May 9	Thursday	REDUCING SELF-INTEREST AND IMPROVING THE RELEVANCE OF ECONOMIC RESEARCH
May 10	Friday	A RECURSIVE PARTITIONING ALGORITHM FOR CLUSTER ANALYSIS
May 10	Friday	THE NATIONAL INSTITUTE OF STATISTICAL SCIENCES: ORIGINS, PLANS AND EXPECTATIONS
May 21	Tuesday	COGNITIVE FACTORS IN COMPREHENDING STATISTICAL GRAPHS
		BIAS CORRECTION FOR THE MAXIMUM LIKELIHOOD ESTIMATE WITH NUISANCE PARAMETERS
June 19	Wednesday	

NOMINATIONS FOR THE WASHINGTON STATISTICAL SOCIETY BOARD OF DIRECTORS - 1991-92

This issue of the newsletter includes a ballot for the election of officers of the Washington Statistical Society for 1991-92. The ballot must be received by May 28, 1991 to be counted. Officers who will continue to serve are: President: Fritz Scheuren. Representatives-at-Large: Nancy Spruill and Michael Cohen. Treasurer: Virginia de Wolf and Methodology Chair: Sue Ahmed.

Ballots should be mailed to the address shown on the ballot. Here is a brief description of each candidate:

President Elect:

Marie Argana is a survey statistician and Assistant Chief of the Data User Services Division at the Bureau of the Census. She has a master's degree from the University of Rochester. She currently serves as Secretary of the WSS and is Program Chair-elect of

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WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agriculture & Natural Resources
Cynthia Clark	763-8558
John Herbert	532-4544

Social & Demographic Statistics
Harvey Schwartz	443-6990
Tom Dietz	323-2916

Short Courses
Glenn White	763-7524
Donald Gantz	764-6565
Brad Pafford	447-3623
Sid Schwartz	268-3490

Economics
John Ruser	523-1347
Neil Ericsson	452-3709

Methodology
Sam Slowinski	452-2622
Sue Ahmed	357-6781

Public Health & Biostatistics
Ed Lakatos	496-5905
Gordon Lan	881-9260

Physical Sciences & Engineering
Nozer Singpurwalla	994-7515
Julia Abrahams	696-4320

Statistical Computing
Nancy Flournoy	885-3127
Sylvia Leaver	272-2350

Quality Assurance
Stanley Freedman	586-2038
John Galvin	272-5066

Newsletter Editor
Stephen H. Cohen	523-7551

Employment
Bill Arends	447-6812

the Governments Statistics Section of the ASA. She also chairs the Gertrude Cox Scholarship Committee sponsored by the Caucus for Women in Statistics and the Committee on Women in Statistics of the ASA.

Dwight Brock is Chief, Biometry Office, Epidemiology, Demography and Biometry Program at the National Institute on Aging. He has a Ph.D. in statistics from Southern Methodist University. He has served WSS on the Social Committee and the Local Arrangements Committee for the 1989 joint meetings and is currently a representative-at-large of the WSS. He is a member of the ASA Snedecor Award Committee (1989-92).

Secretary:
Ruth Ann Killion is the Assistant Division Chief for Research and Methodology in the Agriculture Division at the Bureau of the Census. She did her graduate work in statistics at Florida State University and in management at the University of Maryland. In addition to statistics, she enjoys spending time with her family, participates in many church activities, and loves to tour art galleries.

Methodology Chair Elect:
Tapan Nayak is an associate professor of statistics at the George Washington University. He has published research articles in diversity analysis, income inequality, software reliability, and Pitman nearness criterion, among others. His current interests are randomized response designs, empirical Bayes analysis, and multivariate analysis.

Representatives-at-Large:
Glenn Galfond is Senior Manager of Price Waterhouse's Quantitative Methods Group. He has a Ph.D. in statistics from Stanford University. his interests in technical areas include survey research, sampling, and modeling with applications in quality measurement and program evaluation.

