

ELIZABETH LEONARD SCOTT  
1917-1988

Professor Elizabeth L. Scott, a long time member of the faculty of the Department of Statistics at Berkeley, died unexpectedly on December 20, 1988.

Elizabeth Scott's academic career started at Berkeley where she received a BA in 1939 and a PhD in 1949. Both degrees were in Astronomy. During World War II she worked in the Statistical Laboratory that Jerzy Neyman had just started at Berkeley. This was real war work, mostly concerned with improving precision of air bombing. By 1948, when she published her first statistical paper, she had already co-authored 13 papers in Astronomy. Jerzy Neyman had led her to Statistics, she led him to Astronomy; the two of them wrote a long series of papers on the spatial distribution of galaxies.

In 1951 Elizabeth Scott was appointed Assistant Professor of Mathematics at U.C. Berkeley, becoming Associate Professor of Statistics in 1957 and Professor of Statistics in 1962.

Elizabeth Scott worked on a variety of statistical studies. One such study, joint with Neyman, was of weather modification (cloud seeding). That started in 1952. She was still working on a booklet on the subject at the time of her hospitalization. Also with Neyman, she published a series of papers on stochastic models for carcinogenesis. And, as part of a study on ozone depletion, Betty (as she was usually called) became an expert on skin cancer. She visited the U.C. San Francisco melanoma clinic every week.

In the early seventies Betty worked to promote the status of women in academia. She published several papers in which she compared salaries of faculty women with those of faculty men and found a substantial difference at equal qualifications nationally and locally. She was a role model for many aspiring young female scientists and took an active interest in their careers even after her retirement this past spring.

Betty was notable for her boundless energy. She was on several committees of the National Academy of Sciences and travelled often to Washington, D.C. She was also busy locally, taking care of complaints about Evans Hall (that is our building; Betty had a prominent role in its design and its maintenance. We used to joke that she owned it.)

Betty was a superb teacher who cared very deeply about her students. She single-handedly ran our Masters program for about 15 years, and in the last 7 years alone, she supervised the theses of 11 PhD students. She will be remembered as feisty by deans and warm and generous by the students and staff of the department. It was a personal commitment on her part to provide cakes for students and faculty working in Evans on Saturday afternoons.

Elizabeth Scott was internationally known. She had been president of the Institute of Mathematical Statistics, vice-president of the American Statistical Association and president of the Bernoulli Society. (She was a main force behind the organization of the First International meeting of the Bernoulli Society in Tashkent). She received many honors, including election as Honorary Fellow of the Royal Statistical Society. But to us, she will always be the one who cared deeply about the Department and the Laboratory.

The University of California Statistics Department will hold a memorial service for Betty on Friday, February 17 at the Alumni House (Berkeley Campus) at 3:30 p.m.

Donations can be made to the Elizabeth L. Scott Memorial Fund c/o Department of Statistics, University of California, Berkeley, CA 94720. It is the policy of the University of California, Berkeley and the University of California Berkeley Foundation that a portion of the gifts and the interest therefrom (2%) may be used to defray the costs of the administering the fund.

The Southern California Chapter of the American Statistical Association  
announces the Eighth Annual  
WORKSHOP IN APPLIED STATISTICS  
On Friday, May 12, 1989, 8:30-4:30  
at the Annenberg School of Communication  
University of Southern California

HANDLING MISSING DATA: TECHNIQUES AND APPLICATIONS

presented by

Professor Donald B. Rubin  
Department of Statistics  
Harvard University

Professor Roderick J. Little  
Department of Biomathematics  
University of California, L.A.

ABSTRACT: Missing data is a pervasive problem in statistics. This workshop will a) survey ad-hoc historical approaches to missing data adjustment, b) describe principled approaches to the problem based on modeling the data and the missing-data mechanism, and c) discuss real applications, including missing data problems encountered by the workshop participants.

REGISTRATION INFORMATION: The registration fee is \$60 (\$30 for full time students). Admission to the program and exhibits area, one set of handouts, refreshments, and lunch are provided. The fee does not cover the cost of parking. Lunch cannot be guaranteed for registrations postmarked after 4/30.

REFUND INFORMATION; Refund requests should be addressed to Nancy Berman (address below). A \$10 service charge will be assessed for request received before April 30. Refund requests received after that date will not be honored.

