Repeated Measures   |
| 24 | Wed.  | Handling Missing (or Bad) Data: A Theoretical Overview of Reweighting for Unit Nonresponse (4th in series) |

#### MARCH

- |   |      |  |
|---|------|--|
| 1 | Mon. | Short Course: Resampling Methods for Complex Surveys |
|---|------|--|

## Announcements

### WSS Members Nominated

Jonas Ellenberg, Chief of the Biometry and Field Studies Branch, National Institute of Neurological Disorders and Stroke, and Mitchell Gail, Head of the Epidemiologic Methods Section, National Cancer Institute, have been nominated as candidates for the 1994 President-Elect of the American Statistical Association (ASA). The winner will serve as President of ASA in 1995.

The Council of Chapters has three representatives on the ASA Board of Directors -- one from each geographic region, elected on a rotating basis for a three-year term. This year, two WSS members have been nominated to represent the Northeast Region: Rich Allen, National Agricultural Statistics Service, and Nancy Kirkendall, Energy Information Administration. A number of other local statisticians are on the upcoming ASA ballot, as well. Good luck to all.

### Shiskin Award Nominees Sought

Nominations are invited for the annual Julius Shiskin Award for Economic Statistics. This award, established in 1979 by the Washington Statistical Society and co-sponsored by the National Association of Business Economists, is given in recognition of unusually original and important contributions in the development of economic statistics or in the use of economic statistics in interpreting the economy. The contributions could be in statistical research, in the development of statistical tools, in the application of computer techniques, in the use of economic statistical programs, in the management of statistical programs, or in developing public understanding of measurement issues, to all of which Mr. Shiskin contributed. Either individuals or

groups in the public or private sector can be nominated.

The award will be presented with an honorarium of \$500 at the Washington Statistical Society annual dinner in June 1993. A nomination form may be obtained by writing to the Julius Shiskin Award Committee, American Statistical Association, 1429 Duke Street, Alexandria, VA 22314-3402. Completed nominations must be received by April 1, 1993.

The most recent winners of the Shiskin Award are: Allen H. Young, for his leadership in forging and refining statistical tools that contribute substantially to the ability to analyze the U.S. economy and for imaginative management of a major statistical agency through critical times; Carol A. Carson, for her leadership in developing and refining the economic statistical database of the U.S. and for her contributions to the development of the revised U.N. System of National Accounts; and Stephen Taylor, for his work in developing and perfecting the U.S. Flow of Funds Accounts and using them to interpret the behavior of financial markets.

### QL Update

The Washington Statistical Society's Quantitative Literacy Group announces several activities in Prince George's County public schools. The school system is introducing a completely new math sequence for middle schools next year, which includes two quarters of statistics and one quarter of probability. The whole sequence is planned to have a very hands-on, real-life orientation.

The county math supervisor has also asked for QL volunteers' help in developing a statistics

(Continued on page 7.)

## Program Abstracts

**Topic:** Estimation of the Loss from Failed Savings and Loans for the RTC

**Speaker:** Charles D. Cowan, Resolution Trust Corporation

**Discussant:** Samuel M. Slowinski, Federal Reserve Board

**Chair:** Phillip S. Kott, National Agricultural Statistics Service

**Date/Time:** Wednesday, February 10, 1993, 12:30 - 2:00 PM

**Location:** BLS Cognitive Lab, Room 2990, Postal Square Building, 2 Massachusetts Ave., NE, Washington, DC (Red Line -- Union Station)

**Sponsor:** Methodology Section

**Abstract:** The Resolution Trust Corporation (RTC) is responsible for the sale of failed savings and loans (S&L), if the RTC can find a buyer, or the disposition of assets held by failed S&L's, if the S&L cannot be sold. The RTC has instituted a large scale quarterly survey to estimate the total value of recoveries, the amounts received for sold assets. Estimates are made in this survey for 17 asset categories (such as consumer loans) and for the total recovery for all asset types. The survey sample is a stratified multi-stage sample of institutions and assets, with a rotation design to spread the sample over a four-quarter period and with supplementation to include a sample of new institutions, as they fail and go into receivership under the RTC.

