



The Southern California *Statistician*

SOUTHERN CALIFORNIA CHAPTER, AMERICAN STATISTICAL ASSOCIATION

Volume 36, No.2

January/February 1998

ASA President David S. Moore to speak at Feb 7 Southern California ASA Meeting:

David S. Moore, the incoming president of the ASA, will speak at SCASA's Statistics Career Day on

"Statistical Literacy and Statistical Competence in the 21st Century"

Feb 7
at the City of Hope,
Platt Auditorium.

In addition to being the ASA president, David Moore is the Shanti S. Gupta Distinguished Professor of Statistics at Purdue University, and the statistical author of "Against All Odds", the Annenberg/Corporation for Public Broadcasting telecourse on statistics.

Career Day begins at 10:00, and David Moore will speak at 11:30. You can come just for the talk, or for the whole event. Career Day is an excellent way for students to learn about the nature and variety of statistical careers, and about academic programs in the region. Please consider putting up a flyer, or participating yourself. Everything is free except lunch, which can be reserved for \$5.00 (students) or \$7.00 (others) by sending a check made out to SCASA to:

Anita Iannucci,
UCI Center for Statistical
Consulting,
Social Sciences Plaza D 1296,

Irvine CA 92697-5105.
Bag lunches are welcome.

The City of Hope is at 1500 East Duarte Road, in Duarte. Take the Buena Vista exit off of the 210 freeway (just west of the 605 interchange) go one block south on Buena Vista, and East on Duarte Rd. Parking is available on Duarte Road or inside the gate.

More information about Career Day, including a map and directions, can be found from the SCASA web page at <http://orion.oac.uci.edu/~mew-comb/statistics/scasa/scasa.html> or contact Jeff Longmate at (626)-359-8111 x2478, or jlongmat@smtplink.coh.org

The Seventeenth Annual Workshop in Applied Statistics

presented by

The Southern California Chapter
of the American Statistical
Association.

*Survival Analysis Extended to
Recurrent Events Data with
Repairable Products, Disease
Recurrences and Other
Applications*

by Dr. Wayne Wilson

8:00-5:00,
Friday April 24, 1998
at the Business School,
CSU at Long Beach

ABSTRACT

Analysis of recurrent events data is a new topic with no basic texts. Most life data courses deal with a single endpoint, end of life or failure, which is modeled with a life distribution that must be estimated. Recurrence data require a stochastic process model. This workshop presents a simple, widely useful non-parametric model and provides estimates, confidence limits, and comparisons for populations. Other approaches for such data, such as

those in the book by Ascher and Feingold, are often limited to data from a single unit and entail assumptions (such as the process has independent increments) which are often false in practice. Handouts will include expository journal articles and lecture notes. The wide variety of applications includes repairable products (e.g. automobiles, airplanes, medical equipment) and episodic disorders or behaviors (e.g. recurrences of bladder tumors in patients, multiple cardiac events and relapses of drug addicts and cigarette smokers).

UCI Biostatistics Colloquium

Presented by the
UCI Center for Statistical Consulting
Co-sponsored by
the UCI Office of Research
and Graduate Studies
& the UCI College of Medicine

Wednesday,
February 4, 1998

Speaker

Peter A. Lachenbruch,
PhD Biostatistics Branch Chief
Division Biostatistics and Epidemiology
Center for Biologics Evaluation & Research
Food & Drug Administration
U.S. Department of Health & Human Services

Title

*FDA Statistics: Some Observations on
Statistical Reviewing at CBER*

Abstract

This presentation will be comprised of two related topics: The first part of the talk will address the principles used by the FDA when reviewing pre-licensure and licensure applications. The second part of the talk will identify statistical knowledge that is helpful/necessary for statisticians in the pharmaceutical industry or in a regulatory agency such as the FDA. While no one statistician can be expected to know all of the topics identified, all of the topics do come to bear on some applications.

Schedule

4:15 pm: Reception (coffee/cookies)
5:00 pm: Presentation begins

Location

The Nelson Auditorium, in Irvine Hall (Bldg #835) at the College of Medicine, on the main campus of UCI Parking in Lot 83 (\$4.00 for visitors)

For further information about this event
Please contact the UCI Center for Statistical
Consulting by telephone: [714] 824-1680 or
by e-mail: stats@uci.edu

UCR Statistics Department Colloquium

Winter, 1998

Place: Stat/Comp. 2678
Refreshments: 3:30PM, Stat/Comp. 2634

Speaker: Professor M.M.Rao
Date: Tuesday January 13, 1998
Time: 3:45 PM
Title: Test of Peak Values in Physiopathologic Time Series.

