May 1987

WASHINGTON STATISTICAL SOCIETY

NEWSLETTER

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International Statistical Programs Center

As part of a continuing but irregular series of articles on the statistical activities of various federal agencies, we offer the following information on the International Statistical Programs Center (ISPC) at the Census Bureau. The editor encourages further contributions in this vein.

History

In the 1940's the Census Bureau began an active role in international technical assistance. Much of this assistance was directed to the countries of Latin America through the 1950 Census of the Americas. During the 1950's and 1960's when the Agency for International Development (AID) and the United Nations were actively supporting long-term advisory teams in developing countries, the Census Bureau had over 50 advisors in overseas assignments at one time. During this period the Census Bureau was instrumental in the development of not only national censuses, but in establishing official statistical offices as well.

Since that time the international technical assistance activities of the Bureau of the Census have grown along with the interest of the United States in world economic and social development. AID had been, and continues to be, the chief source of funding for the international activities of the Census Bureau. However, in recent years the support and influence of other organizations such as the United Nations, the World Bank, and individual country governments have been growing.

Training

Since the inception of the program, ISPC has trained over 4,000 foreign statisticians and computer specialists from nearly 100 countries. Through this program, ISPC has contributed

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WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agriculture & Natural Resources		**Public Health & Biostatistics**		**Short Courses**	
Ron Bosecker	447-3895	Jai Choi	436-7047	Virginia deWolf	366-5361
Maurice Owens	734-4379	Mary Foulkes	496-6818	Terry Ireland	301-859-6104
				Andrew A. White	436-7022
Economics		**Social & Demographic Statistics**		Glenn White	763-5248
Lynda Carlson	252-1112	Lee-Ann C. Hayek	357-1587		
		John Czajka	484-9220	**Methodology**	
Physical Sciences & Engineering				Mary Mulry	763-7140
Donald Gantz	425-3931	**Statistical Computing**		Bill Winkler	252-2140
		Harry Foxwell	872-8058		
Employment		Sally Howe	921-3395	**Newsletter Editor**	
Evelyn Kay	331-1153			David Judkins	251-1500

substantially to statistical development in many countries. Graduates of the program are playing key roles in planning, conducting, and analyzing censuses and surveys in nearly all countries of the developing world. Many graduates have become directors of their countries' statistical offices.

The basic goals of the training programs are to produce a corps of trained personnel in the national statistical offices to meet the information demands of development and to have graduates of the program make immediate contributions to their countries' statistical program through a balanced program of practical application and theory. This training is located at Bureau of the Census headquarters near Washington, DC, and is conducted in English. Training varies in length from 2 to 18 months.

Long- and Short-Term Advisory Services

Throughout the history of ISPC, experts from the Census Bureau and other Federal agencies have been recruited to travel to foreign countries to provide on-site assistance. In some cases, this assistance is given on a long-term basis with one or more resident advisory positions. In others, continuing short-term assistance proves more effective. Increasingly, these two technical assistance modes are being used in countries to provide both continuity and access to a broad range of technical skills. The finding of these activities is normally under the auspices of AID, international agencies, or the host country.

Long-Term Services

The ISPC responds to requests from the United Nations, AID, or developing country governments for long-term assistance on an individual or team basis. Expertise can be provided on developing statistical capabilities in countries ranging from the most rudimentary organizations to highly sophisticated statistical systems. The staff recruits expert advisors from the Census Bureau's domestic divisions, other Federal agencies, universities, or the private sector, and administers their assignment and work overseas.

Long-term assistance has included all aspects of taking a census or a survey. For example, Census Bureau staff has helped to map enumeration districts in Turkey, design and conduct an ongoing agriculture survey in Bolivia, establish a multi-purpose household sample frame in Bangladesh, and develop a national computer center in Saudi Arabia. There are currently over 30 advisors located in Saudi Arabia, Bangladesh, Nigeria, and various other countries.

Continuing Short-Term Services

The ISPC has survey and mathematical statisticians, economists, social science analysts and data processing specialists available for short-term continuing technical assistance. They provide advisory statistical assistance to development programs overseas and short-term consultation and technical assistance to counterparts in developing countries on planning and implementing a variety of statistical activities.

There are three purposes of this assistance: institution building, or the development of data collection capabilities in the host-country agency; production of data for project and program planning, implementation and evaluation; and analysis and use of that information for program and policy determination. The broad range of skills and depth of the staff make it possible to react to requests for assistance on very short notice. The staff is able to work in several languages, with a concentration in Spanish and French.

