

WSS Newsletter - November 1982

WSS Sponsored

CALENDAR

Topic: Speakers: The Reagan Experiment: Can the Impact be Measured? Dr. Isabele V. Sawhill, Senior Fellow, Urban Institute and Gregory B. Mills, Research Associate, Urban Institute

Date and Time:

Monday, November 8, 1982, 12:30-2:00 p.m.

Location:

Room 3000A, Federal Building, 12th and Pennsylvania Avenue, N. W.

WSS SPECIAL MEETING

Topic:

Changing Demographic Realities and Their Pressures on Public Policy

Speaker: Date and Time: Location:

Bruce Chapman, Director, U.S. Bureau of the Census Tuesday, November 9, 1982, 12:30-2:00 p.m. IRS Auditorium, 1111 Constitution Avenue, S.W.

Topic:

Theory Sigma

Speaker: Date and Time: J. Stuart Hunter, Consultant, Princeton, New Jersey

Tuesday, November 16, 1982, 12:30-1:45 p.m.

Location:

George Washington University, Room 103, Building C, 2201 G Street, N. W.

Topic:

Calibration Curves: A Realistic Evaluation of Their Uncertainties C. H. Spiegelman, National Bureau of Standards

Speaker: Date and Time: Location:

Thursday, November 18, 1982, 12:30-2:00 p.m. Main Commerce Building, Conference Room A

Topic:

Residential Energy Consumption: Pitfalls of Designing and Implementing a New

Survey

Speaker:

Lynda Carlson, Department of Energy Tuesday, November 23, 1982, 12:30-2:00 p.m.

Date and Time: Location:

Forrestal Building, 1000 Independence Avenue, S.W., Room 6A110

Topic:

Randomization, Why It Should Not Be Done!

Main Commerce Building, Room 6802

Speaker:

Dennis Lindley, Visiting Research Professor, George Washington University Thursday, December 2, 1982, 12:30-2:00 p.m.

Date and Time:

Location:

Location:

Topic:

G. W. University Academic Center, Room T206, 21st and J Street, N. W.

Topic: Speaker: Date and Time:

Interactive Graphical Display and Analysis Techniques James J. Filliben, National Bureau of Standards Thursday, December 9, 1982, 12:30-2:00 p.m.

Bayesian and Non-Bayesian Methods of Estimating the Failure Rate Function,

with Critical Comments

Speaker:

Professor Nozer Singpurwalla, George Washington U.

Date and Time: Location:

Thursday, December 9, 1982, 12:30-2:00 p.m. G. W. University Academic Center, Room T206, 21st and J Street, N. W.

Topic:

Interpreting Statistics on the Money Supply

Speaker:

Lloyd C. Atkinson, Deputy Asst. Director for Fiscal Analysis, Congressional

Budget Office

Date and Time: Location:

Thursday, December 14, 1982, 12:30-2:00 p.m.

IRS Auditorium, 1111 Constitution Avenue, S.W.

Other Sponsors

Sponsor: Topic:

Statistics of Income Division, IRS The Population-Sample Decomposition

Speaker: Date and Time: Bernard M.S. van Praag, Professor, Leyden (Holland) University

Location:

Monday, November 1, 1982, 10:30 a.m.-12:00 noon 1201 E Street, N. W., Room 401, Washington, D. C.

Sponsor:

Social Security Administration

Topic:

The Impact of Changes in the Income Distribution on the Distribution of Wealth:

An Application of Social Filter Theory

Speaker: Date and Time: Bernard M.S. van Praag, Professor, Leyden (Holland) University

Monday, November 1, 1982, 2:00-3:30 p.m.

Location:

11th Floor Conference Room, 1875 Connecticut Avenue, N. W., Washington, D. C.

Sponsor:

National Center for Health Statistics

Topic: Speaker: Date and Time: Methodology for the Current Population Survey Lawrence Cahoon, Bureau of the Census

Location:

Thursday, November 18, 1982, 1:30-2:30 p.m. Center Building, Room 10-53, 3700 East-West Highway, Hyattesville, Maryland

Sponsor:

Statistics of Income Division, IRS

Annual Report, Statistics of Income - 1980 Individual Income Tax Returns Topic: Beth Kilss, Peter Sailer and Richard Thomas, IRS

Speaker: Date and Time: Location:

Wednesday, November 24, 1982, 1:00-3:00 p.m. 1201 E Street, N. W. Room 806B, Washington, D. C.

ETAILED INFORMATION ON THE MEETINGS

Topic: Abstract: The Reagan Experiment: Can the Impact Be Measured?

The speakers will report on the Urban Institute's recently released book, The Reagan Experiment-An Examination of Economic and Social Policies Under the Reagan Administration and discuss some of the critical data and statistical needs for the next phase of the study. The Urban Institute is seeking advice from the statistical community on alternative approaches for measuring the long term impacts of recent policy changes.