Abstract:

A simple applied statistical procedure for testing a suspected peak in a time series is presented and applied to data on circadian periodic aspects of audiogenic physiopathology in certain mice. Also discussed are methods for locating unsuspected peaks in sets of responses obtained from several groups of individuals.

Jan 15

Bill Hanley, Ph.D. Defense
*On the Lorenz Zonoid Representation of
Distributional Variability*

Jan 20

Satish K. Tripath, Engineering, UCR
Quality of Service in Computer Networks

Jan 27

Weng Kee Wong, Biostatistics, UCLA

Feb 3

Ke-Hai Yuan
and Peter M. Bentler
Psychology, UCLA
*Pseudo Maximum Likelihood Based Methods for Mean
and Covariance Structure Analysis with Missing Data*

Feb 10

Curt Burgess, Psychology, UCR
*Bootstrapping Conceptual Memory from the
Statistical Regularities in Language: The HAL Model*

Feb 17

Kung-Jong Lui, Math Sciences, San Diego State

Feb 24

Ron Seibel, Allergan
Brett Sellars, Amgen
Yi-Jing Duh, Chiron

March 3

Kaushik Ghosh
Statistics, UC Santa Barbara

For Further Information:
Call Statistics: (909)-787-3774

Job Opportunities

Openings to develop algorithms, system models, and simulators, and to perform analysis studies related to new and existing remote sensing systems. Requires a BS, MS and/or PhD in Mathematics or Statistics, 1-10 years of related experience, and a working knowledge of C/C++ or Ada. Send resume and cover letter to:

Dr. Rosia Pan
Dept. 8321, B59/1
Gencorp Aerojet
P.O. Box 296
1100 W. Hollyvale St.
Azusa, CA 91702

Two openings are available within the Department of Biostatistics of the Division of Information Sciences at the City of Hope (COH) National Medical Center. COH is a non-profit medical center conducting state-of-the-art research into the causes and cures for cancer and other life-threatening diseases, and providing the highest quality care for such patients. The center

includes a Beckman Research Institute for basic science research, the third largest bone marrow transplantation program in the nation, and a highly renowned diabetes institute. The following positions will provide you with the opportunity to participate in the design, conduct and analysis of some of the more than 200 clinical and basic research studies on-going at COH:

Associate Director of Biostatistics:

This position will oversee the 45 members of the department, serve as a liaison with biomedical researchers, and participate in study design, analysis, grant preparation, and manuscript writing for an assigned specialty area. The Associate Director will also interface with the newly formed Department of Biomedical Informatics within the Division, to provide input into the development of cutting edge database systems to support the biostatistical work. The qualified candidate should hold a Ph.D. or Dr.PH in biostatistics, epidemiology, or a related field.

Experience in administration, oncology, and biomedical research is highly desirable.

Biostatistician/Programmer:

This position involves programming and database development, statistical analysis, and participation in consulting with biomedical researchers. The qualified candidate should hold a Master's degree in biostatistics or a related field, with strong SAS and database programming skills. Experience in biomedical research and database design/development is highly desirable.

COH offers highly competitive salary/benefits packages. To apply for either of these exciting positions, please write or send email to:

Dr. Joyce Niland
(jniland@smtplink.coh.org)
Director of Biostatistics
City of Hope National
Medical Center
1500 East Duarte Road
Duarte, CA 91010

RAND STATISTICS SEMINAR SERIES

FEBRUARY 19, 1998
Jeremy M.G. Taylor
Radiation Oncology-
Biostatistics
UCLA

MARCH 19, 1998
Rob Kass
Carnegie Mellon University

APRIL 17, 1998
Terry Speed
University of California,
Berkeley

Refreshments will be served in the Main Conference Room from 3:30 to 4 pm. For further information, please contact Tom Lucas at (310) 393-0411 (x7140). **THE EAST LOBBY ENTRANCE AT RAND HAS BEEN RE-OPENED**

ARNIE'S ACTIONS

1. I wish all of you and your families a very healthy and happy new year!
2. We sincerely thank Joyce Niland for her year of chapter leadership and the City of Hope for its generous support of that leadership.
3. After 30 year's rest, I approach a 2nd term with an enthusiasm to provide better service to our members and our communities.
4. Would you consider volunteering to enrich the new high school mathematics courses for Advanced Placement in Statistics? It relates well to our upcoming Careers Day with David Moore. We already have coordinators for both Los Angeles Unified and San Diego Unified. Please e-mail agoodman@juno.com.

5. If you are interested in attending an area meeting to discuss service improvement, please e-mail to agoodman@juno.com.
6. We can communicate easier and faster if we know your e-mail address. Please send it to my UCI address: agoodman@uci.edu.
7. Finally, send any comments or suggestions to agoodman@juno.com.