FURTHER INFORMATION: Contact either

Nancy Berman or  
Medical Center RB1-220  
1124 West Carson  
Torrance, Ca 90509  
(213) 212 1874 (213) 476 2488

Roberta Madison  
Department of Health Sciences (HLTH)  
California State University  
Northridge, CA 91330  
(818) 885 4645 (213) 457 4627

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REGISTRATION FORM: 8TH Annual Workshop in Statistics on May 12, 1989

Name: \_\_\_\_\_ Telephone ( ) \_\_\_\_\_

Professional Affiliation: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
-----

Registration Type: Regular (\$60) Student (\$30)

Vegetarian Lunch ( ) Receipt for Registration Fee Requested ( )

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Make your check or money order payable to "Workshop in Applied Statistics".  
Return it and this form to: Professor Roberta E. Madison, Department of  
Health Sciences (HLTH), California State University, Northridge, CA 91330  
-----

**Chapter Order Form for ASA150 Items**

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Please enclose check payable to American Statistical Association, for amount of total order with this form and send to:

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## EMPLOYMENT OPPORTUNITIES

### 1. STATISTICIAN, Systems Applications Inc., San Rafael

**RESPONSIBILITIES:** Analysis of air and water pollution data. Analyses require originality and ingenuity; thus imaginative approaches to probing and presenting data are sought. Conscientiousness concerning the accuracy, appropriateness, and timeliness of results is essential.

**REQUIREMENTS:** Ph.D in statistics. Oral and written communication skills necessary to present results to clients. Some statistical consulting experience is preferred, especially in the physical sciences. Ability to use statistical packages (SAS preferred) is required.

**COMPANY:** Systems Applications, Inc. is an environmental consulting firm in Marin county, providing consulting services related to air and water pollution to the U.S. EPA and other governmental and industrial organizations.

**SEND RESUME:** Job #4-P-89BA, Systems Applications Inc. 101 Lucas Valley Road, San Rafael CA 94903. Include salary requirements. AA/EEO

### 2. STATISTICIAN, ICI Americas Inc., Richmond

**RESPONSIBILITIES:** Consult with and assist chemists with experimental design, statistical data analysis and in interpreting results.

**REQUIREMENTS:** Advanced degree in statistics. Statistical consulting experience desirable. Knowledge of experimental design (preferably industrial screening designs, fractional factorials, response surfaces, mixture designs) AOV regression. SAS experience. Experience with other statistical methods or design/ analysis of software is a plus. Excellent written and verbal communication skills.

**COMPANY:** ICI Americas, Inc. is a diversified chemical/pharmaceutical company and a world leader in the agricultural chemicals business. This position is in the Agricultural Products Western Research Center in Richmond, CA.

**SEND RESUME:** Ms. K. D. MacLaren, ICI Americas, Inc. 1200 South 47th Street, Box 4023, Richmond CA 94804-0023. Please include salary history. AA/EEO

### 3. RESEARCH ANALYST, CHEVRON CORP. MEDICAL STAFF, S.F.

**RESPONSIBILITIES:** Management and analysis of data from occupational cohort studies, ad hoc epidemiological investigations, health evaluation, and Chevron's morbidity and mortality surveillance systems..

**REQUIREMENTS:** Masters degree in Public Health or related field and experience in data analysis are required. Ability to use SAS and database management software are desirable.

**SEND RESUME:** Dr. Kenneth Satin, Medical Department, Room 1359, Chevron Corporation, 225 Bush Street, San Francisco CA 94104.. above.

**NOTICES:**

**AMERICAN SOCIETY FOR QUALITY CONTROL - CALL FOR PAPERS.**

The American Society for Quality Control (ASQC) Region 7 Statistics division is currently planning a "Statistical Applications in Quality Assurance and Reliability" conference one JUNE 2 and 3, 1989. This conference will be sponsored by the Southern California ASA and the University of California at Riverside statistics department.

Papers should illustrate the use of statistics in diverse applications and disciplines such as quality of design and productivity, process control, quality audit and reliability and the impact of these disciplines on quality costs such as scrap and rework rates and Total quality Management (TQM) and planning.

Submit title , abstract and a short biography by **March 1, 1989** to Rodney Green, Program Chairman, c/o Kennedy Company, Division of Shugart, 1600 Shamrock Ave, Monrovia CA 91016. (818)357-8831 x513.

**ASA SESQUICENTENNIAL SOUVENIRS - Order Now.**

Three items are available:

KOOZIES (Insulated beverage can holders) Light blue with a dark blue ASA150 seal. \$1.40 plus shipping.

PENS (by Schaefer, large barrel, ball point) dark blue with silver ASA150 imprint. \$1.50 plus shipping.

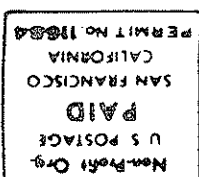
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AMERICAN STATISTICAL ASSOCIATION  
SAN FRANCISCO BAY AREA CHAPTER





# American Statistical Association

## SAN FRANCISCO BAY AREA CHAPTER

### CALENDAR OF TALKS

|                  |           |  |
|------------------|-----------|--|
| JANUARY 11, 1989 | Wednesday | David C Trindale, Advanced Micro Devices |
| JANUARY 17, 1989 | Tuesday   | J. Richard Landis, Penn. State U.        |
| JANUARY 19, 1989 | Thursday  | Mark DiCamillo, Field Research           |

### BIostatistics PROGRAM

**SPEAKER:** J. Richard Landis  
Center for Biostatistics and Epidemiology, Penn. State U.

Dr. Landis was on the faculty of the Biostatistics Department at the University of Michigan(Ann Arbor) for 13 years before moving to his present position this autumn. He has done research and published extensively in the area of categorical data analysis.