Arthur Kennickell is Project Director of the Survey of Consumer Finances at the Federal Reserve Board. He has a Ph.D. in economics from the University of Pennsylvania. His interests in statistics are in the area of survey research and include questionnaire design, sampling for rare populations, use of administrative data, nonresponse issues, and imputation methodology.

Leyla Mohadjer is a Senior Survey Statistician at Westat, Inc. She has a Ph.D. in mathematical statistics from the George Washington University. Her interests are survey sample design and variance estimation, telephone survey methodology, and analysis of survey data.

Richard Valliant is a Senior Mathematical Statistician in the Office of Survey Methods Research at the Bureau of Labor Statistics. He has a Ph.D. in statistics from Johns Hopkins University. His areas of interest include the application of models to sample design and estimation problems.

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PROGRAM ABSTRACTS

TOPIC: REDUCING SELF-INTEREST AND IMPROVING THE RELEVANCE OF ECONOMIC RESEARCH

SPEAKER: Clive W.J. Granger, University of California, San Diego

CHAIR: Charles Thomas, Federal Reserve Board

DATE & TIME: Thursday, May 9, 1991; 3:30-5:00 pm

LOCATION: Room B-1215, Federal Reserve Board, 20th and C Streets, N.W.
(entrance on the South side of C Street between 20th and 21st)

SPONSOR: Federal Reserve Board; Economics Section, WSS; and Methodology Section, WSS. Please call Margaret Gray @ 202-452-3726 by 2:00 pm the day before the seminar. On arrival, sign in @ the guard desk and state purpose and room number of your visit.

ABSTRACT: I will start with a simplistic, naive viewpoint. I will take a science to consist of the accumulated knowledge of the researchers or scientists, working in the area. The philosophy of science is thus essentially the philosophy of these scientists, that is, their approach to the field and their strategies for research. I will take the main objective of these scientists to be to learn about some specific part of the real world. However, objectives of individual workers may be different from the whole group. I will assume the following objectives: (a) for the discipline: to study and attempt to understand the actual economy; (b) for the individual researcher: to maximize his/her personal utility, reflected through income, self-satisfaction, reputation; and (c) for a particular piece of research: to influence the belief- and thus probably the behavior- of other workers and economic agents.

The three objectives are related but are not necessarily in union. A theme of this paper is to consider the implications, causes and cures of this disharmony, which I believe is weakening the discipline's attention towards the main objective. This leads to inefficiencies in research effort and consequently a lack of respect for economic research by scientists in other fields, by politicians, the media and the public at large.

TOPIC: A RECURSIVE PARTITIONING ALGORITHM FOR CLUSTER ANALYSIS

SPEAKER: Joseph S. Costa, Jr., National Security Agency

DATE & TIME: Friday, May 10, 1991; 11:00am - 12:00 pm

LOCATION: George Washington University, 707 22nd Street, N.W., Room 301 (between G and H Streets, near Foggy Bottom Metro stop),

SPONSOR: Physical Sciences and Engineering.

ABSTRACT: In 1965, Edwards and Cavalli-Sforza introduced a method for cluster analysis based on a recursive partitioning strategy over a minimum-variance clustering criterion. Although this method is intuitively appealing, it has been dismissed by Gower (1967) and others because of its computational infeasibility. It has been suggested on numerous occasions that some efficient method be found to search an intelligently-chosen subset of the set of all possible partitions for a (hopefully) near-optimal solution. Here one such method is developed, applying techniques used in the Classification and Regression Trees (CART) classification paradigm of Breiman, Friedman, Olshen and Stone (1984) to the problem of cluster analysis.

PROGRAM ABSTRACTS (continued)

TOPIC: THE NATIONAL INSTITUTE OF STATISTICAL SCIENCES: ORIGINS, PLANS
                    AND EXPECTATIONS

SPEAKER: Dan Horvitz, Ph.D., Interim Director, NISS.

CHAIR: Monroe Sirkin, Ph.D., Associate Director, Office of research and Methodology, NCHS.