Note from the Editor

Send information for the next issue to

Harold Dyck
Information and Decision Sciences
California State University
San Bernardino 92407-2397
(909)880-5765
fax: (909)880-5594
email: hdyck@wiley.csusb.edu



The Southern California *Statistician*

SOUTHERN CALIFORNIA CHAPTER, AMERICAN STATISTICAL ASSOCIATION

Volume 36, No.3

APRIL/MAY 1998

The Southern California Chapter of the American Statistical Association
Seventeenth Annual Workshop in Applied Statistics presents:

DR. WAYNE B. NELSON

Speaking on:

Survival Analysis Extended to Recurrent Events Data with Repairable Products, Disease Recurrences and Other Applications

Dr. Wayne Nelson will conduct SCASA's seventeenth annual Workshop in Applied Statistics.

Time: 8am - 5pm

Date: Friday, April 24, 1998

**Where: the Business School, SBA 140A,
California State University at Long Beach**

Abstract

Analysis of recurrent events is an emerging area of survival analysis whose prominence is increasing due to its many and varied applications. Most life-data courses deal with a single endpoint, end of life or failure, which has a life distribution that must be estimated. Since recurrence data behaves like a stochastic process, a simple nonparametric procedure that provides both point and confidence interval estimates of recurrence time will be presented. This method is especially useful in situations where traditional approaches fail because they depend upon unrealistic conditions (such as "being a process with independent increments").

Each Workshop participant will be provided a complete set of lecture notes, as well as a number of expository journal articles and a wide variety of examples. These examples include applications to industrial products that are repairable (e.g. automobiles, airplanes, military equipment, medical devices, etc.) and to problems in

the health sciences (e.g. relapse for drug addicts or cigarette smokers).

For further information contact Connie Vadheim's email (vadheim@afp76.humc.edu) or phone ([310] 222-3842) or visit our Website:

[http://orion.oac.uci.edu/~mewcomb/
statistics/scasa/chapterwide/asw/1998/wnabstr.html](http://orion.oac.uci.edu/~mewcomb/statistics/scasa/chapterwide/asw/1998/wnabstr.html)

All Workshop participants are encouraged to bring a pocket calculator. A previous course in life data analysis is not necessary and knowledge of counting processes is not necessary.

PLEASE NOTE: If your registration is postmarked by April 12th we will send you a parking permit! If your registration is postmarked after the 12th, you will have to purchase your parking permit at the yellow permit box located in Lot B for \$1.75. Use Lot B; do not use Lot A.

Directions to CSULB

Going down Palo Verde is the fastest and easiest way to get to CSULB. Exit the 405 on Palo Verde and go south (that means make a on Palo Verde, if you were Southbound on the 405). The second stop light on Palo Verde is Atherton street. Make a right onto Atherton. Proceed on Atherton in the left lane for about a block, until you hit Merrian Way. You'll notice the CSULB

pyramid on your left. A left on Merrian Way will get you into the campus. Some parking lots will be ahead and off to your right. A right at the second stop sign on Merian Way gets you into Parking Lot B, which is where you should park.

Your parking pass is valid in Parking Lot B. If you didn't receive a parking pass, be sure to purchase one from the yellow machines in the parking lot. The cost is \$1.75 (bring exact change). From Parking Lot B you will notice the Parking Structure and a black and brick building off to it's side. This is the Business College. Happy navigating!

THREE SURVIVAL ANALYSIS TALKS TO BE PRESENTED AT UC IRVING

Sponsored by the UCI Center for Statistical Consulting Information: [714] 824-1680 & co-sponsored by the UCI Office of Research and Graduate Studies & the UCI College of Medicine.

Friday, April 3, 1998

Michael R. Chernick, Ph.D.

Senior Biostatistician, Cardiac Rhythm Management
Division St. Jude Medical

Title: Survival Analysis and Recurrent Events

Friday, April 10, 1998

Janet M. Myhre, Ph.D

Professor, Department of Mathematics
Director, Institute of Decision Science
Claremont McKenna College

Title: Decision Making Using Repairable
Systems Models

Friday, April 17, 1998

James C. Wang, Ph.D.

Director, Biostatistics & Data Management
Allergan

Title: Time-to-Event Analysis of Recurrent
Clinical Symptoms

Schedule: All three programs begin at 3:00 pm

Location: Social Science Plaza B-1222 (bldg #211)

On the main campus of UCI

Parking in Lot #1 (\$4.00 for visitors)

For further information about these talks, contact the UCI Center for Statistical Consulting by telephone: [714] 824-1680 or by e-mail: stats@uci.edu, or see: <http://stats.uci.edu/~stats/>

WNAR/IMS Meeting

The Abstract deadline for the WNAR/INS meeting in San Diego June 28-July 1 has passed (Ap. 1), but see:

<http://members.aol.com/mswnar/>

WNARAnnualMeeting98.html

for registration instructions, or send a message to program chair, Jeremy Taylor at:

jeremy@liza.ph.ucla.edu.