**TOPIC:** "SOME STATISTICAL ISSUES IN THE BLOOD PRESSURE/BLOOD LEAD CONTROVERSY"

**DATE:** January 17, 1989 (Tuesday)  
6:00 Cocktails (Cash Bar)  
6:30 Dinner  
7:30 Presentation

**PLACE:** Sofia Restaurant  
2121 El Camino Real, San Mateo  
Sofia is at the corner of El Camino and 21st Street, two blocks South of highway 92.

**PRICE:** \$13.00 for dinner (Soup/Salad, Entree, Dessert, Coffee)

**RESERVATIONS:** Call Kelvin Lee (415) 852-3253 by January 12 with your choice of entree (veal parmigiana, chicken cacciatore, or fish du jour). Chapter members should feel no obligation to join us for dinner; if there is a schedule conflict, feel free to come at 7:30 just for the talk, but let Kelvin know. Same telephone number can be used for reservation cancellations.

### GENERAL APPLICATION PROGRAM

**SPEAKER:** Mark Di Camillo  
Managing Director, Field Institute

**TOPIC:** "PRE ELECTION POLL, METHODOLOGY OF TELEPHONE SURVEYS"

**DATE:** January 19, 1989 (Thursday)  
11:30 Coffee  
12:00 Lunch and Presentation

**PLACE:** PLACE: Bank of America  
180 Montgomery, 8th floor Conference Room C  
San Francisco

Arlene Frazier will take reservations for a box lunch from the local delicatessen. Cost \$5.50. Phone (415) 622-8422.

*Mike Tarter*  
*Liz Kay*

*Liz Kay*

*Karen Jones re whole chapter*  
*Liz Kay*

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(415) 856-9400

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Fred Khorasani  
(408) 765-9318

ASQC STATISTICAL TASK GROUP  
Curtis Engelhard  
(408) 765-9325

*Barbara Korn*  
*Billy Owen*  
*CD*

APPLICANT:

**POSITION DESIRED: Mathematical Statistician**

**EXPERIENCE:** Ten years (last four as a manager) at the U.S. Census Bureau. Experience in survey design, estimation procedures, technical report writing, oral presentations, methods for data collection, processing, and statistical analysis. Familiar with FORTRAN programming and statistical packages (SPSS, Minitab, SAS and BMDP). Versed in Deming's management philosophy.

**EDUCATION:** M.A. in Applied Math/Statistics, U.C. Santa Barbara, 1978

**CONTACT:** Robert Edson (703) 971-0245 after 3pm (Pacific)

**EMPLOYMENT OPPORTUNITIES**

**STATISTICIAN, FAILURE ANALYSIS ASSOCIATES**

**RESPONSIBILITIES:** Use methods of statistical epidemiology in the analysis of large volumes of accident data. Coordinate and manage tasks performed by research assistants.

**REQUIREMENTS:** M.A. or Ph.D in statistics or related field. Experience with analysis of large volume databases. SAS or other statistical analysis packages is essential. Engineering background is an advantage.

**COMPANY:** Failure Analysis Associates is a national engineering and scientific services firm specializing in the analysis and prevention of engineering system and product failures.

**SEND RESUME:** Personnel Manager, Failure Analysis Associates, P.O. Box 51470, Palo Alto, CA 94303. Reference AD# RR 9.23.  
Equal Opportunity Employer.

**CHAPTER NEWS:** Three chapter members were elected ASA Fellows in 1988.

**JULIET POPPER SCHAFFER**, Senior Lecturer, Department of Statistics, U.C. Berkeley; for significant contributions to the theory and methods of multiple comparisons, for excellence in teaching and consulting, for dedicated editing of applied statistics journals, and for service to the ASA.

**ROBERT H. SHUMWAY**, Professor, Division of Statistics, U.C. Davis; for significant contributions to the theory of time series and signal detection; for outstanding statistical applications in oil and water sciences, seismology, and health sciences; and for consulting and teaching skills.

**ABRAHAM SILVERS**, Senior Project Manager, Electric Power Research Institute, and Adjunct Professor of Epidemiology (Biostatistics), U.C. San Francisco; for major contributions to risk assessment and compartmental analyses, for consultive expertise in clinical trials and in heart and cancer research, and for outstanding leadership as a statistical administrator.