Topic:

Theory Sigma

Chair:

Seymour M. Selig, Office of Naval Research

Abstract:

American industry faces the challenge of how best to improve the quality of products and, simultaneously, to enhance productivity. Various theories of management have been proposed as solutions to the problem. Unfortunately, the role of the statistician is overlooked along with the tremendous advances in the arts in statistics that have occurred since the end of World War II. Theory sigma attempts to coalesce good

management practice with up to date statistical methods.

Topic: Chair: Discussant:

Abstract:

Calibration Curves: A Realistic Evaluation of Their Uncertainties

Dr. Churchill Eisenhart, National Bureau of Standards

Dr. Edward Wegman, Office of Naval Research

Calibration curves are used to obtain one type of measurement from another. Usually one type is measured less precisely than the other; let Y denote the former and x the latter type of measurement. The calibration curve relates Y to x according to the equation $Y = f(x) + \sigma \varepsilon$, where ε is a standard normal random error, σ is the unknown standard deviation of the measurement error; and f is the unknown calibration curve.

If f were known x would typically estimated by $f^{-1}(Y)$. Since it is unknown, a calibration experiment is performed to collect the data x_i , $Y_i = f(x_i) + \sigma \epsilon_i$, i = 1,..., n. These data are used to obtain an estimate, σ , of the standard deviation, and, $\hat{\tau}$, an estimate of the calibration curve. The Y measurement process is then said to be calibrated to the x process.

After calibration new measurements Y_i^* , $i=1,2,...k_0$, $1 < k_0 < \infty$ are obtained, and for each the associated x_i^* is estimated by $x_i^* = f^{-1}(Y_i^*)$. Uncertainty statements are made about \hat{x}_i^* , $i=1,...k_0$ using information about the distribution of \hat{f} , \hat{g} , and Y_i^* , $i=1,...k_0$ This talk examines critically various forms of calibration uncertainty 1,...,k₀. It proposes several basically new diagnostic techniques as well as statements. calibration control chart procedures.

Topic: Chair: Discussant: Residential Energy Consumption: Pitfalls of Designing and Implementing a New Survey

Eva E. Jacobs, Bureau of Labor Statistics

Tom Jabine, Consultant Abstract:

The Residential Energy Consumption Survey is in its fourth fielding--a circumstance that those working on the survey find quite amazing. The talk will cover the basic recommendations of starting a major survey with very limited staff and financial resources. The provisions and problems encountered along the way will be discussed. Tom Jabine, as discussant will cover similar experiences he has been involved in.

Topic: Chair: Discussant: Abstract:

Interactive Graphical Display and Analysis Techniques

Karen Kafadar, National Bureau of Standards David Desjardens, Bureau of the Census

The purpose of this paper is to examine various commonly-occurring data analysis problems, and to present graphical solutions to these problems. Several of the solutions presented are new and so may serve as additional tools to the growing arsenal of

graphical techniques at the disposal of the practicing data analyst.

Topic: Bayesian and Non-Bayesian Methods of Estimating the Failure Rate Function, With

Critical Comments

Discussants: Abstract:

Professor Dennis V. Lindley and Dr. Kent Bailey

Recently developed non-Bayesian approaches for estimating the failure rate function will be presented and some weaknesses of these methods will be discussed. Alternative

Bayesian methods are proposed.

Topic: Chair: Abstract: The Population-Sample Decomposition Fritz Scheuren, Internal Revenue Service

This presentation deals with the estimation of model parameters in large samples, with emphasis on the separation of "model problems" and "sample problems." Model problems are the estimation problems we encounter in the usual setting in theory, where samples are assumed to be i.i.d. and representative. Sample problems arise when the sample cannot be assumed to be representative, because of incomplete observations, selectivity bias, measurement errors, etc. This seminar will focus on the population-sample decomposition concept, which enables us in many cases to solve the model problems and sample problems independently and separately from each other.

Topic:

The Impact of Changes in the Income Distribution on the Distribution of Wealth: An

Application of Social Filter Theory

Chair: Abstract: Denton Vaughan, Social Security Administration

Professor van Praag is the founder of the Dutch School of economists who have pioneered in the direct measurement of normative functions which individuals use to evaluate the adequacy of their own income. Social Filter Theory is one theoretical approach used to explain the distribution of parameters of individuals' income

evaluation functions in a given society.

NATIONAL CENTER FOR HEALTH STATISTICS SEMINAR

Thursday, November 18, 1982 - 1:30 p.m. - 2:30 p.m. Center Building, Room 10-53, 3700 East-West Highway, Hyattsville, Maryland

Topic:

Methodology for Current Population Survey

A description of the sample design of current population survey will be given. Some indications of the research on redesign of the survey will be described.