RAND STATISTICS SEMINAR SERIES

SPEAKER: Terry Speed
Department of Statistics and
Program in Biostatistics
University of California, Berkeley

TOPIC: Statistics and the Proof of Scientific
Misconduct

TIME: 2 pm, FRIDAY, April 17, 1998

PLACE: Main Conference Room
RAND
1700 Main Street
Santa Monica, CA 90401

ABSTRACT

Statistical arguments are often made to demonstrate falsification of data. Such arguments depend on identifying unusual features of the data; the idea seems to be that made-up data looks different from real data. For example, there might be an unusual pattern of digit preferences, or suspiciously long runs of certain kinds of numbers. More sophisticated versions of this argument might be based on the idea that experimental data should follow certain kinds of statistical models; lack of fit is interpreted as evidence of fabrication.

In this talk I will discuss the statistical arguments used to "demonstrate" that Thereza Imanishi-Kari was guilty of scientific misconduct, and will suggest that these arguments have little force.

Refreshments will be served in the Main Conference Room from 1:30 to 2 pm.

For further information, please contact Ron Fricker at (310) 393-0411 (x6102).

AP STATS AND SCASA VOLUNTEERS WANTED

Arnie Goodman has met with the teachers of Advanced Placement (AP) statistics for the Los Angeles Unified School District. They are very enthusiastic about our participation. Other schools throughout Southern California have AP stats courses and would also welcome our interest. This is an exciting way for the chapter to reach out to the community and to encourage young people who will be our future colleagues. We hope you'll want to participate.

Chapter members can be involved in a number of ways. As examples, you might: Volunteer in the classroom by:

-
- Providing enrichment topics
- Describing studies you have done
- Providing career information

- Describing the importance of statistics to non-statisticians

Volunteer outside the classroom by helping with workshops for students and teachers

We need your help. We need volunteers who are willing to teach in or outside of the classroom, to identify AP programs in their local school districts, and/or to coordinate these activities. You may volunteer for as many or as few hours as you like. We hope to have representatives from all application areas and encourage you to share this request with your colleagues.

For more information or to volunteer please call or email Nancy Berman:

Phone: 310-222-1874

Email: berman@gcrc.humc.edu

JOB OPPORTUNITIES

PacifiCare Health Systems

Statistical Analyst

PacifiCare Health Systems is one of the nation's leading managed health care services companies. To continue improving quality of care, we are collecting, managing, and analyzing more data than ever before. Therefore, we wish to add a statistical analyst at our headquarters in Santa Ana, CA. We are looking for someone with an analytical background who enjoys manipulating datasets and who is eager to learn.

Essential: Masters degree in statistics or biostatistics. Excellent communication skills. Programming skills in SQL, Focus, Access, or similar database software.

Desirable: Work experience that includes programming.

PacifiCare offers competitive salary and benefits commensurate with education and experience.

Please visit our web site at www.pacificare.com for information about PacifiCare. Mail, fax, or email your resume to the address below.

Thank you.

L. M. El
PacifiCare Health Systems
3100 Lake Center M/S LC03-280
Santa Ana, CA 92683
Fax: (714) 825-5034
Email: ely_lm@exchange.phs.com

City of Hope National Medical Center

An opening for Associate Director, Department of Biostatistics is available within the Division of Information Sciences at the City of Hope (COH) National Medical Center. COH is a non-profit medical center conducting state-of-the-art research into the causes and cures for cancer and other life-threatening diseases, and providing the highest quality care for such patients. The center includes a Beckman Research Institute for basic science research, the third largest bone marrow

transplantation program in the nation, and a highly renowned diabetes institute. This position will provide you with the opportunity to participate in the design, conduct and analysis of some of the more than 200 clinical and basic research studies on-going at COH:

Associate Director of Biostatistics: The Associate Director will help to oversee 50 department members, serve as a liaison with biomedical researchers, and participate in study design, analysis, grant preparation, and manuscript writing for an assigned specialty area.

He/she will also interface with the newly formed Department of Biomedical Informatics within the Division, to provide input into the development of cutting edge database systems to support the biostatistical work. The qualified candidate should hold a Ph.D. or Dr.PH in biostatistics, epidemiology, or a related field. Experience in administration, oncology, and biomedical research is highly desirable.