## Statistics Task Group of ASQC

(Santa Clara Valley Section)

### Analysis of Reliability Data with Failures from a Defective Subpopulation

David C. Trindade, Ph.D.  
Director, Applied Statistics  
Advanced Micro Devices

Most reliability analysis is based on the assumption that all units under stress will eventually fail for a specific mechanism. However, in practical applications, we often encounter defective subpopulations: a fraction of the units under stress contain flaws that lead to failure. Once the faulty units in the defective subpopulation fail, the surviving components experience no further fails for that mechanism. In this talk, Dr. Trindade will discuss appropriate procedures to defect and analyze such lifetest data. He will also describe the use of burn-in to screen out even those mechanisms classified as having an increasing failure rate (wearout). An actual case history involving mobile ionic contamination integrated circuits will be presented.

Wednesday, 7:00 P.M.

January 11, 1989

Intel Corporation Auditorium (Building SC9)  
2250 Mission College Blvd, Santa Clara

From Highway 101 in Santa Clara, take Montague Expressway east to the first stop light. Turn left onto Mission College Boulevard. At the first stop light, turn left into the Intel parking lot.

For further information call Curt Engelhard at (408)765-9325



Some Interesting Statistics:

Ninety-two point four percent of juvenile delinquents have eaten tomatoes.

Eighty-seven point one percent of the adult criminals in penitentiaries throughout the United States have eaten tomatoes.

Informers reliably confirm that of all known American Communists, ninety-two point three percent have eaten tomatoes.

Eighty-four percent of all people killed in automobile accidents during the year 1980 had eaten tomatoes.

Those who object to singling out specific groups for statistical proofs require measurements within a total. Of those people born before the year 1850, regardless of race, color, creed or caste, and known to have eaten tomatoes, there has been one hundred percent mortality!

In spite of their dread addiction, a few tomato eaters born between 1850 to 1900 still manage to survive, but the clinical picture is poor—their bones are brittle, their movements feeble, their skin seamed and wrinkled, their eyesight failing, hair falling, and frequently they have lost all their teeth.

Those born between 1900 and 1925 number somewhat more survivors, but the overt signs of the addiction's dread effects differ not in kind but only in degree of deterioration. Prognostication is not hopeful.

Don't let this happen to you!

Exhaustive experiments show that when tomatoes are withheld from an addict, invariably his cravings will cause him to turn to substitutes—such as oranges, or steak and potatoes. If both tomatoes and all substitutes are persistently withheld, death invariably results within a short time.

The skeptic of apocryphal statistics, or the stubborn nonconformist who will not accept the clearly proved conclusions of others, may conduct his own experiment.

Obtain two dozen tomatoes (they may actually be purchased within a block of some high schools, or discovered growing in a respected neighbor's back yard)—crush them to a pulp in exactly the state they would have if introduced into the stomach, pour the vile juice and pulp into a bowl, and place a goldfish therein.

Within minutes the goldfish will be dead!

Those who argue that what affects a goldfish might not apply to a human being may, at their own choice, wish to conduct a direct experiment by fully immersing a live human head into the mixture for a full five minutes.

The results are almost always conclusive.

**WARNING:** It has been determined that statistics, if left unqualified or misdirected, can be hazardous to your advertising message. Consult your local ad agency. If problem persists, seek a second opinion.

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THE

D R E A D T O M A T O

AAAS Annual Meeting  
15-20 January 1989  
San Francisco Hilton

The annual meeting of the American Association for the Advancement of Science will be held concurrently with the joint annual meeting of the American Association of Physics Teachers and the American Physical Society.

The American Statistical Association is an affiliated society of the AAAS and, together with the AAAS Section on Statistics, is sponsoring or cosponsoring more than a dozen symposia and technical sessions of interest to statisticians.

PRELIMINARY PROGRAM INFORMATION (Title. Organizer(s) - Speakers. Day/time)