DATE & TIME: Friday, May 10, 1991; 2:30- 4:00 pm.
LOCATION: National Center for Health Statistics, Auditorium, Presidential Bldg, 11 floor, 6325
                    Belcrest Road, Hyattsville, MD 20782

SPONSOR: Office of Research and Methodology, NCHS and WSS.

ABSTRACT: The National Institute of Statistical Sciences (NISS) is an initiative of the professional
                    statistical societies. It is just now getting underway in the Research Triangle Park of
                    North Carolina under the auspices of a consortium organized under the leadership of the
                    Triangle Universities Center for Advanced Studies, Inc. (TUCASI). Members of the
                    consortium include Duke University in Durham, The University of North Carolina at
                    Chapel Hill, North Carolina State University at Raleigh and the Research Triangle
                    Institute. The primary focus of the new Institute will be on identifying scientific issues
                    of national and global importance in such areas as technology and economic
                    competitiveness, the environment, medicine and public health, food production, computer
                    science, and chemistry and undertaking, via a visiting fellow program, large-scale cross-
                    disciplinary statistical research projects relevant to those issues.

                    The origins of NISS, the decision to locate it in the Research Triangle and some of the
                    factors influencing that decision will be presented. Who owns NISS, its structure and how
                    it will function, its mission, its collaborative research programs and other activities, and
                    its potential for interaction with industry and government will all be discussed. A detailed
                    progress report covering accomplishments to date and plans and expectations for the
                    future will also be given.

TOPIC: COGNITIVE FACTORS IN COMPREHENDING STATISTICAL GRAPHS

SPEAKERS: Don Beu, National Center for Health Statistics
                    Jared Jobe, National Center for Health Statistics

CHAIR: Andrew White, National Center for Health Statistics

DATE & TIME: Tuesday, May 21, 1991, 12:30-2:00 pm.
LOCATION: Room 2736, GAO Bldg., 441 G St., N.W., Washington, D.C. (Near Judiciary Square
                    Metro Station)

SPONSOR: WSS Methodology Section

ABSTRACT: Recently, cognitive research has been conducted on respondents' comprehension of
                    statistical graphs and maps. The speakers will discuss some of the current scientific
                    theory regarding graph comprehension as well as experiments conducted by the Office
                    of Research and Methodology at the National Center for Health Statistics. The session
                    will also include the showing of a videotape of some recent cognitive interviews
                    demonstrating respondent comprehension problems in interpreting various graphs of
                    statistical data published by federal agencies. Finally, the audience will be invited to
                    participate in a short group experiment interpreting statistical graphs from federal
                    agencies.

PROGRAM ABSTRACTS (continued)

TOPIC: **BIAS CORRECTION FOR THE MAXIMUM LIKELIHOOD ESTIMATE WITH NUISANCE PARAMETERS**

SPEAKER: Kung-Yee Liang, Department of Biostatistics, Johns Hopkins University

CHAIR: Myron Waclawiw, Biostatistics Research Branch, NHLBI

DATE & TIME: Wednesday, May 22; 1:30 pm

LOCATION: Conference Room 4, Building 31, NIH, (Shuttle every 15 minutes from Medical Center Metro.)

SPONSOR: Gordon Lan, George Washington University

ABSTRACT: The maximum likelihood estimate (MLE) is known to be inconsistent when the number of nuisance parameters is proportional to the sample size. The finite sample performance of the MLE may not be desirable even when the number of nuisance parameters is fixed by design. The use of conditional likelihood and quasi-likelihood as alternatives to avoid the bias associated with the MLE is discussed. A small amount of theory is supplemented with a series of examples including odds ratio estimation in 2x2 tables and treatment effect estimation in teratological experiments.

TOPIC: **IMPLEMENTING TOTAL QUALITY MANAGEMENT AT THE EMPLOYMENT STANDARDS ADMINISTRATION**

SPEAKER: William D. Lockerby, Employment Standards Administration

CHAIR: John Galvin, Bureau of Labor Statistics

DATE & TIME: Wednesday, June 19, 1991; 12:30-2:00 pm.