COH offers highly competitive salary/benefits packages. To apply for this exciting position, please write or send email to:

Dr. Joyce Niland
 Director of Biostatistics
 City of Hope National Medical Center
 1500 East Duarte Road
 Duarte, CA 91010
 (jniland@smtplink.coh.org)

Bausch and Lomb Surgical

Clinical Data Analyst/SAS Programmer

Bausch & Lomb Surgical's vision is to be "Number One in the Eyes of the World". As a result of this, we believe that our consumers will recognize our leadership in the industry. To achieve this vision, we will make it our mission to help consumers see, look and feel better through innovative design and technology.

In order to achieve our ambitious objectives, we are constantly searching for talented individuals. People who are results oriented, flexible, thrive on challenge and yet are capable of operating in a team environment will do well at Bausch & Lomb Surgical. We offer competitive compensation and benefits packages, opportunities for personal growth and development and a stimulating work environment.

The successful candidate will hold a BA/BS in computer science, statistics, or related area. C or SAS programming skills are required. Experience with data structures is a plus. Functions include providing programming support for the check, display, and analysis of clinical data, and generating data listings and statistical graphs.

Please send (or FAX 909.399.1646) resume to:

Yi-Jing Duh, Ph.D.
 Manager of Statistical Services
 Bausch and Lomb Surgical
 555 West Arrow Highway
 Claremont, CA 91711

University of California, Irvine

Post-Doctoral Research Positions in Cost-Benefit Analysis of Tobacco Policies

Applications are invited for the following four positions:

*** Biostatistician (position 1)**

Ph.D. in biostatistics, statistical epidemiology, demography, or equivalent. Knowledge of meta-analysis and statistical modeling techniques for Markov or other simulation models. Experience with tobacco research helpful. Bayesian preferred.

*** Health Economist (position 2)**

Ph.D. in economics, health economics, or equivalent. Practical hands-on experience gathering and evaluating secondary health care cost data. Understanding of cost-effectiveness and cost-benefit analysis. Knowledge of the economics of excise taxes. Broad understanding of Medicare, Medicaid and Social Security and interest in tobacco policy.

*** Tobacco and Public Health Specialist (position 3)**

Ph.D., Dr.PH. or Sc.D. in public health field, or MD/MPH, or equivalent. Extensive knowledge of the literature on the risk of disease from tobacco use and the effectiveness of tobacco control policies and interventions.

* Computer Simulation Specialist (position 4)

Ph.D. or M.S. in computer science, engineering, or equivalent. Knowledge of computer simulation techniques, especially Markov and other state-transition methods. Experience with model validation. Flexibility to develop models in Microsoft Excel or write code. Commitment to careful planning, documentation, and testing of software as well as good user-interface design.

Initial appointments are for 6, 9 or 12 months and may be renewable. Start dates are flexible as grant funding is for three years. Review of applications will begin April 20, 1998 and continue until positions are filled. Inquiries may be sent via e-mail to tengs@uci.edu. To apply, please mail hardcopy of letter, curriculum vitae, and the names and addresses of 3 to 5 persons from whom letters of recommendation may be solicited to:

Tammy O. Tengs, Sc.D.
Health Policy and Planning
Department of Urban and Regional Planning
School of Social Ecology
University of California, Irvine
Irvine, CA 92697-7075

Irvine California is located near the ocean one hour south of Los Angeles and 1.5 hours north of San Diego. Interviews will be conducted on an ongoing basis in Irvine. Additional interviews may be conducted in New York April 25 and September 17-19, in Chicago April 27, in Washington DC at the meeting of the association for Health Services Research June 21-23, and in Boston at the meeting of the Society for Medical Decision Making October 25-28. The University of California is an equal opportunity educator and employer committed to excellence through diversity.

Biostatisticians at St. Jude Medical Cardiac Rhythm Management Division

1. Position Number 5989: Biostatistician Sylmar, California. Primary Responsibilities: Responsible for assisting in design of research protocols and Case Report forms. Will develop computer generated programs to check clinical data for accuracy and consistency. Conducts analysis on clinical data for inclusion in required reports for investigators and the FDA, plus performs analysis/ management of data to be used for Postmarket Surveillance reporting. Will assist in sample

size determination, analyze safety/efficacy data, provide data management for reports and analysis datasets, and perform analysis corresponding to protocol defined hypothesis tests and ad-hoc reporting/analysis. Will assist in design of data checking and clinical monitoring programs in SAS or other software, plus provide statistical consulting to other departments as needed.

Qualifications: Graduate degree in Statistics, Biostatistics or Biometrics is required. Must be familiar with statistical software, particularly SAS. Knowledge of clinical trials is a plus.