- Statistical Description and Modeling of Spatial Variability: Theory and Applications (3 sessions): Paul Switzer, Stanford - A. Owen, Y. Vardi, M. Stein, D. Myers; S. Geng, E. Englund, G. Flatman, G. Uehara, K. G. Cassman, L. Gelber; M. F. Goodchild, J. Dangermond, S. J. Walsh, J. E. Estes. Sun/am,pm; Mon/am
- Modelling the AIDS Epidemic. Agnes M. Herzberg, Imperial College & P. A. Lachenbruch, UCLA - L. Billard, R. Elashoff, M. Gail, S. W. Lagakos. Wed/pm
- Clinical Trials of AIDS Drugs and Vaccines: Issues of Science, Ethics, and Confidentiality. Deborah Runkle, AAAS & Marvin Zelen, Harvard - S. Nightingale, W. Curran, R. Gelber, L. Corey, D. Hoth. Thu/pm
- The Evolving National Program for the Assessment of the Quality of Medical Care. Henry Krakauer & R. Clifton Bailey, Health Care Financing Admin. - H. Krakauer, K. Lohr, P. Batalden, A. Donabedian, J. Sisk. Wed/am .
- Has Risk Assessment Become Too Conservative? Adam M. Finkel, Resources for the Future - W. Farland, R. L. Sielken, Jr., John C. Bailar III, K. S. Crump. Sun/pm
- Risk Assessment and Environmental Policy: New Directions (2 sessions). Thomas E. McKone, Lawrence Livermore. K. Sexton, R. Coppock, J. C. Davies, D. Hattis, D. W. North; W. R. Ott, L. B. Ellwin, C. Harris, L. Zeise. Mon/am,pm
- The 1987 National Surveys of Hazardous Waste Management Facilities. John L. Warren, Research Triangle Institute - J. L. Warren, J. W. Craig, S. Caldwell, P. Smith, D. Allen. Wed/am
- New Data on the American Family. Joseph E. Potter, Harvard & James A. Sweet, University of Wisconsin. Wed/pm
- Quality and its Impact on Competitiveness. H. James Harrington, ASQC & Walter L. Hurd, International Academy for Quality. Tue/pm
- Statistics in Product and Process Design from Eli Whitney to the Present. William A. Golomski, W. A. Golomski & Assoc. - L. Oh, W. T. Fuller, A. A. Aswad, M. Flynn, W. A. Golomski. Wed/am

Values, Policy Controversies and the 1990 Census (2 sessions). Patrick Burns, Federation for American Immigration Reform & Rachele Hollander, NSF. Tue/am,pm

Developments in the Use of Federal Government Economic Statistics for Scientific Research. Karen R. Polenske, MIT - F. Williams, F. Goto, D. Rice, F. T. Juster, K. R. Polenske, S. Robinson. Thu/am

Some Results on the Application of Cognitive Laboratory Research Techniques to Survey Methodology. Cathryn S. Dippo, Bureau of Labor Statistics - P. Campanelli, M. Palmisano, J. Lessler, C. Tucker, M. Sirken. Sun/am

Sociologists and Statisticians: A Sesquicentennial Partnership. William A. Golomski, W. A. Golomski & Assoc. - L. A. Goodman, J. Tanur, I. Berg, C. R. Block. Wed/pm

Cross-National Measurements of Public Understanding of Science and Technology. Jon D. Miller, Northern Illinois Univ. Tue/pm

Sharing Scientific Data: A Cross-Disciplinary Examination of Accomplishments, Problems and Prospects. Joan E. Sieber, California State Univ., Hayward - M. David, R. Jenne, D. White, D. Blanchard, V. J. Evans, A. Weiss, V. Weil. Wed/pm

INFORMATION - Registration information is available from

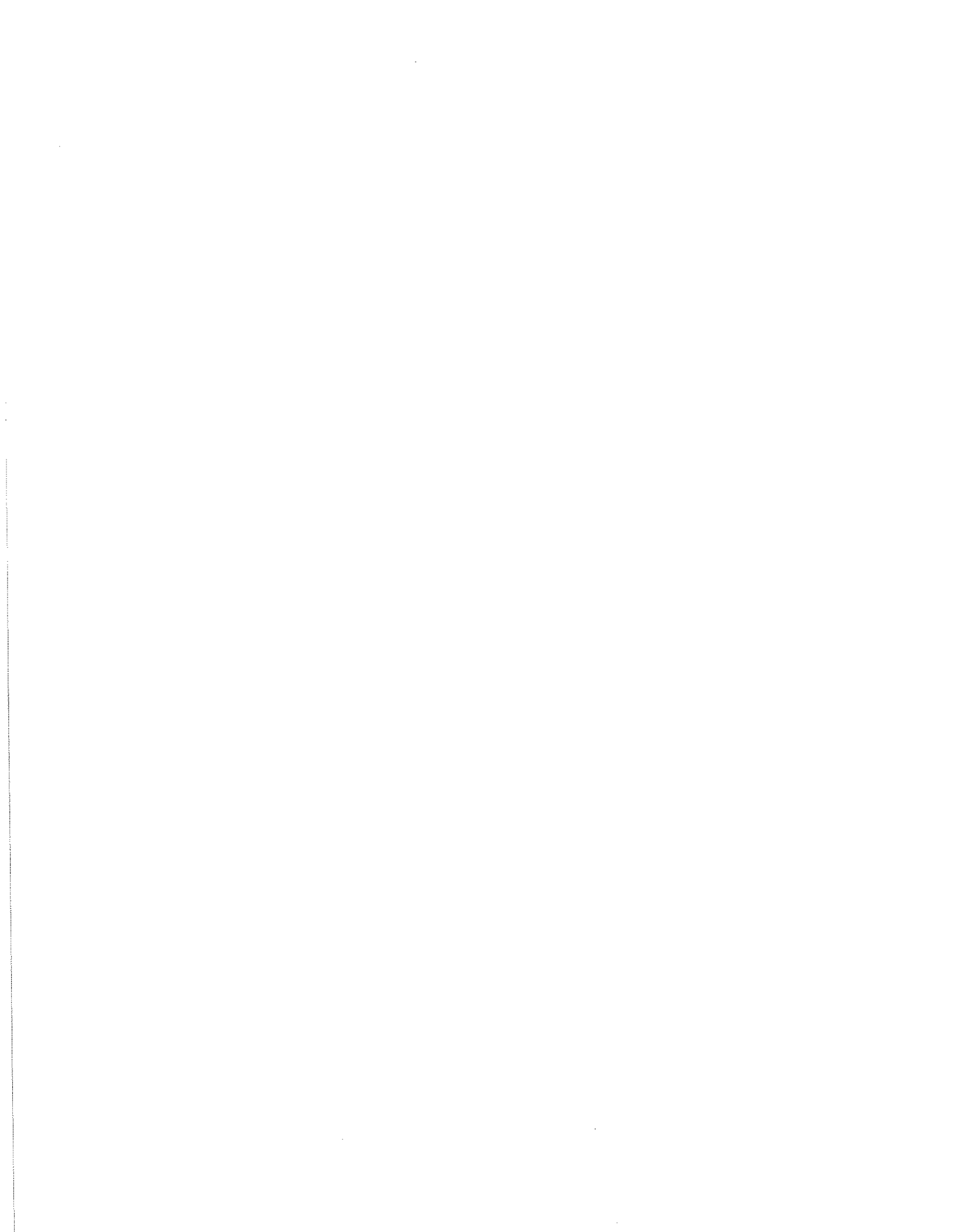
AAAS Meetings Office  
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Washington, DC 20005