### Newsletter in Search of an Editor

For the past year and a half Bettye Jamerson and Wendy Alvey have been working hard to re-shape the *WSS NEWS* into a more informative and timely vehicle to notify you about all of the various activities of the Washington Statistical Society. As fun and challenging as that has been, it is time to step down. Therefore, WSS is looking for a new editor to take over this very important task. Volunteers with some time on their hands (and, preferably, knowledge of Pagemaker or some other desktop publishing software) should contact Marie Argana at (301) 763-4595. Jamerson and Alvey have agreed to finish out the current year (through June 1993), but would like to begin working with the new editor as soon as possible, in order to ensure a smooth transition.

## Program Abstracts (cont'd)

**Topic:** The Overestimated Workweek: Alternative Approaches to Estimated Hours at Work

**Speakers:** John P. Robinson, University of Maryland, and Ann Bostrom, George Tech

**Chair:** Clyde Tucker, Bureau of Labor Statistics

**Date/Time:** Thursday, February 18, 1993, 12:30 - 2:00 PM

**Location:** BLS Cognitive Lab, Room 2990, Postal Square Building, 2 Massachusetts Ave., NE, Washington, DC. (Red Line -- Union Station)

**Sponsor:** Data Collection Methods Section

**Abstract:** Much use is made of the BLS/CPS questions on estimated weekly hours at work, which have remained at rather steady levels over the last two decades. Comparisons are made between these workweek estimates and work hours reported by American workers in daily time diaries of their activities, which have shown a decline in hours at work over the last two decades. Micro-level analyses reveal reasons and potential explanations for this discrepancy in trends. Special attention is given to gender differences in the discrepancies and to additional diary data from eight other western countries related to hours at work -- some of which include weekly time diaries that can be directly compared to weekly estimates.

\* \* \* \* \*

**Topic:** Nonresponse on the Farm Costs and Returns Survey (FCRS)

**Speakers:** Terry O'Connor and Kay Turner, National Agricultural Statistics Service

**Discussant:** Mary Ahearn, Economic Research Service

**Chair:** Dave Dillard, National Agricultural Statistics Service

**Date/Time:** Monday, February 22, 1993, 12:30 - 2:00 PM

**Location:** Waugh Auditorium (in basement), 1301 New York Ave., NW, Washington, DC. (Blue/Orange Lines -- between Metro Center and McPherson Square). Call Linda Atkinson on (202) 219-0505 to place your name on the guard's list for entry.

**Sponsor:** WSS and National Agricultural Statistics Service

**Program Abstracts (cont'd)****Nonresponse on the Farm Costs and Returns Survey (FCRS) (cont'd)**

**Abstract:** Almost all sample surveys suffer from nonresponse. Response can be quite poor on a survey such as the Farm Costs and Returns Survey (FCRS), where respondents are asked to provide sensitive economic data during a lengthy interview. The first speaker will discuss research he is conducting on the FCRS to learn more about why some sampled farmers refuse to participate. It is hoped that a better understanding of the specific reasons farmers refuse will allow interviewers for the National Agricultural Statistics Service (NASS) to better solicit cooperation from reluctant respondents. In spite of these efforts, response is likely to remain at low levels. The second speaker will discuss ways NASS is handling nonresponse more equitably when it summarizes data from the FCRS. Improved adjustments for nonresponse should produce more defensible estimates.

\* \* \* \* \*

**Topic:** The Effects of Missing Observations in Analyzing Repeated Measures

**Speaker:** Margaret C. Wu, National Heart, Lung, and Blood Institute

**Discussant:** John Lachin, George Washington University

**Chair:** Linda Atkinson, Economic Research Service

**Date/Time:** Tuesday, February 23, 1993, 12:30 - 2:00 PM

**Location:** Waugh Auditorium (in basement), 1301 New York Ave., NW, Washington, DC. (Blue/Orange Lines -- between Metro Center and McPherson Square). Call Linda Atkinson on (202) 219-0505 to place your name on the guard's list for entry.

**Sponsor:** Economics Section

**Abstract:** Some parametric and nonparametric methods for analyzing repeated measures are briefly reviewed. The effects of random, as well as informative, missing observations on these methods are compared and illustrated.