Information Exchange

One of the least expensive forms of technical assistance is the exchange of information. The Bureau of the Census, through ISPC, maintains exchanges of publications with 130 countries and several international statistical organizations. Methodological materials and analytical studies are regularly transmitted. The ISPC library is open to the public.

The primary objective of all ISPC activities is the creation of an institutional capability for statistical and related work in host governments.

For more detailed information on the work of the International Statistical Programs Center, contact Elaine Czellar at 763-2836.

OTHER ANNOUNCEMENTS

Washington Academy of Sciences Seminar

On Thursday, May 21, Simon Strauss, President, W.A.S., will speak on "Advanced Composites: An Historical Perspective." The talk will be held at the Mary Grayden Center, American University, at 8:30 p.m. Preceding Dr. Strauss's presentation, there is a social hour at 6:45 and a dinner at 7:30. There is a charge for the social hour and dinner. Reservations must be made one week in advance by calling 320-3621. There is no fee for attendance of only the lecture.

Open Board Meeting

The WSS Constitution specifies that at least one meeting of the Board of Directors shall be announced to the membership as an "open meeting" to provide a forum for comments and suggestions from members-at-large. This year's meeting will be held Tuesday, May 26, at 12:30 p.m. in Room 3000 at 400 Maryland Avenue, S.W. Eva Jacobs, the District 1 representative to the ASA board, will report on the draft version of "Strategic Planning for the ASA." Open discussion to follow. Draft copies available in advance from Dan Kasprzyk, (301) 763-5784.

ICPSR: 25th Annual Summer Program

The twenty-fifth annual ICPSR (Inter-University Consortium for Political and Social Research) Summer Program in Quantitative Methods of Social Research will be held in Ann Arbor, Michigan June 29 to August 21, 1987. The Summer Program will feature a number of special courses and presentations on such topics as: Structural Equations with Limited Dependent Variables, Pooled Time Series Analysis Models, Statistical Estimation of Formal Models, Network Analysis, Contextual and Multilevel Effects, Artificial Intelligence, Bootstrap and Jackknife Re-sampling Methods, and LISREL Models. There will also be workshops on methodological application in the areas of American Electoral Research, Latino Research Issues, Crime and Criminal Justice, Population Projection and Estimation, and the Survey of Income and Program Participation (SIPP). The eight-week Program will be divided into two four-week terms and offer as well the standard courses on Linear Models, Causal Analysis, Time Series, Mathematical Modeling, and Logit/Log-Linear Models. For more information, application and brochures, contact: ICPSR Summer Program, P.O. Box 1248, Ann Arbor, MI 48106, (313) 764-8392.

Statistical Luncheon with the Washington Operations Research/ Management Science Counsel

On Thursday, May 14, John Herbert, Energy Information Administration, will speak on "Evaluating the Hidden Dimension of Regression Measurement Error." The talk will be held over lunch at Mr. Smith's Restaurant in Tysons Corner from noon to 1:30 p.m. Make reservations by May 12 with David van Tyn, 547-4550.

International Conference on Telephone Survey Methodology, November 8-11, 1987

This conference is meant to summarize the state of the field of telephone survey methodology and stimulate further advances. Of particular interest to graduate students is the availability of a small number of fellowships. Details may be found in the March issue of AMSTAT News.

WSS Annual Dinner

SPEAKER: Ben Wattenberg, American Enterprise Institute

DATE: Wednesday, June 3, 1987

TIME: 6:30 p.m. CASH BAR
7:30 p.m. DINNER

LOCATION: Old Ebbit Grill, 675 15th Street, N.W., Washington, D.C.

COST: $21.00

MENU:

> *Grilled chicken paillard (brushed with lemon butter and fresh herbs)*
> *Oven-roasted potatoes*
> *Salad*
> *Vegetable, dessert*

- OR -

> *Baked scrod (topped with seasoned bread crumbs and white wine)*
> *Parsley Potatoes*
> *Salad*
> *Vegetable, dessert*

For more information call 763-5784 or 763-7958.

Detach here and mail by May 27 to:

WSS
c/o Charles Mann Associates, Inc.
818 18th Street, N.W.
SW 820
Washington, D.C. 20006

Include check payable to WSS for $21 per person.