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**CHAPTER DUES:** Several members are more than a year behind in local chapter dues. Please check the date on your mailing label. The printed date is the last time that we received your dues. If you are overdue please send \$6 to:

Anna Bagniewska  
Syntex Labs  
3401 Hillview Avenue L-2500  
Palo Alto, CA 94304

**AAAS ANNUAL MEETING JAN 15-20 in San Francisco**

The AAAS annual meeting will be January 15-20, 1989 at the San Francisco Hilton. There are several sessions of special interest to statisticians. A preliminary program and registration information is enclosed in this month's newsletter.

**READ ABOUT THE KILLER TOMATOES**

Arlene Frazier forwards the enclosed statistics on tomatoes. Hope you enjoy this article.

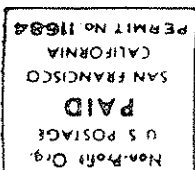
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**American Statistical Association**  
SAN FRANCISCO BAY AREA CHAPTER





# American Statistical Association

## SAN FRANCISCO BAY AREA CHAPTER

### CALENDAR OF FUTURE TALKS

#### General Applications Programs:

DECEMBER 1, 1988      THURSDAY      Prof. Robert Shumway, UC Davis  
JANUARY 19, 1989      THURSDAY      Mark DiCamillo, Field Research

### JOINT GENERAL APPLICATIONS AND BIostatISTICS

**SPEAKER:** Professor Robert Shumway  
UC Davis

**TOPIC:** "ESTIMATING MEANS IN CENSORED SAMPLES UNDER TRANSFORMATION"

Reporting procedures for potentially toxic pollutants are complicated by the fact that concentrations are measured using small samples that include a number of observations lying below some detection limit. Furthermore there are often a small number of high concentrations observed in combination with a substantial number of low concentrations. The above configuration produces small non-normally distributed samples with censoring.

This talk proposes a procedure for computing improved estimators for the means of censored samples that can be transformed to normality. The method estimates the optimal power transformation in the Box-Cox family by searching the censored data likelihood. Maximum likelihood estimators for the mean of the transformed scale are calculated via the EM algorithm. Maximum likelihood estimators in the original scale are computed as functions of the estimated mean and variance in the transformed population. Confidence intervals are computed using the delta method and the nonparametric percentile and bias-corrected percentile versions of Efron's bootstrap.

A simulation study over sampling configurations expected with environmental data indicates that the delta method combined with a reliable value for the power transformation produces intervals with better coverage properties than are yielded by the bootstrap.

**DATE:** December 1, 1988 (Thursday)  
3:30 - 4:00      Coffee  
4:00 - 5:00      Presentation

**PLACE:** Room 400  
Golden Gate University  
536 Mission Street  
San Francisco, CA

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ASQC TASK GROUP REP.  
Fred Khorasani  
(408) 765-9318

ASQC STATISTICAL TASK GROUP  
Curtis Engelhard  
(408) 765-9325

**APPLICANT:**

**POSITION DESIRED: Mathematical Statistician**

**EXPERIENCE:** Ten years (last four as a manager) at the U.S. Census Bureau. Experience in survey design, estimation procedures, technical report writing, oral presentations, methods for data collection, processing, and statistical analysis. Familiar with FORTRAN programming and statistical packages (SPSS, Minitab, SAS and BMDP). Versed in Deming's management philosophy.

