



OCTOBER 1985

WASHINGTON
STATISTICAL
SOCIETY

NEWSLETTER

Calendar

| | | | |
|----------|----|-----------|---|
| October | 1 | Tuesday | Data Reliability in the Current Population Survey |
| October | 8 | Tuesday | A Multipurpose Optimum Allocation Algorithm |
| October | 8 | Tuesday | Multiple Imputation for Interval Estimation |
| October | 10 | Thursday | The Analyses of Human Leukocyte Antigen Data With No Double Recessives |
| October | 18 | Friday | Mathematics and Statistics of Generalized Mixed Exponential Distributions |
| October | 23 | Wednesday | Techniques for Preserving Statistical Confidentiality |
| October | 30 | Wednesday | A Markov Chain Model for Illinois Corn Yields |
| November | 8 | Friday | Statistical Methods for Longitudinal Studies |
| November | 15 | Friday | FEE EVENT: Short Course on Generalized Linear Models |

Random Bits by Mary Grace Kovar, WSS President

The invitation to join the Washington Statistical Society says that the WSS is an interactive forum for the exchange of information. The major means of the WSS communicating with members is clear; it is the Newsletter that you are reading. The means by which members can communicate with the WSS and with one another is not always so clear.

This issue of the WSS Newsletter includes the name and telephone number of each member of the Executive Board, the Program Board, and the Chairperson of each current committee. These names and telephone numbers are for you to use.

If you have ideas of things that the WSS should be doing or could be doing better, let us know. There is a special committee this year, the Strategic Planning Committee, so this is a good time to suggest changes that should be considered. You can call Charles Mann or me.

If you have an idea for a session or a short course, please call the appropriate member of the Program Board. You know what you are doing, what is happening in your organization, and what people are coming in from out of town. The people who chair the program sections simply cannot know everything that is going on, no matter how hard they

(Continued)

WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agriculture & Natural Resources

Fred A. Vogel 447-3638
Gary Liberson 363-7140

Economics

Bette S. Mahoney 697-5655
Wray Smith 528-2772

Physical Sciences and Engineering

Seymour Selig 334-3522
Nozer Singpurwalla 676-7515

Public Health & Biostatistics

Jai Choi 436-7047
GooLoo Wunderlich 245-2100

Social & Demographic Statistics

Lee-Ann C. Hayek 357-1587
Donald J. Hernandez 763-7950

Statistical Computing

Harry Foxwell 872-8058
Ron Steele 475-3483

Short Courses

Virginia deWolf 275-5801
Josefina Lago 251-1500
Andrew A. White 436-7022

Methodology

Cathryn Dippo 523-1874
Mary Mulry-Liggan 763-7140

Newsletter Editor

Julia Oliver 252-5744

Employment

Evelyn Kay 331-1153

Random Bits by Mary Grace Kovar, WSS President
(Continued)

work, unless you tell them. Please do so, and do it as far in advance as possible so that sessions and courses can be arranged.

The committees also need information from you. Please tell Paul Ahmed of people who might like to be members of WSS, Terry Ireland of people who could be nominated to office in WSS, or Katherine Wallman of anyone who should be nominated to be Fellow of ASA. Tell Evelyn Kay if you have a job opening or are seeking a position.

The WSS will be celebrating its 60th birthday in 1986, and we are already planning for the annual dinner to be a birthday party. The Social Committee and the History Committee members will appreciate your help.

Nancy Kirkendall will try to reconstruct as much of the 60-year history as she can. The files are good for recent years, but the only information about early years is in people's memories. Please call Nancy if you remember who the officers were, have old Newsletters, or remember interesting stories about WSS and its members.

In case you have forgotten:

The Newsletter is put together five weeks before publication. Julia Oliver has to have all of the information for the Newsletter that far in advance.

Announcements promoting products are not acceptable for the Newsletter, which does not have rates for paid advertising at this point. Announcements of professional meetings to be held in Washington, of special events, of Federal meetings open to the statistical community are welcomed.

The Employment column is open to all members of the WSS without charge.

