



# The Southern California STATISTICIAN

✻ Meeting Memo and Newsletter ✻

SOUTHERN CALIFORNIA CHAPTER AMERICAN STATISTICAL ASSOCIATION

Volume 23, No. 2

February, 1986

### INLAND AREA MEETING

**WHO:** STEVE MILLARD  
Visiting Assistant Professor  
Statistics and Applied Probability  
Program  
University of California,  
Santa Barbara

**TOPIC:** Environmental Monitoring,  
Statistics and the Law:  
Room for Improvement

**WHEN:** February 6, 1986 - Thursday  
7:00 - 8:00 PM Cheese and Wine  
8:00 - 9:00 PM Speaker

**WHERE:** Millikan Laboratory  
Pomona College  
6th and College Avenue  
Claremont, CA 91711  
  
(Take I-10 to Indian Hills Bl.  
No. on Indian Hill to 6th St.  
Ea. on 6th to College.)

**PRICE:** (No Charge)

**FOR MORE INFORMATION:** Call Don Bentley  
(714) 621-8000, x-2941 or  
(714) 624-9195

### THE TOPIC

Concerns over environmental degradation have led to legislation such as the Clean Water Act, the Clean Air Act, and the Resource Conservation and Recovery Act. Both federal and state laws have mandated the creation of numerous monitoring programs to insure or determine the integrity of the environment. Unfortunately, many monitoring programs that gain approval cannot shed much light on the questions they were meant to answer because in a statistical sense they are poor experimental designs (e.g., some studies at Love Canal). In this talk, some past environmental studies are reviewed and their weaknesses pointed out. Current regulations for monitoring at hazardous waste sites are also discussed. The need to improve the status of the career category "statistician" is linked to the poor quality of past environmental monitoring designs.

### THE SPEAKER

Dr. Steve Millard received his Ph.D. from the University of Washington (Biomathematics Group) in 1985. His areas of interest are: Environmetrics, Time Series Analysis, Experimental Design.

\*\*\*\*\*

### THE RAND CORPORATION STATISTICS SEMINAR SERIES

February 13: Professor Arnold Zellner  
Graduate School of Business  
University of Chicago  
"Bayesian estimation and prediction in  
econometric modeling using asymmetric  
loss functions"

March 13: Professor Jerry Friedman  
Department of Statistics  
Stanford University  
and Stanford Linear Accelerator  
"Exploratory projection pursuit"

April 17: Professor Robert Elashoff  
Department of Biomathematics  
University of California, Los Angeles  
"The SRI-UCSF Chemical Mixture Study:  
design problems, alternative analyses,  
and prospects for the future"

All seminars will be on Thursday afternoons from 4:00 to 5:00 PM in the Main Conference Room at The Rand Corporation, 1700 Main Street, Santa Monica, unless otherwise specified. Refreshments will be available from 3:30 to 4:00 PM outside the Main Conference Room, and there will be time for questions and discussion with the speaker from 5:00 PM on. All who are interested are invited to attend; non-Rand people should come to the East Lobby (the one with the flagpole outside, across the street from Santa Monica's City Hall) between 3:30 and 4:00 on seminar day, and someone will be there to help you get to the Main Conference Room. For more information, contact David Draper at (213) 393-0411, x-7713.

\*\*\*\*\*

### ANNUAL WORKSHOP - May 1986

Need Vendors.....!

Our annual workshop will be organized in May 1986. The next newsletter will carry the details of the workshop. The person in charge of the workshop, Dr. Roberta Madison, is interested in locating vendors of personal, micro and graphic computers, as well as those with statistical software for displays. If you have any suggestions or know some vendors who might be interested, Dr. Madison would like to hear from you. She can be reached at (805) 499-1101 (home) or (818) 885-2015 (CSUN).

\*\*\*\*\*

### WORKSHOP ON NEW METHODS FOR THE ANALYSIS OF CATEGORICAL DATA

We are pleased to announce a workshop on the analysis of categorical data, jointly sponsored by the Southern California Chapter of the American Statistical Association, and the Public Policy Research Organization, University of California, Irvine.