CHOICE OF MENU: Grilled chicken paillard Number of people _____

Baked scrod Number of people _____

Give name and affiliation as you wish it to appear on your name tag:

Name: _____ Affiliation: _____

Name: _____ Affiliation: _____

PROGRAM ABSTRACTS

TOPIC: **Highlights of the Statistics of Income - Individual Income Tax Program**

SPEAKERS: Terry Smith, Dorothy Collins, Bonnye Walker, and Michael Strudler

CHAIR: Dave Paris

DATE & TIME: Tuesday, May 12, 1987; 11:30 a.m. to 1:00 p.m. (NOTE TIME OF TALK)

LOCATION: Internal Revenue Service, Commissioner's Conference Room 3313, 1111 Constitution Ave., N.W., Washington, D.C. 20224 (Federal Triangle Metro Station)

SPONSOR: IRS and WSS

ABSTRACT: A brief description and some highlights will be presented on information available from the Statistics of Income - Individual Income Tax Program. First, statistical data on taxpayers' income, deductions, credits, and tax for Tax Years 1984 and 1985, including a description of the sample and selection criteria, will be highlighted. Next, the Individual Tax Model File and SOI Statistical Services will be discussed. Finally, proposed plans for alternative income concepts and program enhancements will be described.

TOPIC: **An Application of Canonical Correlation Analysis to Very Short Time Series**

SPEAKER: Tamas Lengyel, Beloit College and Computing and Automation Institute of Hungarian Academy of Science

CHAIR: Mike Hogye, Agricultural Marketing Service, USDA

DATE & TIME: Wednesday, May 13, 1987; 12:30 to 2:00 p.m.

LOCATION: Room 2736 GAO Bldg., 441 G Street, N.W., Washington, D.C. (Judiciary Square Metro)
(Call 523-1760 if you plan to attend to assure building entrance.)

SPONSOR: Methodology Section

ABSTRACT: Canonical correlation analysis can be applied to predict some aspects of complex phenomena. It can be considered as a natural generalization of the principal component analysis and is applicable to prediction with very short time series. Some optimal properties of the canonical factors and coefficients will be presented. An application that dealt with the prediction of the heart disease, coronaria thrombosis, over a five year time span will be given.

TOPIC: **The Statistical Precision of Medical Screening Procedures: Application of Polygraph and AIDS Antibodies Test Data**

SPEAKER: Joseph Gastwirth, George Washington University

CHAIR: Janet Wittes, NHLBI

DISCUSSANT: Lester Curtin, ORM

DATE & TIME: Thursday, May 14, 1987; 11:30 to 1:00 p.m.

LOCATION: NCHS, 3700 East West Highway, Hyattsville, Maryland, Room 1-39B&C

SPONSOR: Office of Research and Methodology, NCHS and WSS

PROGRAM ABSTRACTS (continued)

TOPIC: **External Comparisons with the Case-Cohort Design**

SPEAKER: Salom Wacholder, NCI

CHAIR: David Pee, Information Management Services, Inc.

DATE & TIME: Tuesday, May 19, 1987; 1:30 to 3:30 p.m.

LOCATION: Landow Building, Conference Room E, 7910 Woodmont Avenue, Bethesda, Maryland
                (Three blocks north of Bethesda Metro)

SPONSOR: WSS - Public Health and Biostatistics

ABSTRACT: The case-cohort design can be an economical alternative to the standard cohort design for external as well as internal comparisons. Methods for comparing risk in exposure groups within the cohort to the risk in an external population will be discussed. Theoretical and empirical properties of several variations of the design and analysis of case-cohort studies will be presented. Application of related techniques to synthetic case-control studies will be outlined.

TOPIC: **Outcome in Pediatric Intensive Care: Multi-Institutional Validation and Applications**

SPEAKER: Murray Pollack, GWU School of Medicine and Childrens Hospital National Medical Center

CHAIR: Janet Greenblatt, Prospect Associates

DATE & TIME: Tuesday, June 23, 1987; 1:30 to 3:30 p.m.

LOCATION: Landow Building, Conference Room E, 7910 Woodmont Avenue, Bethesda, Maryland
                (Three blocks north of Bethesda Metro)

SPONSOR: WSS - Public Health and Biostatistics

ABSTRACT: The Physiologic Stability Index (PSI), an objective measure of pediatric intensive care mortality risk, and other population characteristics were measured prospectively in 2394 patients from 9 pediatric intensive care units. The observed numbers of survivors and nonsurvivors were compared with the predicted numbers of survivors and nonsurvivors calculated from a logistic function derived from data on 822 patients at one institution. Patient populations differed significantly with respect to population characteristics (e.g., age, chronic disease, emergency admissions). Most important, mortality rates of the ICUs also differed significantly (range 3.0% to 17.6%). The mathematical function based on the PSI and age reliably predicted the outcomes in all ICUs. Thus, mortality rate differences in these ICUs could be explained by the differences in severity of illness of the populations.