Anyone who is in Washington for a year - on a Sabbatical or an assignment to an agency - is welcomed as a Guest Member. Call Rich Allen if you know of such people so that he can add their names to the list of people to receive the Newsletter.

Finally, Barbara Bailar, an active member of WSS, has been elected as President of the American Statistical Association. Our congratulations to Barbara. We'd also like to offer her all the help we can to make her term as president as successful as she deserves.

PROGRAM ABSTRACTS

TOPIC: Data Reliability in the Current Population Survey (CPS)
SPEAKER: Colm O'Muircheartaigh, Census and the London School of Economics
CHAIR: Janice Shack-Marquez, Bureau of Labor Statistics
DISCUSSANT: Joseph Waksberg, WESTAT
DATE AND TIME: Tuesday, October 1, 1985; 12:30-2:00 p.m.
LOCATION: GAO Auditorium, 441 G Street, N.W., Washington, D.C.
ABSTRACT: An improved estimate of simple response variance for CPS data will be presented. The level of response variance and of the index of inconsistency for different types of respondents will be examined both for self-report and for proxy-reports. Some applications of the results will be suggested.

TOPIC: A Multipurpose Optimum Allocation Algorithm
SPEAKER: James Bethel, U.S. Department of Agriculture
DATE AND TIME: Tuesday, October 8, 1985; 12:30-2:00 p.m.
LOCATION: Room 5219 South Agriculture Bldg.
ABSTRACT: A simple and efficient algorithm is developed for optimally allocating multivariate survey samples. The algorithm is based on an iterative search among convex combinations of the best univariate allocations. The proof of convergence, which uses basic convex programming theory, will be discussed and an example will be presented.

TOPIC: Multiple Imputation for Interval Estimation
SPEAKER: Nathaniel Schenker, Bureau of the Census
CHAIR: Robert Fay, Bureau of the Census
DISCUSSANT: Fritz Scheuren, Internal Revenue Service
DATE AND TIME: Tuesday, October 8, 1985; 12:30-2:00 p.m.
LOCATION: IRS Auditorium, 1111 Constitution Avenue, N.W.
ABSTRACT: Multiple imputation is a method of handling nonresponse in surveys by replacing each missing datum with two or more values representing a distribution of likely values. This allows the data analyst to assess between-imputation variability as well as within-imputation variability. In this seminar, multiple imputation techniques and methods of constructing interval estimates using multiply imputed data will be described. Analytic and Monte Carlo results concerning the coverage properties of multiple imputation intervals for the population mean will be presented. Exploratory work on a project involving multiple imputation of 1980 industry and occupation codes to a 1970 Census Bureau public-use sample will also be discussed.

TOPIC: The Analyses of Human Leukocyte Antigen Data with No Double Recessives
SPEAKER: John Gart, National Institutes of Health (NIH)
CHAIR: James Dambrosia, NIH
DISCUSSANT: William Blackwelder, NIH
DATE AND TIME: Thursday, October 10, 1985; 1:30-3:30 p.m.
LOCATION: Landow Building, Conference Room A, 7910 Woodmont Avenue, Bethesda, MD
ABSTRACT: The methods of score tests and heterogeneity (or discrepancy) chi-square tests are applied to Human Leukocyte Antigen data wherein no double recessives are observed. The principle results are: 1) A score test for the possibility that the true recessive frequency may exceed zero in such circumstances and 2) Two-omnibus tests of equality of the gene frequencies in two groups, say cases in control, depending on whether the estimated recessive gene frequency may or may not be zero.

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PROGRAM ABSTRACTS (CONTINUED)

TOPIC: Mathematics and Statistics of Generalized Mixed Exponential Distributions
SPEAKER: Carl Harris, George Mason University
CHAIR: Seymour Selig, National Research Council
DATE AND TIME: Friday, October 18, 1985; 12:30-2:00 p.m.
LOCATION: University of the District of Columbia, Bldg 39, Conference Room 301 E&F
4200 Connecticut Avenue, N.W.