## Program Abstracts (cont'd)

**Topic:** Handling Missing (or Bad) Data: A Theoretical Overview of Reweighting for Unit Nonresponse (4th in series)

**Speaker:** Phillip S. Kott, National Agricultural Statistics Service

**Discussant:** Richard Bolstein, George Mason University

**Chair:** Michael P. Cohen, National Center for Education Statistics

**Date/Time:** Wednesday, February 24, 1993, 12:30 - 2:00 PM

**Location:** BLS Cognitive Lab, Room 2990, Postal Square Building, 2 Massachusetts Ave., NE, Washington, DC. (Red Line -- Union Station)

**Sponsor:** Methodology Section

**Abstract:** Survey data are often reweighted to compensate for unit nonresponse. This presentation will review two distinct justifications for reweighting. The first assumes a response or quasi-randomization model in which survey response is treated as another phase of the random selection process. In the second, the survey values themselves are assumed to satisfy a simple stochastic model.

Both of these justifications rely on modeling, albeit of very different variables. They both can be invoked to support the popular technique of post-stratifying the unit respondents into mutually exclusive reweighting groups. This has led to a good deal of confusion, both conceptually and operationally.

One goal of this presentation is to clear up some of this confusion. A second is to show how more complicated reweighting schemes (such as those incorporating raking, linear regression, and logistic regression) can be justified under one or preferably both of the models.

## Announcements

### QL Update (cont'd)

course at the high school level. In particular, she would like us to propose the outcomes from the course, i.e., what is it that students should know and be able to do at the end of the course.

Finally, a few volunteers are contacting one or two schools each, to see how we can help them in QL. We expect a rise in the response from middle schools next school year, when they start the new math sequence.

If you're willing to be involved with individual schools or help with the high school statistics course, call Gary Shapiro at (301) 763-2674. To assist in other counties, please call Ron Fecso at (202) 334-2295.

### Data Bank on Federal Information

The National Technical Information Service (NTIS), Department of Commerce, has released a data bank on CD-ROM designed to give researchers access to extensive federal government information. The National Economic, Social and Environmental Data Bank (NESE●DB) includes information on economic growth, education, health issues, criminal justice and the environment. More than 25 federal organizations contributed.

The NESE●DB CD-ROM comes with software and requires a personal computer with 640K RAM, an ISO 9000 (standard) CD-ROM reader, and Microsoft CD-ROM extensions (versions 2.0 or higher). It may run on Macintosh with a PC emulator. Annual subscriptions and quarterly updates are available from the NTIS Subscription Branch by calling (703) 487-4630 or faxing (703) 321-8547 (No. PB93-592440KRM for annual

subscription or No. PB93-592441KRM for most recent quarter only).

### Surveys and Privacy Brochure

The American Statistical Association's Committee on Privacy and Confidentiality released a brochure on "Surveys & Privacy" last year. The brochure attempts to address concerns the general public may have about participation in surveys. The pamphlet just received an Excellence in Print Gold Award from Washington Express, an organization of publications and public relations professionals, for both its content and design. Copies can be obtained by calling ASA at (703) 684-1221.

### Health Records Conference

The Task Force on the Privacy of Private Sector Health Records presents Health Records: Social Needs and Personal Privacy, February 11-12, 1993, at the Omni Shoreham Hotel, Washington, DC. The conference, jointly sponsored by the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, and the Agency for Health Care Policy and Research, will explore the most appropriate and effective methods for maintaining a balance between the privacy of health records and the legitimate needs for information, while facilitating the development of the electronic health system and health records. Presentations will focus on uses of health information, the effects of health information upon individual rights, and the best means for society to strike the balance between the privacy of health records and the need for data in the future. For information about registration, call Kunitz and Associates, Inc. at (301) 770-2730.

## Announcements (cont'd)

### Tentative Schedule of SIGSTAT Meetings

SIGSTAT is the Joint Special Interest Group in Statistics for the Capital PC User Group and WORMSC (Washington Operations Research/Management Science Council). The tentative schedule of events for the next two months is as follows:

- 2/10/93: MathCad.--**New Windows version of the "mathematical scratchpad," includes symbolic and numeric computations along with graphics.
- 3/10/93: Mathematica - Part 1.--** An Introduction to the Windows version of this leading symbolic math package.

All meetings are scheduled for Wednesdays from 12:30 - 1:30 PM in Room B-14, 1301 New York Ave., NW, Washington, DC. (The building is located midway between the Metro Center and McPherson Square Metro stops.) If this is your first SIGSTAT meeting, call Charlie Hallahan, (202) 219-0507, to gain entry into the building.