(continued on next page)

**TITLE:** NEW METHODS FOR THE ANALYSIS OF CATEGORICAL DATA

**TOPICS COVERED:**

- Introduction to Log-Linear Modeling
- Ordinal Data: Association Models for 2-way and Multi-way Tables, including Log-Bilinear Models
- Latent Class Models, Models for Turnover Tables, Scaling Models, and Multiple Group Models
- Rate Adjustment Methods

**DATE AND TIME:** April 2, 1986 (Wednesday)  
9:30 to 2:30 PM  
Lunch break of the hour

**LOCATION:** University of California, Irvine  
Silverado Room, Mesa Court.

**ADMISSION:** On a first-come basis

**FEES:** \$60.00 (Pre-paid. Use registration form below)  
(Includes lunch and workshop material)

**PRIOR KNOWLEDGE:** Please note that conference attendees will be expected to have a working knowledge of multiple regression.

**FOR MORE INFORMATION:** Call A.Venkatesh (714) 856-6625

**WORKSHOP LEADER:** Professor Clifford Clogg  
Pennsylvania State University

Professor Clogg is one of the foremost authorities in the world on the analysis of categorical data. He obtained his Ph.D. from the University of Chicago and has received numerous awards and honors for his contributions to the field of statistics. He is currently the editor of Sociological Methodology and an Associate Editor of JASA.

**BMDP<sup>(R)</sup> SHORT COURSES - DATA ANALYSIS**

This winter, BMDP<sup>(R)</sup> offers two courses in the Los Angeles area. In each course, you will learn how to apply BMDP to real-world problems and to interpret statistics and supplemental displays in the output.

(Course 1) Introduction to BMDP, January 28-29, 1986: This course is for those who want a thorough grounding in the basics of BMDP. You will learn the mechanics of making the package work. You will also learn how to print data, sort files, re-express data (using arithmetic operations, functions, conditional statements), select a sub-set of files (cases and variables), etc.

Examples of lecture and workshop sessions cover descriptive statistics with histograms and frequency counts, two-sample t-test, one-way and two-way analysis (ANOVA), bi-variate scatter plots with correlation and line of best-fit, and two-way/multi-way, frequency tables.

(Course 2) Advance Data Analysis, February 19-20, 1986: If you are already comfortable with basic statistics and statistical software, this may be the course for you.

Presentations alternate between basic topics and more advanced analysis. The basic topics are already outlined in the Introduction to BMDP (see above). The advanced analysis includes, multiple linear regression, repeated measures and factorial ANOVA, log-linear models, factor analysis, discriminant analysis, cluster analysis and data screening.

During workshop sessions, procedures will be demonstrated on IBM PC-XT. The registration fee for each 2-day course is \$425 per person. SCASA members can receive a \$100 discount and pay only \$325.

For more information (venue, etc.), call Tanya Hartec at BMDP, (213) 475-5700.

Registration Form

CATEGORICAL DATA WORKSHOP

Name: \_\_\_\_\_

Address: \_\_\_\_\_

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

Mail the registration with a check for \$60, payable to SCASA, to A. Venkatesh, Graduate School of Management, University of California, Irvine, Irvine, CA 92717.

Graduate School of Management  
University of California  
Irvine, California 92717  
Alladi Venkatesh

SOUTHERN CALIFORNIA CHAPTER

**American  
Statistical  
Association**

(If the above address is incorrect, please notify Alladi Venkatesh)



# The Southern California STATISTICIAN

✧ Meeting Memo and Newsletter ✧

SOUTHERN CALIFORNIA CHAPTER AMERICAN STATISTICAL ASSOCIATION

Volume 23, No. 3

February/March 1986

### Los Angeles Area Chapter Meeting

**WHO:** Kevin McCarthy  
Senior Demographer  
The Rand Corporation  
Santa Monica, CA

**TOPIC:** Current and Future Effects of Mexican Immigration into California

**WHEN:** Thursday, February 20, 1986  
6:00 P.M. - Social Hour  
7:00 P.M. - Dinner  
8:00 P.M. - Speaker

**WHERE:** Hacienda Room  
UCLA Faculty Center

**PRICE:** Dinner will cost \$10.00 (\$8.00 for full-time students). There is no charge for the after-dinner program.

**RESERVATIONS:** Please place your dinner reservations by MONDAY, FEBRUARY 17 by calling one of the following numbers:

#### Los Angeles Area:

Marge Lebsack (BMDP) (213) 475-5700

#### Pomona

Lydia Gans (714) 598-4439

#### Riverside

Barbara McNitt (805) 546-2709

#### Orange County

Bob Newcomb (714) 856-7027

#### The Speaker

Dr. Kevin McCarthy is Senior Demographer with the Rand Corporation, and received his doctorate in Sociology from the University of Wisconsin. He has conducted numerous studies on demographic trends and their implications concerning public policy issues.