ABSTRACT: Mixtures of distributions have found increasing applications of late. Exponential forms are particularly useful because of their importance in general function theory, and the reasonable ease of statistical inference for them. It has in fact been show that any distribution may be well approximated by linear combinations of exponentials with mixing parameters not constrained to be positve.

TOPIC: Techniques for Preserving Statistical Confidentiality
SPEAKERS: Gordon Sande, Statistics Canada, and Larry Cox, Bureau of the Census
CHAIR: Nancy Spruill, Department of Defense
DATE AND TIME: Wednesday, October 23, 1985, 12:30-2:00 p.m.
LOCATION: Room GJ-015, U.S. Department of Energy, 1000 Independence Ave., S.W.
ABSTRACT: Confidentiality protection is a basic part of the operations of a statistical agency. Techniques and challenges in the areas of a.) release of microdata, b.) frequency tabulations and c.) magnitude tabulations will be reviewed. Various operational problems and some research in progress will be reviewed.

TOPIC: A Markov Chain Model for Illinois Corn Yields
SPEAKER: Thomas R. Birkett, U.S. Department of Agriculture
DATE AND TIME: Wednesday, October 30, 1985; 12:00-2:30 p.m.
LOCATION: Room 5152 South Agriculture Bldg., 12th and Independence Ave., S.W.
ABSTRACT: An irreversible absorbing Markov chain is fit to USDA corn objective yield data. The variables normally used as the predictor variables in a regression model are used to define the transient states of the Markov chain. The absorbing states are discrete classes of gross yield.

UPCOMING SESSIONS

November 8 Statistical Methods for Longitudinal Studies
November 15 FEE EVENT: Shortcourse on Generalized Linear Models

Report on ASA Board of Directors Meeting August 3-4, 1985 by Eva E. Jacobs

The Board discussed and took action where necessary on the following issues:

1. ASA election results were announced. Of particular interest to WSS was the election of Barbara Bailer as President-elect. Mary Grace Kovar, WSS president, is Chair-elect of the Social Statistics Section and Joseph Waksberg is Chair-elect of the Section on Survey Research Methods.

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Report on ASA Board of Directors Meeting August 3-4, 1985 by Eva E. Jacobs (Continued)

2. Two new chapters, Mid-Michigan and Chihuahan Desert International, were approved. Guidelines for establishing and dissolving chapters were approved.
3. Financial reports were reviewed. The status of the Buildings and Development fund was reported. The future direction of the fund campaign will be addressed at the Board meeting in November. Recommendation on requests by committees for 1986 funds will be made in September for Board decision in November. A recommendation was approved that Continuing Education be treated like other activities and not be required to be self-supporting.
4. After extensive investigation of the alternative in-house computer systems proposed by DISC and Wang for ASA, the group appointed by the Board to review the proposals chose the Wang/IMC systems. An Information Systems Manager will be hired. The conversion process will begin by early September.
5. A committee will be set up to review the dissemination of the ASA directory in the future. The new computer environment of the ASA office should permit the incorporation of more timely data.
6. Guidelines for cooperative cosponsorship of meetings with other societies were approved. The document covers types of groups, level of cosponsorship, member involvement, financial arrangements and publicity and access.
7. There was discussion of a cooperative agreement with EPA. The executive Committee was given authority to conclude such an agreement provided that ASA activities were limited to educational activities.
8. The Strategic Planning process is now underway in the chapters and sections in accordance with the strategic planning framework developed by the strategic planning group. Reports will be sent ASA by September. There will be a special ASA Board meeting November 1-3 devoted entirely to this activity.
9. President Neter was authorized to write to the National Academy of Sciences to urge that there be greater representation of statisticians in the academy and to support the request for establishment of a separate section on statistics.
10. A resolution was voted on which deplored discrimination against sexual minorities. The vote was indecisive (2/3 approve of the entire Board is required) and the absent members of the Board were to vote by mail.
11. New editors for JASA and JBE were approved. There was also a great deal of discussion about ASA sponsored publications, problems of royalty allocations and approval of publications. This is clearly an area that will require more extensive investigation.

I would be please to hear from WSS members on these or other issues of interest before the next Board meetings in November.