### Applied Change Point Conference

The University of Maryland Baltimore County (UMBC) and the National Security Agency are organizing a conference on applied change point problems. The conference will be held on the UMBC campus March 17-18, 1993. Invited speakers include John Hartigan, Maria Huskova, Ian B. MacNeill, Emmanuel Parzen, Adrian Raftery, Pranab Sen, Muni Srivastava, and Shelemyahu Zacks. Persons wishing to attend should contact Peter Matthews, Department of Mathematics and Statistics, University of Mary-

land Baltimore County, 5401 Wilkins Ave., Baltimore, MD 21228 or phone (410) 455-2423. Deadline: February 15, 1993.

### Census Bureau's 1993 Annual Research Conference

The Census Bureau's 1993 Annual Research Conference (ARC 1993) will be held March 21-24, 1993, at the Doubletree Hotel, National Airport in Arlington, Virginia (only one half mile from National Airport and three blocks from the Metro). ARC 1993 will comprise a mix of topics such as simplification of census questionnaires, census evaluation, confidentiality issues, uses of administrative records, creating economic databases, automated coding, CAPI questionnaire design, geographic information systems, imputation and variance estimation, evaluation of automated data collection, coverage and nonresponse, survey reinterviews, and analyses of survey and census data. For further information contact Maxine Anderson-Brown, ARC Conference Coordinator, Office of the Director, Bureau of the Census, Washington, DC 20233, phone: (301) 763-1150.

### Accelerated Testing Workshop

The National Institute of Standards and Technology (NIST) will sponsor a four day Workshop on Accelerated Testing: Statistical Models, Test Plans, and Data Analyses, April 26-30, 1993, at Gaithersburg, Maryland. The workshop will be presented by Wayne Nelson, a leading authority on reliability data analyses and statistical methods in accelerated testing, in conjunction with Jonathan Martin, Jim Lechner, and Harry Schafft of NIST. Manufactured products last for years under normal operating conditions; however,



## Announcements (cont'd)

### Accelerated Testing Workshop (cont'd)

management and engineering decisions require reliable information early in the life cycle. Accelerated testing quickly yields such information. This workshop will describe accelerated testing methods in a manner that will benefit those responsible for product design, development, testing and to accurately estimate and improve product reliability using test data. For complete information, contact Ms. Lisa Oakley, National Institute of Standards and Technology, Admin A337, Gaithersburg, MD 20899, phone: (301) 975-2839.

### Public Health Conference for the Year 2000

The National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, has issued a call for papers for the next biennial Public Health Conference on Records and Statistics, to be held July 19-21, 1993, in Washington, DC. The conference theme is "Toward the Year 2000 -- Refining the Measures." Health People 2000, the nation's plans for disease prevention and health promotion will be featured, with sessions on data collection and analysis, both conceptual and methodological. Topics will include such areas as race and ethnicity classification, disability research, health statistics from record systems, confidentiality, intercensal population estimates, and socio-economic indicators. Abstracts are due February 5, 1993. For information contact NCHS, PHCRS, 6525 Belcrest Rd., Room 1100, Hyattsville, MD 20782 or call (301) 436-7142.

### Transparency Masters Book Available

The Audiovisual Material Committee of the American Statistical Association's Section on

Statistical Education has completed the publication of *Transparency Masters Book for Teaching Statistics*. It consists of over 200 masters from which a teacher can readily make transparencies for introductory statistics courses, mathematics courses and applied statistics courses. They can also be used at the high school level. Topics covered include probability, data, random variables and probability distribution, binomial random variables, normal random variables, sampling and sampling distribution, estimation and tests of hypotheses. To order, contact Mosby-Year Book at (800) 426-4545.

## Employment Column

As a service to local statisticians, the Washington Statistical Society News provides notification of employment opportunities and descriptions 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 write to: Bill Arends, USDA-NASS, Room 4133 South Building, Washington, DC 20250-2000. Contact Mr. Arend at (202) 720-6812.