#### The Topic

While many popular beliefs prevail concerning the issue of current Mexican immigration into California, some beliefs are factual and others are fictional. Dr. McCarthy will discuss survey findings concerning the profile of typical immigrants and where they settle. He will also review his analysis of the immigrants impact on the labor market, public institutions and related financial and public policy issues.

### WORKSHOP ON NEW METHODS FOR THE ANALYSIS OF CATEGORICAL DATA

We are pleased to announce a workshop on the analysis of categorical data, jointly sponsored by the Southern California Chapter of the American Statistical Association, and the Public Policy Research Organization, University of California, Irvine.

**TITLE:** NEW METHODS FOR THE ANALYSIS OF CATEGORICAL DATA

**TOPICS COVERED:**

- Introduction to Log-Linear Modeling
- Ordinal Data: Association Models for 2-way and Multi-way Tables, including Log-Bilinear Models
- Latent Class Models, Models for Turnover Tables, Scaling Models, and Multiple Group Models
- Rate Adjustment Methods

**DATE AND TIME:** April 2, 1986 (Wednesday)  
9:30-2:30 PM  
Lunch break of the hour

**LOCATION:** University of California, Irvine  
Silverado Room, Mesa Court.

**ADMISSION:** On a first-come basis

**FEES:** \$60.00, \$40.00 for full-time students (Pre-paid, Use registration form below) (Includes lunch and workshop material) (Make checks payable to SCASA, and mail to A. Venkatesh, Graduate School of Management, University of California, Irvine, CA 92717).

**PRIOR KNOWLEDGE:** Please note that conference attendees will be expected to have a working knowledge of multiple regression.

**FOR MORE INFORMATION:** Call A. Venkatesh (714) 856-6625

**WORKSHOP LEADER:** Professor Clifford Clogg  
Pennsylvania State University

Professor Clogg is one of the foremost authorities in the world on the analysis of categorical data. He obtained his Ph.D. from the University of Chicago and has received numerous awards and honors for his contributions to the field of statistics. He is currently the editor of Sociological Methodology and a Associate Editor of JASA.

-----Tear off here-----

Registration Form  
CATEGORICAL DATA WORKSHOP

Name: \_\_\_\_\_

Address: \_\_\_\_\_

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

EMPLOYMENT OPPORTUNITY

Air Quality Specialist/Statistician

TAKE THIS OPPORTUNITY to join one of the most sophisticated environmental agencies in the nation. The South Coast Air Quality Management District exercises control over non-vehicular sources of air pollution in Los Angeles, Orange and Riverside Counties, and in the non-desert portions of San Bernardino County.

We have an immediate opening in our Planning Division for a Statistician to apply mathematical and statistical theory in analyzing and solving complex statistical problems, and to provide consultative services to technical staff. The analyst will develop and analyze computerized data sets, utilize appropriate sampling techniques for specific applications, develop applied models, and prepare and present reports.

The most competitively qualified candidates will have a degree in statistics or at least 12 units in graduate level courses and a thorough working knowledge in one or more of the following areas: statistical theory and methods including multivariate analysis and nonparametric statistics; analyses of large data sets and utilization of methods for determining appropriate sample sizes. Training and experience analyzing air quality data and application and use of mathematical and statistical programming packages is highly desirable.

**SALARY:** Starting monthly salary is approximately \$2,575.63 with periodic increases based on merit to \$3,190.74. (Salary is paid biweekly: \$1,188.75 to \$1,472.65.) A three percent (3%) salary adjustment is scheduled effective December 31, 1985.