LOCATION: Room 2736, GAO Bldg., 441 G Street, N.W., Washington, D.C. (Sign in at guard desk and state purpose and room number of visit.)

SPONSOR: Quality Assurance Section

ABSTRACT: Total Quality Management (TQM) is a management system for continuously improving all the processes of an organization through the application of quantitative methods and human resources. This non-technical presentation will describe how TQM is being implemented in the Wage and Hour Division of the Employment Standards Administration (ESA). The mission of Wage and Hour is to enforce the nation's employment standards in order to serve and protect the present and future workers of America.

                    Topics to be covered in the presentation will include: (1) the conceptual Wage and Hour Quality Model; (2) the design plan for how improvement is managed; (3) features of the working union partnership; (4) the natural team approach to managing process quality; and (5) employee enablement and empowerment.

ORIOLES vs. RED SOX
at Memorial Stadium, Baltimore
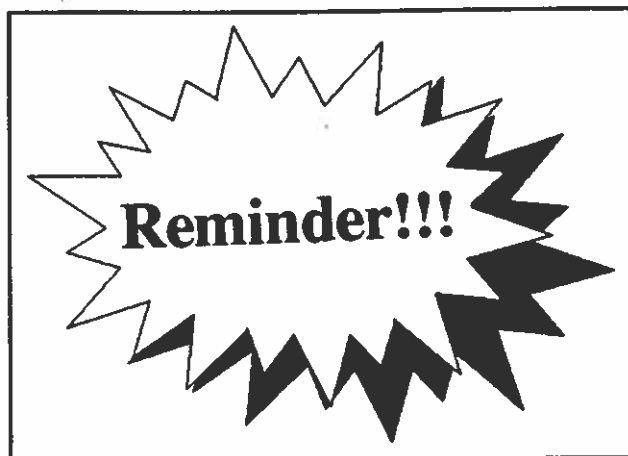## Saturday, June 29, 1991 @ 1:35 pm.

Come out to See the "Washington Statistical Society" in lights on the Scoreboard!!

To purchase tickets, send a self-addressed, stamped envelope and a check payable to the Washington Statistical Society for $4.75 per ticket to:

Patricia M. Guenther
2036 Mayflower Drive
Silver Spring, MD 20905-5563

All tickets are lower reserve general admission. Tickets will be mailed on June 20th. Questions? Call Pat at 301-436-5618 if you are an Orioles fan. If your are a Red Sox fan, call Phil Kott at 301-763-1186.

Don't miss the insert about our 44th Annual Dinner!! Reservations are due by June 7th.

Reminder!!!

Schedule of SIGSTAT Meetings

SIGSTAT is the Joint Special Interest Group in Statistics for the Capital PC User Group and WORMSC. The schedule of events through next May is as follows:

05/15/91	Axum-Technical graphics and data	analysis, 2D and 3D graphics

All meetings are scheduled for Wednesdays from 12:30-1:30 in Room B-14. 1301 New York Ave., N.W. 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, and leave your name in order to gain entry into the building.

EMPLOYMENT COLUMN

The Washington Statistical Society Newsletter provides a service of 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. Deadline for inserting notices is 5 (five) weeks before the publication date. Those interested should write to: Bill Arends, USDA-NASS, Room 4133 South Building, Washington, D.C. 20250-2000. Contact Mr. Arends at 202-447-6812.

JOB OPENINGS

U.S. ENVIRONMENTAL PROTECTION AGENCY[1]
MATHEMATICAL STATISTICIAN GS-1529
STATISTICIAN (General) GS-1530

The Statistical Policy Branch (SPB)[1] has an opening for a Junior/Midlevel statistician (GS11/12) and also for a Midlevel/Senior statistician (GS 13/14). The SPB is located in the Science, Economics and Statistics Division, part of the office of Policy, Planning, and Evaluation, and advises senior management on statistical issues, provides consulting services to Agency program offices, and takes a lead role in the development of innovative statistical methodologies for the analysis of complex environmental data sets.