**EDUCATION:** M.A. in Applied Math/Statistics, U.C. Santa Barbara, 1978

**CONTACT:** Robert Edson (703) 971-0245 after 3pm (Pacific)

**EMPLOYMENT OPPORTUNITIES**

1. **STATISTICIAN**, FAILURE ANALYSIS ASSOCIATES

**RESPONSIBILITIES:** Use methods of statistical epidemiology in the analysis of large volumes of accident data. Coordinate and manage tasks performed by research assistants.

**REQUIREMENTS:** M.A. or Ph.D in statistics or related field. Experience with analysis of large volume databases. SAS or other statistical analysis packages is essential. Engineering background is an advantage.

**COMPANY:** Failure Analysis Associates is a national engineering and scientific services firm specializing in the analysis and prevention of engineering system and product failures.

**SEND RESUME:** Personnel Manager, Failure Analysis Associates, P.O. Box 51470, Palo Alto, CA 94303. Reference AD# RR 9.23.  
Equal Opportunity Employer.

2. **SR STATISTICIAN**, Systems Applications Inc.

**RESPONSIBILITIES:** Perform exploratory and confirmatory data analyses in support of the U.S. Environmental protection Agency. Analyses require originality and ingenuity; there is much opportunity for professional growth. May participate in marketing activities.

**REQUIREMENTS:** PhD in statistics or equivalent with at least one year of statistical consulting experience. Ability to program in FORTRAN, SAS, Minitab, BMDP, or other statistical packages. Must have be able to present results clearly to clients.

**SEND RESUME:** JOB #4-P 89, Systems Applications Inc., 101 Lucas Valley Road, San Rafael, CA 94903. Please indicate salary expectations and referral source.

**EMPLOYMENT OPPORTUNITIES (CONTINUED):**

**3. STATISTICIAN, UCSF, Dept of Epidemiology & Internal. Health**

**RESPONSIBILITIES:** Conduct statistical analysis national health surveys using multivariate and weighted analyses with prewritten statistical programs. Adapt or modify computer programs for use in analyzing survey data. Create, document and maintain computer data files. Advise senior staff on data processing options.

**REQUIREMENTS:** MA or equivalent in Biostatistics. Strong SAS or SPSSX. Experience with survey research and complex sample survey design desirable. Interest and capability to conduct analyses of a large national data set employing a complex sampling design is required.

**SEND RESUME:** John Neuhaus or Maradee Davis, Dept. of Epidemiology and Intl. Health, UCSF, San Francisco, CA 94143-0560.  
Phone (415) 476-2528.

**4. BIOANALYST, Syntex, Palo Alto**

**RESPONSIBILITIES:** Analyze data from clinical trials. Understand and interpret statistical analyses, generate summary tables and graphs for presentation.

**REQUIREMENTS:** MA in Statistics or Biostatistics. Three years experience in data analysis and computer programming. SAS programming and strong microcomputer skills.

**SEND RESUME:** Carol A. Francisco, 3401 Hillview Avenue, Palo Alto, CA 94304.  
Phone (415) 354-7141.

**CHAPTER NEWS:** Barbara Kamm has been elected District Governor, District 7 for the ASA Council of Chapters. Barbara previously served as the SF Bay chapter representative to the Council of Chapters; she will serve a two year term, 1989-1990, as Council Governor.

**CHAPTER DUES:** Several members are more than a year behind in local chapter dues. Please check the date on your mailing label. The printed date is the last time that we received your dues. If you are overdue please send \$6 to:

Anna Bagniewska  
Syntex Labs  
3402 Hillview Avenue A4-200  
Palo Alto, CA 94303



**ANNOUNCEMENTS:**

**Stanford Students Invite You to Lunch: Participate in STATS.**

The students at the Statistics Department of Stanford University have a new program "Statisticians Together to Augment Training at Stanford" of STATS. The program consists of a series of informal luncheons with several students meeting a corporate statistician. The purpose of STATS is to supplement the theoretical training that the students receive with a practical sense of how statistics are used in the real world. We basically just want to know what it is that statisticians do for different corporations. We are looking for non academic statisticians to take part in the program. You will be able to choose the time, date, location and number of students ~~that~~ you would like to meet.

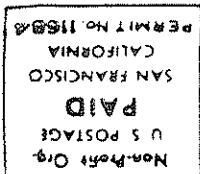
**CONTACT:** Vance Berger, Director STATS, Dept. of Statistics, Sequoia Hall, Stanford, CA 94305. Phone (415)723-2213. or vance@playfair.stanford.edu.