**MINIMUM REQUIREMENTS:** Training and experience; graduation from an accredited college with specialization in engineering, the physical sciences, mathematics, economics, environmental planning or environmental science, or a closely related field, and two years' experience analyzing, evaluating and making recommendations on research activities in any of the above fields of specialization.

**HOW TO APPLY:** Contact the Personnel Division at (818) 572-6155 or write to South Coast Air Quality Management District, 9150 Flair Drive, El Monte, CA 91731.

THE RAND CORPORATION STATISTICS SEMINAR SERIES

- February 13: Professor Arnold Zellner  
Graduate School of Business  
University of Chicago  
"Bayesian estimation and prediction in econometric modeling using asymmetric loss functions"
- March 13: Professor Jerry Friedman  
Department of Statistics  
Stanford University  
and Stanford Linear Accelerator  
"Exploratory projection pursuit"
- April 17: Professor Robert Elashoff  
Department of Biomathematics  
University of California, Los Angeles  
"The SRI-UCSF Chemical Mixture Study: design problems, alternative analyses, and prospects for the future"

All seminars will be on Thursday afternoons from 4:00 to 5:00 PM in the Main Conference Room at The Rand Corporation, 1700 Main Street, Santa Monica, unless otherwise specified. Refreshments will be available from 3:30 to 4:00 PM outside the Main Conference Room, and there will be time for questions and discussion with the speaker from 5:00 PM on. All who are interested are invited to attend; non-Rand people should come to the East Lobby (the one with the flagpole outside, across the street from Santa Monica's City Hall) between 3:30 and 4:00 on seminar day, and someone will be there to help you get to the Main Conference Room. For more information, contact David Draper at (213) 393-0411, x-7713.

\*\*\*\*\*

ALLADI VENKATESH  
Graduate School of Management  
University of California  
Irvine, CA. 92717

SOUTHERN CALIFORNIA CHAPTER

**American  
Statistical  
Association**

(If your address is incorrect, please notify Alladi Venkatesh)



# The Southern California STATISTICIAN

✧ Meeting Memo and Newsletter ✧

SOUTHERN CALIFORNIA CHAPTER AMERICAN STATISTICAL ASSOCIATION

Volume 23, No 4

March 1986

## Santa Barbara Area Meeting

WHO: Professor J. Tiago de Oliveira  
Department of Statistics  
Faculty of Sciences, University of  
Lisbon, and  
University of California  
Santa Barbara (UCSB)

TOPIC: The Evolution of Statistics in  
Portugal

WHERE: Faculty Club, UCSB

WHEN: March 13, 1986 (Thursday)  
6.00 p.m. Social Hour  
7.00 p.m. Dinner  
8.00 p.m. Speaker

PRICE: \$11.00 Regular  
\$ 9.00 Students

RESERVA-  
TIONS : Please call S.Rao Jammalamadaka  
(805) 961-3119, or  
Leslie Brandt  
(805) 961-2129  
Bob Newcomb  
(714) 856-5366

### THE SPEAKER

Professor Tiago de Oliveira is well known for his important contributions to the area of Statistical extreme values and their applications. He leads a very talented group of young statisticians at the University of Lisbon. He is a fellow of the Institute of Mathematical Sciences.

### THE TOPIC

A brief description of the evolution of statistics in Portugal will be given, starting with the population census of the 16th century. This will be followed by a description of the changes in the recording of official statistics in the 19th century and the current status of the National Statistics Office. The talk will conclude with a presentation of the developments in research and teaching of statistics in the present time.

## Los Angeles Area Meeting

WHO: Dr Paul Cory  
Associate Professor  
Department of Preventive Medicine  
and Bio-Statistics  
University of Toronto

TOPIC: The Risk of Being a Welder

WHERE: UCLA Faculty Center

WHEN: Thursday, March 25, 1986  
6.30 p.m. Social Hour  
7.30 p.m. Dinner  
8.30 p.m. Speaker

PRICE: \$11.00 Regular  
\$ 9.00 Students

RESERVA-  
TIONS: Please call  
Margaret Lebsock  
(213) 475-5700  
Bob Newcomb  
(714) 856-5366

### THE TOPIC

Several studies have been conducted to determine whether welders are at any excess risk of death. The results have been conflicting often due to a lack of information on smoking status and lack of a comparable control group. A cohort of approximately 3000 welders followed by a total of 60,000 person-years and a comparison cohort of 6500 hundred plumbers followed by a total of 140,000 person years was assembled over the entry period 1950-1975. The talk will include the various statistical methods used to analyze the data (eg Standardized mortality ratio, Modified life-table, and Cox proportional hazards) and the problems associated with cohort analysis.