Applicants should possess an advanced degree in statistics (or related field) and have some experience in consulting with non-statistical clients. As the applicant will be a consultant to various program offices of the Agency, good communications skills will be required.

Experience or a background in at least one of the following areas is desirable:

* Applied Estimation Techniques
* Mathematics of Survey Sampling
* Spatial Statistics
* Linear and Non-linear Modeling
* Multivariate Analysis
* Time Series Analysis
* Nominal & Ordinal Data Analysis
* Applied Risk Assessment
* Statistical Computing/Linear Programming

Persons interested in these positions should send letters of interest and resumes to: John Warren, Statistical Policy Branch PM-223X, U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460 or call 202-382-2683 for further information.

BIOSTATISTICIAN

Boehringer Mannheim Pharmaceuticals, a growing pharmaceutical company is seeking a biostatistician to support its clinical research. The successful candidate will enjoy a close working relationship with the clinical research staff in the design and analysis of clinical trials in the areas of cardiovascular and metabolic diseases and oncology. Candidates should possess a Ph.D. in Statistics or Biostatistics, or a master's degree with at least two years of clinical trial experience. Experience with SAS is highly desirable. Boehringer Mannheim Pharmaceuticals is located in Rockville near the Shady Grave Health Sciences Campus. Please send resumes to Ms. Kathleen Cover, Boehringer Mannheim Pharmaceuticals, 15204 Omega Drive, Rockville, MD 20850. EOE-M/F/V/H.

JOB OPENINGS (continued)

RESEARCH ASSOCIATE/SENIOR RESEARCH ASSOCIATE
RESEARCH DIVISION
FEDERAL JUDICIAL CENTER
WASHINGTON, DC

The Federal Judicial Center is the research, development and educational arm of the federal judiciary. The Center's mission is to improve judicial administration in the Courts of the United States. The Research Division conducts empirical research aimed at improving the procedures and programs that federal trial and appellate courts use to manage their caseloads. Associates on the research staff assist in identifying problems and issues relevant to the federal courts that are amenable to empirical studies; develop research designs; implement them; and prepare reports on the findings of research projects.

MANDATORY QUALIFICATIONS:

Either (1) graduate-level training in a discipline that provides a professional knowledge of quantitative or qualitative research methodology and one of the following: (a) a law degree, (b) a demonstrated familiarity with the legal system, (c) clear evidence of research skills directly applicable to the studies of the legal process, or (d) experience or training in long-range planning for courts or equivalent organizations;

Or   (2) a law degree, at least one year of law-related employment after law school, and a demonstrated ability to conduct research using such methods of empirical inquiry as case studies, surveys by questionnaire or interview or statistical analysis.

DESIRABLE QUALIFICATIONS:

(1) Experience conducting research about litigation or other methods of dispute resolution.
(2) Experience in the administration of criminal or civil justice in the federal system, as an attorney or a court employee.
(3) Knowledge of the federal court system and federal court procedures.
(4) Knowledge of computer techniques for data manipulation and storage.
(5) Excellent writing skills.

SALARY AND BENEFITS:

The pay level will be established on the basis of the successful candidate's qualifications and experience within the range of $44,348 to $61,643 with a strong preference for entry at the lower end of that range.

The position does not carry the tenure rights of positions in the competitive Civil Service. All other federal government benefits are applicable.

APPLICATION PROCEDURE:

Please send resume of SF-171 and a cover letter (see below) to :

Personnel Officer (Announcement #91-09)
Federal Judicial Center
Dolley Madison House
1520 H Street, N.W.
Washington, D.C. 20005

In a cover letter referring to Announcement #91-09, please address specifically the mandatory and desirable qualifications listed above. Applications will be accepted until the position has been filled.

