TOPIC: Nonparametric Multiple Comparisons: The State of the Art
SPEAKER: Dr. G. Campbell, DCRT, NIH
DATE AND TIME: Thursday, December 1, 1983; 12:00-2:00 p.m.
LOCATION: Room E, Landow Building, 7910 Woodmont Ave., Bethesda, Maryland

TOPIC: Modeling Bivariate Data
SPEAKER: Ingram Olkin, Stanford University & National Bureau of Standards
DATE AND TIME: Friday, December 2, 1983; 12:30-2:00 p.m.
LOCATION: Rooms 413-414, George Washington University Marvin Center, 800-21st Street, N.W., Washington, D.C.

TOPIC: Nonparametric Procedures for Comparing Diagnostic Tests with Paired or Unpaired Data
SPEAKER: Dr. Sam Wied
DATE AND TIME: Thursday, December 8, 1983, 11:00-12:30 p.m.
LOCATION: Landow Building, Conf. Room E, 7910 Woodmont Ave., Bethesda, Md.

TOPIC: Bayesian Data Analysis
SPEAKER: Henry Braun, Educational Testing Service
CHAIR: Joseph Gastwirth, George Washington University
DISCUSSANTS: Nozer Singpurwalla, GWU and Dr. Cliff Spiegelman, NBS
DATE AND TIME: Tuesday, December 13, 1983; 12:00-1:30 p.m.
LOCATION: Rm. 208, George Washington University, Bldg. C, 2201 G St., N.W.

TOPIC: Birthday/Holiday Program for Morris Hansen
DATE AND TIME: Thursday, December 15, 1983; 5:30-8 ish
LOCATION: GWU Faculty Club, 21st Street, N.W., between H and I SEE GREEN FLYER FOR DETAILS

TOPIC: 1982 Economic and Agricultural Census Automation and Other Improvements
SPEAKER: Michael G. Farrell, Census
DISCUSSANTS: Daniel Rosa, IRS and David Morganstein, WESTAT
DATE AND TIME: Thursday, December 15, 1983; 12:30-2:00 p.m.
LOCATION: Room 4E-069, Forrestal Bldg., 1000 Independence Avenue, S.W.

SPONSOR: National Center for Health Statistics

TOPIC: Coping With Collinearities Using Prior Estimates of Regression Coefficients
SPEAKER: Nathan Mantel, American University
DATE AND TIME: Thursday, December 15, 1983; 1:30-2:30 p.m.
LOCATION: Room 1-23, Center Bldg., 3700 East West Highway, Hyattsville, Md.
TOPIC: Nonparametric Multiple Comparisons: The State of the Art
ABSTRACT: The area of multiple comparisons is explored in the context of the special problems that nonparametric statistics introduce. Particular attention is focused on stepwise procedures in the one-way layout. Control of the various types of errors as well as power comparisons are investigated for a variety of nonparametric procedures using Monte Carlo simulations.

TOPIC: Modeling Bivariate Data
ABSTRACT: Regardless of the criterion used, the standard multivariate distribution is the natural extension of the univariate normal distribution. However, this is not the case for non-normal distributions. The talk surveys the methods for generating bivariate distributions with given marginals. Some new results using the bivariate binomial, Poisson, and Gamma distributions will be mentioned.

TOPIC: Nonparametric Procedures for Comparing Diagnostic Tests with Paired or Unpaired Data
ABSTRACT: Nonparametric methods will be presented for comparing two diagnostic tests designed to distinguish "cases" from "controls". Procedures have been developed for paired or unpaired data from continuous or discrete diagnostic assays. The nonparametric statistics, which are related to the "receiver operating characteristic" curve, are robust and generally efficient. Guidelines will be given indicating what hypothesis each statistic is designed to test and how large samples must be for the asymptotic theory to hold.

TOPIC: Bayesian Data Analysis
ABSTRACT: The rationale for the (empirical) Bayesian analysis of large data sets will be examined and the development of a flexible family of empirical Bayes models outlined. The utility of these techniques will be illustrated through their application to problems involving the simultaneous estimation of large numbers of statistical relations (either multiple regression equations or survival curves) when comparatively little data is available for the estimation of any single relation.

TOPIC: 1982 Economic and Agriculture Censuses: Automation and Other Improvements
ABSTRACT: In 1982, the economic and agriculture censuses were conducted concurrently for the first time. Innovative concepts in complex software systems, data processing, survey and questionnaire design, and publication procedures resulted in dramatic improvements in this program.