NOTICE MAILED 11/15/88

921 Regal Rd  
Berkeley, CA 94708

**American Statistical Association**

SAN FRANCISCO BAY AREA CHAPTER







# American Statistical Association

## SAN FRANCISCO BAY AREA CHAPTER

### CALENDAR

#### General Applications

|                  |          |                                |
|------------------|----------|--------------------------------|
| NOVEMBER 3, 1988 | THURSDAY | Dr. Paul Tukey, BELLCOR        |
| DECEMBER 1, 1988 | THURSDAY | Prof. Robert Shumway, UC Davis |
| JANUARY 19, 1989 | THURSDAY | Mark DiCamillo, Field Research |

### JOINT GENERAL APPLICATIONS PROGRAM

**SPEAKER:** Paul Tukey  
BELLCOR

**TOPIC:** "MULTIVARIATE & DYNAMIC GRAPHICS FOR DATA ANALYSIS"

Dr. Tukey will be discussing computer programs which can be used to dynamically display data in multiple dimensions. Strategies for the use of these programs to understand and describe complex multivariate data will be given.

There will be a demonstration of this technology.

**DATE:** November 3, 1988 (Thursday)  
3:30 - 4:00 Coffee  
4:00 - 5:00 Presentation

**PLACE:** 1011 Evans Hall  
University of California  
Berkeley, California

Professor Mike Tarter has kindly offered to be the local host. Refreshment will be served at his home following the presentation. Directions will be provided at the meeting.

**UNSEL OF CHAPTERS REP.**  
Alvin D. Wiggins  
(415) 752-7823

**PRESIDENT**  
Abraham Savaris  
(415) 895-2815

**PRESIDENT ELECT**  
Florence Van Geem  
(415) 271-8887

**VICE PRESIDENT  
GENERAL APPLICATIONS PROGRAMS**  
Dean H. Fearn  
(415) 881-3447

**VICE PRESIDENT  
BIOSTATISTICAL PROGR**  
Kelvin K. Lee  
(415) 852-3253

**TREASURER**  
Anna Bagrowska  
(415) 855-5208

**SECRETARY**  
Rose Ray  
(415) 898-6400

**ASOC TASK GROUP REP.**  
Fred Khorasani  
(408) 785-9318

**ASOC STATISTICAL TASK GROUP**  
Curtis Engelhard  
(408) 785-9325



SAN FRANCISCO BAY AREA CHAPTER  
**American Statistical Association**

921 Regal Rd.  
Berkeley CA 94708



NOTICE MAILED 10/12/88

EMPLOYMENT OPPORTUNITIES

1. STATISTICIAN, FAILURE ANALYSIS ASSOCIATES

**RESPONSIBILITIES:** Use methods of statistical epidemiology in the analysis of large volumes of accident data. Coordinate and manage tasks performed by research assistants.

**REQUIREMENTS:** M.A. or Ph.D. in statistics or related field. Experience with analysis of large volume databases. SAS or other statistical analysis packages is essential. Engineering background is an advantage.

**COMPANY:** Failure Analysis Associates is a national engineering and scientific services firm specializing in the analysis and prevention of engineering systems and product failures.

**SOUND RECORD:** Personnel Manager, Failure Analysis Associates, P.O. Box 51470, Palo Alto, CA 94303. Reference AD8 RR 9.23. Equal Opportunity Employer.

2. ASSISTANT CHIEF, V.A. Med Center, Palo Alto (\$47,479-\$60,683)

**RESPONSIBILITIES:** Assist in the training and supervision of a biostatistical and data processing staff. Plan and conduct final analysis of multi-center clinical trials.

**REQUIREMENTS:** PhD in statistics, biostatistics or related field; 3 years experience.

**SOUND RECORD:** Kenneth E. James, Ph.D., Chief, Cooperative Studies Program Coordinating Center (151K), V.A. Medical Center, 3801 Miranda Avenue, Palo Alto, CA 94304.

2. SR. BIostatistician, V.A. Med Center, Palo Alto (\$47,479-\$60,683)

**RESPONSIBILITIES:** Consult with medical investigators in the design, conduct and analysis of multi-center clinical trials. Statistical/methodological research related to clinical trials.

**REQUIREMENTS:** Ph.D. in statistics, biostatistics or related field.

**SOUND RECORD:** see 2. above.

NOTICES: SPEAKERS WANTED

Would you like to make an hour long presentation on any statistical topic? Would you like to suggest someone to give a presentation at a local meeting? Do you have information about visiting statisticians who could be contacted to give an invited talk?

**CONTACT:** Reilyn Lee, Vice President Biostatistical Programs, in Palo Alto at (415) 852-3253, or Dean Fearn, Vice President General Applications Programs in Hayward at (415) 537-3439.