JOB OPENINGS (continued)

SUPERVISORY STATISTICIAN
CHIEF, PROGRAM RESEARCH AND DEVELOPMENT BRANCH
AGRICULTURE DIVISION; BUREAU OF CENSUS
GH 14 MATHEMATICAL STATISTICIAN

The Program Research and Development Branch has fifteen staff members and is responsible for the coverage evaluation program for the agriculture census; questionnaire design research; frame development and maintenance for the census; quality assurance activities for the census and agriculture related surveys; classification error and nonresponse estimation for the census; research related to statistical and operational matters in all these areas; and graphics support for the Agriculture Division. Requires good statistical, management and communication skills. Computer skill a plus. Starting salary range is $52,406-$68-129, depending on qualifications and experience. Interested persons should contact Ruth Ann Killion, Agriculture Division, 301-763-8558.

STATISTICIANS

The Pilot Drug Evaluation Staff (PDES) and the Division of Biometrics of the U.S. Food and drug Administration have two immediate joint appointment openings for full-time statisticians. Salary depends on qualifications and experience.

Candidates should have a MS or Ph.D. in Statistics or Biostatistics, strong interests in the design and analysis of clinical trials, and a variety of computer skills to be able to deal with the interactive multi-discipline nature of these positions. As an active member of various drug review teams, successful applicants will work in a peer review environment and apply their skills to the improvement of Investigative New Drug programs and to the review of New Drug Applications.

One of the goals of the Pilot Drug Evaluation Staff is to research and implement new approaches to the drug development and review process. Applicants will need to show imagination in terms of bringing statistical expertise to bear on new or perhaps unconventional methods of data analysis from which a sound statistical foundation can be constructed. Candidates will have the challenging opportunity to participate in and contribute to innovation.

If interested, send a curriculum vitae, a resume, or a SF-171 to:

> Richard A. Stein
> Pilot Drug Evaluation Staff
> Food and Drug Administration
> 5600 Fishers Lane
> Rockville, MD 20857

For further information, Contact Dr. Stein @ 301-443-2814, or Dr Hoi M. Leung @ 301-443-4710.

JOB APPLICANTS

Listed below is a brief description of the qualifications of an applicant seeking employment. Employers interested in interviewing this applicant should notify Mr. Arends 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 kept confidential.

JOB APPLICANTS

CODE NUMBER: 91-01

EDUCATION: * B.A. in Mathematics, Scripps/Pomona College, California.
                 * M.S. in Mathematical Sciences, Johns Hopkins University, Maryland.
                 * M.S. in Statistics, Iowa State University, Iowa.

CAREER INTEREST: Interested in working on data analysis, linear models, experimental design, and/or survey sampling, in the research and development area in industry (pharmaceutical or otherwise) or consulting. My Creative Component project involved work on statistical graphics.

EXPERIENCE IN STATISTICS: Graduate Student Instructor of a 5 credit 2nd-3rd year level course in business statistics.

AVAILABILITY: Immediately

VISA STATUS: Permanent Resident. Eligible for U.S. citizenship in May 1993.

CODE NUMBER: 91-02

EDUCATION: * B.S. in Mathematics, University of North Carolina, Chapel Hill, NC.
                 * M.S. in Geology, University of Pennsylvania, Philadelphia, PA

CAREER INTERESTS: Broad-based and flexible. Ideally would like to gain employment in a field which utilizes statistical knowledge in research.

RESEARCH EXPERIENCE: Research assistant in sedimentology laboratory. Primary duty entails modeling of estuary environment through statistical analysis of biological, light transmission, and hydrological field data.

TEACHING EXPERIENCE: Laboratory instructor of advanced undergraduate courses in crystallography, optical mineralogy and petrology.

SKILLS: Experience in mainframe (VM-CMS environment) and personal computing (IBM and compatibles, AT/286/386). Vast experience in MS-DOS, SYSTAT/SYSGRAPH, SAS, LOTUS, BASIC, and FORTRAN programming. Statistical methods applied in research include: general linear modeling, regression and analysis of variance, time, series, and experimental design.

HONORS: Elected to Phi Beta Kappa, Alpha Chapter of North Carolina.