### THE SPEAKER

Professor Paul Cory, in addition to his duties at the University of Toronto is also a Consultant to the Gage Research Institute where he did research on risks for welders. He received his Ph.D from the Johns Hopkins University and has published about 80 articles in prestigious journals focusing on occupational hazards and environmental health.

\*\*\*\*\*

\*\*\*\*\*

WORKSHOP ON NEW METHODS FOR  
THE ANALYSIS OF CATEGORICAL DATA

We are pleased to announce a workshop on the analysis of categorical data, jointly sponsored by the Southern California Chapter of the American Statistical Association, and the Public Policy Research Organization, University of California, Irvine.

**TITLE:** NEW METHODS FOR THE ANALYSIS OF CATEGORICAL DATA

**TOPICS COVERED:**

- Introduction to Log-Linear Modeling
- Ordinal Data: Association Models for 2-way and Multi-way Tables, including Log-Bilinear Models
- Latent Class Models, Models for Turnover Tables, Scaling Models, and Multiple Group Models
- Rate Adjustment Methods

**DATE AND TIME:** April 2, 1986 (Wednesday)  
9:30-2:30 PM  
Lunch break of the hour

**LOCATION:** University of California, Irvine  
Silverado Room, Mesa Court.

**ADMISSION:** On a first-come basis

**FEES:** \$60.00, \$40.00 for full-time students (Pre-paid, Use registration form below) (Includes lunch and workshop material) (Make checks payable to SCASA, and mail to A. Venkatesh, Graduate School of Management, University of California, Irvine, CA 92717).

**PRIOR KNOWLEDGE:** Please note that conference attendees will be expected to have a working knowledge of multiple regression.

**FOR MORE INFORMATION:** Call A. Venkatesh (714) 856-6625

**WORKSHOP LEADER:** Professor Clifford Clogg  
Pennsylvania State University

Professor Clogg is one of the foremost authorities in the world on the analysis of categorical data. He obtained his Ph.D. from the University of Chicago and has received numerous awards and honors for his contributions to the field of statistics. He is currently the editor of Sociological Methodology and an Associate Editor of JASA.

SCASA ANNUAL WORKSHOP

This is a preliminary announcement for the SCASA annual workshop.

**Date:** May 30, 1986 (Friday)

**Time/Location:** Will be announced in the next newsletter

**Speakers:** Roy Welsh, Co-author, "Regression Diagnostics"  
Charles Stone, Co-author, "Classification and Regression"

Please mark your calendars for this exciting event.

\*\*\*\*\*

SAN DIEGO AREA MEETING

**WHO:** Dr. Charles Barry  
Medical School  
University of California  
San Diego

**TOPIC:** Binary Regression with Errors in Variables

**WHEN:** April 6, 1986 (Friday)  
6:30 p.m. Cocktails  
7:00 p.m. Dinner  
7:45 p.m. Speaker

**WHERE:** Faculty Club, University of San Diego

**PRICE:** \$ 6.00 (includes dinner & drink)

**RESERVATIONS:** Please call Prof. John Chambers (619) 260-4600

Binary Regression Procedures, like logistic regression, or probit analysis are commonly used to compare the rates of response in groups of patients while adjusting for covariates. Such comparisons are generally biased if there are measurement errors in the covariates. As an example, the survival of burn patients depends upon covariates which measure the severity of the injury. Comparisons of groups of patients should adjust for these covariates. Biases which arise from errors in measuring these covariates are studied and error in variable estimation procedures is proposed.

\*\*\*\*\*

Graduate School of Management  
University of California  
Irvine, California 92717  
Alladi Venkatesh

SOUTHERN CALIFORNIA CHAPTER

**American  
Statistical  
Association**

(If the above address is incorrect, please notify Alladi Venkatesh)