2. Position Number CE98029 Biostatistician San Jose, California. Primary Responsibilities: Position involves statistical analysis of data from clinical trials, assistance with clinical and other study designs. Position also involves statistical consultation with individuals from clinical engineering, marketing, development and engineering,

Qualifications: Minimum of a masters degree in Biostatistics or Statistics. Experience or coursework in clinical trials, study design and survival analysis. Familiarity with S-Plus is greatly desired. Excellent oral and written communication required.

3. Position Number 5988 Manager Biostatistics Sylmar, California. Primary Responsibilities: You will assist in development of Protocols to help ensure scientific integrity for the clinical study design. You will be responsible for data analysis of clinical data and including the results in reports for investigators and the FDA. Will provide consulting to other departments in the St. Jude Medical CRM. Division worldwide and external clients in the healthcare industry. You will design all clinical trial studies, design/implement statistical methodology to improve quality speed to market for future studies, and be responsible for all Postmarket Surveillance requirements for lead/pulse generators. Involves work with R&D and Advanced Research in designing appropriate protocols, assisting with the development of study design and providing computer programming resources for statistical analysis.

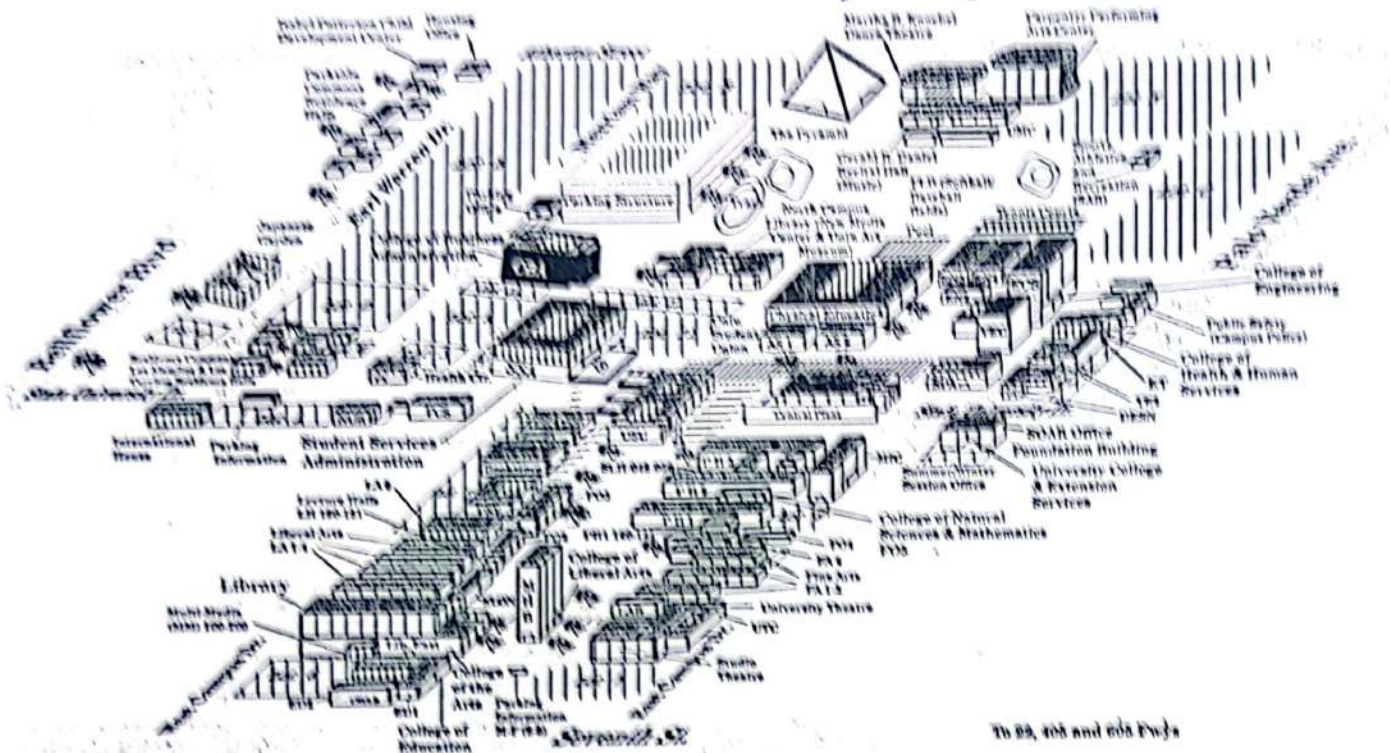
Qualifications: MS or Ph.D. in Biostatistics, Statistics or Biometry. Must have previous experience in the pharmaceutical, biotechnology or medical device industry. Requires extensive experience with SAS software in data management and statistical programming environments. Excellent interpersonal and communication skills are essential. Knowledge of cardiac pacing is a plus. (Cont'd)

CONTACT (for all three positions): JoAnn Williams, Human Resources Department, St. Jude Medical Cardiac Rhythm

Management Division, 13900 Valley View Court, Sylmar, CA 91342.