For further information, call Office of Research and Methodology (301) 436-7111

INTERNAL REVENUE SERVICE, STATISTICS OF INCOME DIVISION SEMINAR

Wednesday, November 24, 1982, 1:00-3:00 p.m. 1201 E Street, N. W., Room 806B, Washington, D. C. (Blue/orange/red lines - Metro Center)

Topic:

Annual Report, Statistics of Income—1980, Individual Income Tax Returns

The Intenal Revenue Service, Statistics of Income Division, is sponsoring a seminar on the next in the series of annual reports, Statistics of Income-1980, Individual Income Tax Returns. Three papers will be presented at this seminar. First, Beth Kilss will focus on a number of quality issues, including reporting and processing errors, timing issues, data collection difficulties, and the impact of dollar budget and burden budget cuts. Next, Peter Sailer will analyze the results of the expedited processing used in the production of the 1980 report. Finally, Richard Thompson will highlight some of the important developments in the areas of income and taxes which are reflected in the 1980 report. All three speakers are statisticians with the Statistics of Income Division.

"REFLECTIONS ON BAYESIAN APPROACHES IN OPERATIONS RESEARCH, PROBABILITY, AND STATISTICS"

Saturday, November 6, 1982 at Blacksburg, Virginia

For information contact Professor Nozer D. Singpurwalla, Department of Operations Research, School of Engineering & Applied Science, The George Washington University, Washington, D.C. 20052, Telephone: (202) 676-7534 or Professor Yashaswini Mittal, Department of Statistics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061, Telephone (703) 961-5657.

THIRTY-EIGHTH ANNUAL CONFERENCE ON APPLIED STATISTICS

December 1 to December 3, 1982
Holiday Inn North, Newark Airport, Newark, New Jersey
(Formerly held at Princeton University)

WASHINGTON STATISTICAL SOCIETY STATEMENT OF INCOME AND EXPENDITURES FOR JULY 17, 1981 TO SEPTEMBER 16, 1982

On Hand July 17, 1981\$ 6,418.13
Receipts 1. Dues collected. \$5,830.50 a. through ASA. \$5,783.00 b. through Local Associates. 47.50 2. Interest. 404.63 3. Donation. 40.00 4. Dinners. 3,909.50 Total Receipts. 10,184.63 Total Operating Funds. \$16,602.76
Expenses 1. Newsletter
WSS-SHISKIN AWARD On Hand July 17, 1981. \$ 3,092.64
Receipts 1. Contributions. \$ 250.00 2. Interest. 852.27 National Bank of Washington. \$ 38.99 National Permanent Savings & Loan. 673.01 First Variable Rate Fund. 140.27 Total Receipts. 1,102.27 Total Operating Funds. \$ 4,194.91
Expenses 1. 1982 Award to Edward F. Denison

I have examined the Treasurer's Report of the Washington Statistical Society for the period July 17, 1981 to September 16, 1982. The examination was made in accordance with generally accepted auditing standards. In my opinion, the report presents fairly the cash receipts and disbursements of the Washington Statistical Society for the period July 17, 1981 to September 16, 1982.

Ron Fecso 16 1 740 Je Chair, Audit Committee

EMPLOYMENT COLUMN

Deadline for inserting notices is the 10th of the month preceding the publication date Send notices and requests to: Evelyn R. Kay 520 - 22nd Street, N.W. Washington, D. C. 20037 (202) 331-1153

JOB OPENINGS

Statisticians
Johns Hopkins

Statisticians are being sought to provide statistical support for test planning and to develop methods for experimental data analysis using small sample sizes. PhD level in statistics and experience in

engineering/scientific applications desirable but not required. Send resume to Stevan F. Sayre, Department LER-248, The Johns Hopkins University Applied Physics Laboratory, Johns Hopkins Road, Laurel, Maryland 20707; or call (301) 953-7100, extension 7523.

Computer Science Professor

Applications are invited for a computer science tenure-track faculty position in the Department of Statistics beginning spring or fall 1983. Responsibilities include undergraduate teaching, research and assistance in

expanding a program leading to a B.S. in Computer Science. Rank and salary dependent on experience. Send resume, three letters of reference and graduate transcripts to Professor Arthur D. Kirsch, Chairman, Department of Statistics, George Washington University, 2201 G Street, N. W., Room 315, Washington, D. C. 20052. George Washington University is an Equal Employment Opportunity/Affirmative Action Employer.

Biostat/Epidemiologist Veterans Administration Biostatistician/Epidemiologist to become part of research team studying Vietnam veteran mortality. Master or doctorate in biostatistics or epidemiology, strong background in collecting and analyzing data from

OR/MS TECHNOLOGIES, HARDWARE, AND HUMAN FACTORS SYMPOSIUM

Washington Operations Research/Management Science Council Wednesday, November 10, 1982

Marvin Center, The George Washington University Between H & I Streets on 21st Street, N. W.

AMERICAN STATISTICAL ASSOCIATION 806 Fifteenth Street, N. W., Washington, D. C. 20005 PAID

FALLS CHURCH, VA.

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