## Vacancies

### Mathematical Statisticians (Biomedical)

The Food and Drug Administration, Center for Drug Evaluation and Research, Pilot Drug Evaluation Staff seeks statisticians for evaluation and related research in clinical areas of arthritis, analgesics, anesthesia, drug abuse, and steroidal

## Employment Column (cont'd)

### Mathematical Statisticians (Biomedical) (cont'd)

drug products in many other disease areas. Openings currently exist for mathematical statisticians and biostatisticians interested in the application of innovative statistical methodology to clinical trials related to the assessment of safety and effectiveness of drugs. Successful applicants will apply their skills in the statistical evaluation of clinical trials from new drug applications submitted by pharmaceutical firms and research in statistical methodologies of clinical trials. Ph.D.-equivalent training in mathematical statistics or biostatistics is required. Experience in exploratory data analysis and statistical modeling is an asset. Applicants should have good written and oral communications skills. Salary ranges from \$38,107-\$70,278, depending on qualifications and experience. For some appointments, U.S. residency (but not citizenship) is required. Send curriculum vitae or Federal Employment Application (SF-171) to Dr. Hoi M. Leung, Pilot Drug Evaluation Staff, Room 9B45, Food and Drug Administration, HFD-007, Rockville, MD 20857.

### Population Reference Bureau Internships

The Population Reference Bureau (PRB) is offering three internships for the 1993-1994 year:

- **International Programs.**-- The intern will work at PRB or the U.S. Agency for International Development to help with the production and distribution of population material for policy makers in developing countries. The fulltime position pays between \$18,000 and \$22,000 annually; some

population- or public health-related classes or work experience are required, as well as foreign language skills. (Deadline: April 2, 1993)

- **Academic Year Program.**-- The intern will work in PRB's Policy Studies Department for nine months, beginning fall 1993. Candidates should have an interest in a specific population-related area and will work on various ongoing staff projects. This 35-hour a week program pays a stipend of \$8.00 an hour. (Deadline: April 2, 1993)
- **Summer Program.**-- The intern will work at PRB in its Policy Studies or Information and Education Departments for three months, beginning May or June 1993, aiding staff on domestic and international projects, depending on intern's interest. This 35-hour a week program pays a stipend of \$8.00 an hour. (Deadline: February 5, 1993)

All internships are open to undergraduate and graduate students. Send resume and letter of application, describing academic studies, interest in the field of population, and work experience, plus two letters of recommendation, to Internship Program, Population Reference Bureau, Inc., 1875 Connecticut Ave., NW, Washington, DC 20009-5728.

### Job Applicants

Listed below is a brief description of the qualifications of an applicant seeking employment. Employers interested in interviewing an applicant should contact Bill Arends by mail -- at USDA-NASS, Room 4133 South Building, Washington,

## Employment Column (cont'd)

DC 20250-2000-- or by telephone -- at (202) 720-6812. All requests should include the code number from the applicant's ad and employer's name, organization, and telephone number. The applicant will be notified of the employer's interest and initiation of any further contact will be left to the applicant. All contacts will be kept confidential.

### Applicant #93-01

Looking for full-time employment in an entry level position that would utilize my statistical abilities.

#### Education:

George Mason University -- 9/91 - present. Graduate Student in Statistics. Completed 15 semester hours. Applied Statistics, Regression Analysis, Multivariate Statistics, Survey Sampling, with SAS programming applications. GPA 4.0/4.0.

Virginia Polytechnic Institute and State University -- 9/86 - 5/88. Master of Science in

Mathematics -- Differential Equations, Real Analysis. GPA 3.4/4.0.

#### Computer Experience:

FORTRAN, PASCAL, SAS. Experience using SAS for statistical programming. Experience with PC, VAX/VMS, and UNIX.

### Applicant #93-02

#### Education:

M.S. in Statistics, University of Maryland  
M.A. in Applied Mathematics, University of Maryland

#### Skills:

Over three years of related work experience.

Analyzed software packages; developed mathematical and statistical models. Experience with writing reports. All phases of software development, and many mathematical software packages. Also have teaching and supervision experience.

Creative, analytical, dependable.

### **\*\*\* Note from WSS NEWS Editors \*\*\***

Items for publication in the March 1993 *WSS NEWS* should be submitted no later than Tuesday, January 26, 1993. Fax items to:

Bettye Jamerson or Wendy Alvey  
Fax: (202) 874-0922

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**Biostatistics**  
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