TOPIC: Coping with Collinearities Using Prior Estimates of Regression Coefficients
ABSTRACT: In certain circumstances, estimates of partial regression coefficients yielded by least squares analysis of multivariate data can be unreliable. If prior estimates of judgemental values of the coefficients are available, they can be used to obtain estimates not subject to such unreliability. These are obtained by estimating each regression coefficient separately as though the preliminary values of all the remaining coefficients were correct.
Deadline for inserting notices is the first 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**

**Operations Research/Mathematical Statistician**

Excellent opportunity for professional growth with a small, high-quality internal consulting group in the CIA. Position involves the development of advanced operations research/statistical techniques and their application to a wide variety of intelligence problems—military, economic, political, scientific/technical. Applicants should be knowledgeable in sampling theory, econometric techniques, non-linear and integer optimization techniques and "impressionistic" multivariate techniques. Projects involve research at the state-of-the-art. Candidates should be US citizens, have a Ph.D in operations research, statistics, or related field (undergraduate degree in engineering a plus), zero to ten years experience, a working knowledge of at least one high-level computer language and the ability to present ideas well in oral and written form for both technical and non-technical clients. Some travel required. Salary range $29,000-$40,000 commensurate with training and experience. Forward resume, graduate transcript, and samples of writing to: Personnel Representative, Department A, Room 821 (LQ), P. O. Box 1925, Washington, D. C. 20013.

**Mathematical Statistician GS-9/11**

Incumbent performs statistical analysis including sampling theory and estimation procedures on a broad range of problem definitions and develops and executes mathematical statistical studies for solution of problem areas investigated. Knowledge of sampling and survey methods required; computer programming and software packages highly desired. Applicants should contact Andrew P. Klugh (202) 632-4804, Work Force Analysis and Statistics Division, Compliance and Investigations Group, Office of Personnel Management, Washington, D. C. 20415

**Risk Assessment Specialist, Biostatistician GS 1530-13.**

Salary range $34,930-$45,406. Join statistical group supporting Toxicology Branch, Office of Pesticide Programs, Hazard Evaluation Division, for evaluation of carcinogenicity, mutagenicity, and/or reproductive hazards reported in toxicological studies with emphasis on the QUANTITATIVE ASSESSMENT OF IMPLIED RISK TO HUMANS. Announcement # EPA 3-OPP-208. Current Federal employment not required, Closing 12/31/83. Send 171 to Lucy Tanner, PM 226, Room 3020, Office of Personnel, EPA, 401 M Street, S. W., Washington, D. C. 20460.

**Mathematical Statisticians GS-9/13**

The Division of Survey Techniques, Bureau of Labor Statistics, has openings for several mathematical statisticians with strong academic and empirical backgrounds in survey design. The positions involve directing activities in selecting samples, non-response adjustment, variances and developing survey methodology for BLS's local area and national Occupational Wage Survey Programs such as the Industrial Wage Survey. Qualifications should include extensive knowledge of complex sample survey design and estimation techniques. Knowledge and experience in use of computer software packages such as SAS is desirable. Send SF-171 to Stephen Cohen, Bureau of Labor Statistics, Division of Survey Techniques, 441 G Street, N.W., Room 2021, Washington, D. C. 20212. Phone (202) 523-1874 or 523-1099.

**Mathematical Statistician GS-1529-13 (2 positions)**

The Agriculture Division of the Bureau of the Census anticipates the announcement and closing of two mathematical statistician positions by mid-December. Both positions require strong technical capabilities in the areas of survey design and estimation, computer analysis and management of large data bases, and research and publication. One position will concentrate on sample selection, weighting, and reliability estimation while the other position will focus on quality control, evaluation of surveys, edit and imputation procedures, and mail list development. Both positions will require supervising a small staff. Interested applicants should immediately contact Dr. Charles P. Pautler, Assistant Chief for Research and Methodology, (301) 763-5943 for further details.
Listed below is a brief description of the qualifications of applicants seeking employment. Employers interested in interviewing these applicants should notify Mrs. Kay of their interest by CODE NUMBER. The request should be by mail and should include the 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 confidential.

CODE NUMBER: 83-11-01
Education: Masters Degree, George Washington University, 1981
Experience: 15 years Federal Government: (physical) systems reliability; acceptance sampling and quality control; large-scale computerized database reports; precise time and time interval.
Objective: Applied math/stat in R&D environment.
Area of Interest: Multivariate analysis and multiple time series analysis.

CODE NUMBER: 83-11-02
Position wanted: Statistician GS 12/13 or equivalent in private industry in Washington, D.C. area.
Education: MS applied statistics, 3-1/2 years experience as mathematical statistician.
Experience: Involvement in all phases from project design to final report. Background in General Linear Models, regression, ANOVA, multivariate analysis, non-parametrics, questionnaire design. Experience with Fortran and major statistical packages.
Area of Interest: Modeling and multivariate analysis.