Have you paid your chapter dues? Please check the mailing label. If you are in arrears, contact the Chapter Treasurer at (310) 825-5250. If you have a change of address, notify Bob Newcomb at (714) 824-5366.

California State University, Long Beach



To 89, 405 and 605 Pwjs



The Southern California
Statistician

SOUTHERN CALIFORNIA CHAPTER - AMERICAN STATISTICAL ASSOCIATION

American Statistical Association, Southern California Chapter
c/o Harold Dyck, Cal State Univ. San Bernardino
5500 University Parkway, San Bernardino, CA 92407



The Southern California
Statistician

SOUTHERN CALIFORNIA CHAPTER, AMERICAN STATISTICAL ASSOCIATION

Volume 36, No. 4

November 1998

SCASA's Annual SCASA Fall "Kick-Off" presents:

LELAND WILKINSON

Speaking on:

THE GRAMMAR OF GRAPHICS

Time: 9:30am - 3:30pm

Date: Saturday, Nov. 21

**Where: Seaver North, 645 N. College Ave., Claremont
Pomona College**

Cost: Lunch \$15.00 (students \$10.00)

Program Schedule:

**9:30-10:30 am
Registration**

**10:30-12:00 noon
Morning Session**

**12:15-1:15 pm Lunch
and Business Meetings
Blue Room,
Frank Dining Hall**

**1:30-3:00pm
Afternoon Session**

**3:00 pm Reception,
Math Lounge, Millikan Lab**

**Reservations must be received by
Nov. 18**

Morning:

**"The Grammar of Graphics"
Leland Wilkinson
SPSS Inc. and Northwestern University**

Abstract: A presentation graphic can be defined as a realization of a mathematical graph, which in turn can be defined as a subset of a crossing of sets. Analyzing this simple proposition in detail leads to a system that integrates diverse graphic types ranging from charts, maps, visualizations, and tabulations. The richness of this system depends on a set of independent components that, in combination, produce a large set of seemingly unrelated displays. These components include an algebra for specifying relations among variables, geometric representation objects such as points and lines, aesthetic attributes such as color and texture, and coordinate systems such as polar and rectangular. This system is a generalization of work by Bertin, Tobler, Cleveland, and other statisticians, geographers, and computer scientists.

Afternoon:

**The Grammar of Graphics
-- A Model-driven Graphical System
Leland Wilkinson
SPSS Inc. and Northwestern University**

Abstract: Producing graphs from data and then graphics from graphs involves several classes of objects:

DATAVIEWS - objects that construct variables from datasets.
TRANSFORMATIONS - objects that transform variables (log, etc.)
FRAMES - objects that create variable sets and associated dimensions

ALGEBRA - a formal algebraic system that operates on variable sets to enable graphic representation of crossing, nesting, repeated measures, etc.

GLYPHS - objects that produce graphs (points, lines, boxes, networks, etc.) from variable sets.

COORDINATES - coordinate transformations of glyph geometry (reflection, rotation, projection, polar coordinates, conformal mappings, etc.)

AESTHETICS - objects that bind perceivable attributes (color, shape, sound, etc.) to glyphs so that they can be rendered visible.

These classes are embedded in an object-oriented system that is capable of producing a substantially greater variety of graphs than existing graphical systems. It also enables a novel user interface for creating and manipulating quantitative graphics called a graphboard. Dan Rope, Dan Carr and Wilkinson are implementing this system in a Java Web-based interactive graphics component library called GPL.

Leland Wilkinson is Sr. VP of SYSTAT Products at SPSS Inc. and Adjunct Professor of Statistics at Northwestern University. He received his B.A. and B.D. from Harvard University and his Ph.D. from Yale in psychometrics. He taught at the University of Illinois at Chicago from 1976 to 1987. In the early 1980's, Wilkinson wrote SYSTAT and founded SYSTAT Inc. in 1984. He was President of SYSTAT until 1994, when he joined SPSS in an acquisition. Wilkinson's current research interests are in quantitative graphics, tabulation, and statistical computing. He is a Fellow of the ASA, Council of Sections representative for the Statistical Computing Section, and an Associate Editor of *The American Statistician*. In addition to journal articles and the original SYSTAT computer program and manuals, Wilkinson is the author (with Grant Blank and Chris Gruber) of *Desktop Data Analysis with SYSTAT* (Prentice-Hall) and a book to appear in 1999 called *The Grammar of Graphics* (Springer-Verlag).