Eva E. Jacobs
District 1 Representative
Bicentennial Building, Room 4216
Washington, D.C. 20212
272-5156

OTHER ANNOUNCEMENTS

August Board Meeting Notes

The August 27th meeting of the Board of Directors was largely devoted to discussion of special emphases for the upcoming year. President Mary Grace Kovar announced her desire to focus on preparation for a WSS 60th anniversary celebration in conjunction with the Annual Dinner next June. Nancy Kirkendall will aid in those interests by serving as a historian for this year.

Kovar reported on the Council of Chapters meetings held in Las Vegas. Those sessions illustrated the uniqueness of WSS in size, program, and activities compared to other chapters.

Program planning for this year is well underway with at least 15 program sessions and one short course already planned for the first three months of the program year.

Software Exchange and Computer Theater at the American Public Health Association (APHA) Meeting, November 18-21, 1985.

Members of the WSS who are planning to attend the American Public Health Association (APHA) Annual Meeting in Washington, November 18-21, 1985 might like to know that there will be a software exchange and computer theatre each day of the meeting. A location in one of the hotels has been set aside and microcomputers, including an IBM-PC and an Apple II+/e, will be available for demonstrations and sharing of public domain software. A schedule of demonstrations will be developed the first day and posted. The headquarters hotel for this meeting is the Shoreham.

All sessions of the Statistics Section of APHA will be at the Capital Hilton. The first session of the Section will be at 2 PM on Monday, November 18, 1985 at the Capital Hilton. This session, like the companion one at ASA which was sponsored by APHA, is to celebrate the 25th birthday of the National Center for Health Statistics. Members of the WSS are invited to attend this session.

WSS Membership News

Have you changed jobs or received an honor or an award? WSS members are invited to submit these announcements to Julia Oliver, P.O. Box 23502, Washington, D.C. 20026. Each submission include a daytime telephone number for verification purposes. Deadline for inserting notice is five (5) weeks before the publication date.

Ron Bosecker is the new Chief of the Methods Staff of the Statistical Report Service, USDA. Ron was most recently the Assistant Statistician in charge of SRS's California State Statistical Office.

Joseph L. Gastwirth, Professor of Statistics at George Washington University, is on a years sabbatical leave at the Department of Statistics, University of California-Davis.

Samuel W. Greenhouse, Professor of Statistics, at the George Washington University, became Chairman of the Department of Statistics/Computer and Information Systems on September 1, 1985. Dr. Greenhouse replaces Dr. Arthur Kirsch who resigned after four years as Chairman. Dr. Kirsch will continue to teach statistics courses within the department.

OTHER ANNOUNCEMENTS (CONTINUED)

Fellowship Announcement

American Statistical Association/NSF/Census Bureau Research Fellowships and Associateships beginning around September 1, 1986. Positions at Census Bureau for one year or shorter period. General areas for research are social and demographic studies, economic measurement and analysis, and statistical methodology and computing. Requirements: for Fellows, Ph.D and research record in relevant field (e.g. Demography, Sociology, Statistics, Economics); for Associates, at least two years graduate study in relevant field. Salaries are commensurate with qualifications and experience; also, fringe benefits and a travel allowance are provided. Apply by January 1, 1986 for Fellows and February 15, 1986 for Associates. For information, contact Dr. Daniel Kasprzyk, Special Assistant for SIPP Research, Room 2024-3, Population Division, Bureau of the Census, Washington, D.C. 20233 (301-763-5784).

EMPLOYMENT COLUMN

Deadlines for inserting notices is five (5) weeks before the publication date

Send notices and request to:
Evelyn R. Kay 202/331-1153
520-22nd Street, NW
Washington, DC 20037

JOB OPENINGS

Price-Waterhouse is expanding its statistical staff to support efforts involving survey design and administration, data analysis, modeling, and forecasting. Qualifications include an advanced degree in statistics, computer programming experience, acknowledge of survey methods, and strong written and oral communication skills. Send resume to D. A. Harrington, Price-Waterhouse, 1801 K Street, N.W., Washington, D.C. 20006.