                A modification of the PSI, the Dynamic Risk Index, is an acute (<24 hour) mortality risk predictor also validated in this population. The applications of both of these predictors to quality assurance and cost-containment will be illustrated.

EMPLOYMENT COLUMN

Deadline for inserting notices is 5 weeks before the publication date. Send notices and requests to: Evelyn R. Kay, 520 - 22nd Street, N.W., Washington, D.C. 20037, (202) 331-1153.

APPLIED STATISTICIAN -- Senior position available with small nonprofit public health research organization. Position requires an advanced degree (M.S. or Ph.D.) either in statistics or social science/public health with strong methodological/statistical background. Successful candidate will be expected to design and carry out research in multi-disciplinary setting. A proven record in applied research, including publications in professional journals, and the ability to communicate effectively with professionals from other disciplines are required. Salary commensurate with experience; excellent benefits. Apply to: Vice President, Research, Insurance Institute for Highway Safety, Watergate 600, Washington, D.C. 20037.

ASSISTANT PROFESSOR OF STATISTICS -- Position available for 1987-88 at The American University, tenure track, in the Department of Mathematics, Statistics, and Computer Science.

Qualifications: Ph.D. in Statistics; evidence of scholarship and research in design of experiments, measurement, or sampling (other areas will be considered).

Responsibilities: Undergraduate and graduate teaching, advising, research, and University Service.

Competitive salary depending on qualifications and experience. Position available August, 1987, subject to final budgetary approval. Send curriculum vitae and names of three references to Austin Barron, Chair, Department of Mathematics, Statistics and Computer Science, The American University, Washington, D. C. 20016. The American University is an EEO/AA University. Minority and women candidates are encouraged to apply.

STATISTICIAN (GS-11 or 12 with promotion potential to 13) -- Position at the Environmental Protection Agency (EPA) in the Office of Water Regulations and Standards for an individual interested in the application of statistics to multi-disciplinary projects directed at protecting and enhancing the Nation's waters. The substance of these projects includes development of industrial water pollution control regulations, development of water quality criteria and monitoring ambient water quality. Responsibilities also include supporting EPA in matters arising in law suits. This position offers the opportunity to apply statistics to important and visible problems. Applicants with computer skills and experience and/or training in engineering, science, economics and litigation support are preferred. Send SF-171 or resume to Dr. Henry D. Kahn, Environmental Protection Agency, Office of Water Regulations and Standards (WH-586), 401 M Street, S.W., Washington, D.C. 20460.

JOB OPENINGS (continued)

MATHEMATICAL STATISTICIAN -- Opening at the Bureau of Labor Statistics' Office of Wages and Industrial Relations to conduct complex sample surveys in measuring occupational salaries. The applicant would work with a small staff on the sample design for several occupational wage programs on sample selection, estimation, nonresponse adjustment procedures, and variance. Applicants must have extensive background on conducting complex surveys. The position is a GS-12 with promotion potential to GS-13. Send SF-171 and a current performance appraisal to: Steve Cohen; Bureau of Labor Statistics; Office of Wages and Industrial Relations; 441 G Street, N.W., Washington, D.C. 20212.

BIOSTATISTICIAN -- Ph.D. in biostatistics or statistics for challenging opportunity in management and analysis of large clinical trials and medical research studies. Excellent computer and communication skills expected. Proven experience in survival analysis, multivariate techniques and exploratory data analysis is required. A strong commitment to quality is essential. One to three years experience in medical research studies is required. Send resume to James Cash, MMRI, 600 Wyndhurst Avenue, Baltimore, MD 21210.

MATHEMATICAL STATISTICIAN -- Ph.D. in mathematical statistics or statistics to provide support for several clinical trials and medical research studies. Excellent communication skills required. Proven experience in experimental design, data monitoring, multivariate methods and statistical computing desired. A strong commitment to quality is essential. Minimum of 1 year experience in medical research studies is required. Send resume to James Cash, MMRI, 600 Wyndhurst Avenue, Baltimore, MD 21210.