DIRECTORY
WASHINGTON STATISTICAL SOCIETY

1985-86 Executive Board, Program Board and Committees

Executive Board

| <u>TITLE</u> | <u>NAME</u> | <u>Work Telephone</u> |
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| President: | Mary Grace Kovar | 436-7105 |
| President-Elect: | Daniel Kasprzyk | 763-5784 |
| Past President: | Terry Ireland | (301) 859-6104 |
| Secretary: | Rich Allen | 447-3896 |
| Treasurer: | Bennie A. Clemmer | (301) 597-6856 or FTS 987-6856 |
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| Representative to ASA Council | Maria Gonzalez | 395-3087 |
| Representative at Large: | Wendy Alvey | 376-0216 |
| | Susan S. Ellenberg | 496-4836 |
| | Nancy J. Kirkendall | 252-2276 |
| | Susan Miskura | 763-7670 |
| Methodology Section Chair: | Cathryn Dippo | 523-1874 |
| Newsletter Editor: | Julia D. Oliver | 252-5744 |

Program Board

| | | |
|---------------------------|---------------------|----------|
| Methodology | Catherine Dippo | 523-1874 |
| | Mary Mulry-Liggan | 763-7140 |
| Social and Demographic | Lee-Ann C. Hayek | 357-1587 |
| | Donald J. Hernandez | 763-7950 |
| Statistical Computing | Harry Foxwell | 872-8058 |
| | Ron Steele | 475-3483 |

(Continued)

PROGRAM BOARD (CONTINUED)

| <u>TITLE</u> | <u>NAME</u> | <u>Work Telephone</u> |
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| | Gary Liberson | 363-7140 |
| Economics | Bette S. Mahoney | 697-5655 |
| | Wray Smith | 528-2772 |
| Physical Sciences and Engineering | Seymour Selig | 334-3522 |
| | Nozer Singpurwalla | 676-7515 |
| Public Health and Biostatistics | Jai Choi | 436-7047 |
| | Gooloo Wunderlich | 245-2100 |
| Short Courses | Virginia deWolf | 275-5801 |
| | Josefina Lago | 251-1500 |
| | Andrew A. White | 436-7022 |
| Newsletter Editor | Julia D. Oliver | 252-5744 |

COMMITTEES

| | | |
|----------------------|-------------------|----------------|
| <u>Nominating</u> | Terry Ireland | (301) 859-6104 |
| | Nancy Gordon | 226-2669 |
| | Daniel Kasprzyk | 763-5784 |
| <u>Shiskin Award</u> | Lillian H. Madow | (415) 856-2839 |
| <u>Fellows</u> | Katherine Wallman | 783-5808 |
| | Earl S. Pollack | 229-5109 |
| <u>Membership</u> | Paul Ahmed | 436-7039 |

(Continued)

COMMITTEES (CONTINUED)

| <u>TITLE</u> | <u>NAME</u> | <u>Telephone</u> |
|--------------------------|------------------|-----------------------|
| <u>President's Award</u> | Terry Ireland | (301) 859-6104 or FTS |
| | Mary Grace Kovar | 436-7105 |
| | Daniel Kasprzyk | 763-5784 |
| <u>Employment</u> | Evelyn R. Kay | 331-1153 (HOME) |
| <u>Social</u> | Marilyn McMillen | 436-7075 |
| | David McMillen | 763-5784 |
| <u>Arrangements</u> | Ayah Johnson | 785-8400 |
| <u>Newsletter Editor</u> | Julia D. Oliver | 252-5744 |

Strategic Planning Committee WSS 1985-86

| | | |
|-----------|-------------------------------------|--|
| Chair: | Charles R. Mann | 466-6161 |
| Members: | Daniel Kasprzyk, President-Elect | 763-5784 |
| | Bennie A. Clemmer, Treasurer | (301) 597-6856 or FTS 987-6856 9-26 |
| | Wendy Alvey Rep-at-Large | 376-0216 |
| Ex. Off.: | Mary Grace Kovar, President | 436-7105 |



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