Directions to Pomona College:

Major highway routes to Pomona College are Freeway I-10 (the San Bernardino), Freeway 57 (the Orange), Freeway U.S. 60 (the Pomona), and Freeway I-210 (the Foothill).

To reach Claremont from any area except Pasadena, take the I-10 to Indian Hill Boulevard (exit 47), and drive north. It is one mile to First Street in the village. Turn right three blocks to College Ave. Left to 7th St.. Seaver Auditorium is at the NW corner of 7th and College. To reach I-10 from Orange County and the south, take 57 or from Long Beach, take I-605. From the west and southwest Los Angeles, take US 60 to 57 and 57 to I-10. From Pasadena and the San Fernando Valley, take I-210 east until it terminates at Foothill Blvd. Drive three miles further and turn right on College Ave.

For further information on the meeting, please call Kathy Sheldon <ksheldon@pomona.edu> at 909-621-8409.

PRESIDENT'S MESSAGE

During the past year, all of our usual events were great:

- o Fall Kickoff Meeting with Carl Morris -- Don Bentley

- o Careers Day with David Moore -- Anita Iannucci and Jeff Longmate

- o Applied Statistics Workshop with Wayne Nelson -- Bob Newcomb

Our sincere thanks go to these chairs and their hard-working committees.

We are so very pleased to congratulate our four new ASA Fellows:

- o Bob Bell of Rand
- o Subir Ghosh of UC Riverside
- o Joyce Niland of City of Hope
- o Roxy Peck of Cal Poly/San Luis Obispo

Their worthy contributions are described in an accompanying article.

Bob Newcomb was elected District 6 Vice Chair and Secretary-Treasurer of the Statistical Graphics Section. (He is updating our Membership Roster as well.) **Nancy G. Berman** is the new Section on Statistical Consulting Publications Officer, and **Roxy Peck** is Chair-Elect Section on Statistical Education.

Thanks go to **Rita Peterson** for years of service to the chapter putting the Chapter Newsletter together and to the UCI students who have helped fold and label them.

Our support for AP Statistics is well underway:

- o Pat Thomas is coordinating our San Diego activities
- o Nancy Berman is coordinating our Los Angeles activities
- o We are preparing a display to offer our support at the California Mathematics Council Meeting in Palm Springs on November 6-8

A video workshop on "Bayesian Hierarchical Modeling" by David Draper (and moderated by Jim Press of the UC Riverside Dept. of Statistics) was sponsored by SCASA and the CSULB (Long Beach) Math Department last month. **Dan Martinez** set things up.

In addition, we are planning a Workshop on Effective Consulting and would welcome both committee members and program suggestions.

Finally, we are bringing the Interface home to Southern California in 2001. It will be located either near South Coast Plaza or UC Irvine, and will honor **Wil Dixon** for his contributions to statistical computing.

I apologize for any significant accomplishments that I may have omitted.

1998 ASA Fellows

Four Chapter members were elected Fellows of the American Statistical Association at the Joint Statistical Meetings in Dallas: Robert Bell, Subir Ghosh, Joyce Niland and Roxy Peck. Congratulations to all four and many thanks for their service to the profession.

Robert Bell, at the Rand Institute in Santa Monica since 1980, is currently on leave for one year at AT&T Research Labs in Florham Park, NJ. Dr. Bell received his Ph.D. in Statistics from Stanford University. His research interests are survey research methods, analysis of data from complex samples, record linkage methods, and health policy analysis. He is currently Chair of ASA's Census Advisory Committee, was 1984 Program Chairman for the local Chapter's 1984 Applied Statistics Workshop, and is on two panels advising the Census Bureau on plans for the decennial census.

Subir Ghosh is a Professor of Statistics at the University of California, Riverside. Dr. Ghosh's research interest is in design and analysis of experiments, linear models, industrial statistics, and survey sampling. He has published over 60 research articles and has edited three books, and is a coordinating editor of the *Journal of Statistical Planning and Inference* and an associate editor of *Communications in Statistics*. Subir received his Ph.D. in Statistics from Colorado State University, Fort Collins, in 1976, and is a past President of the Southern California Chapter of the ASA.

Joyce Niland has been director of the Department of Biostatistics at City of Hope National Medical Center since 1988. In 1997 she organized the Department of Biomedical Informatics. Dr. Niland's Ph.D., earned in 1984, is from the University of Southern California. She has published over 60 biomedical papers and two book chapters on statistics applied to bone-marrow transplantation, is an associate editor of two major journals, and has served on numerous review panels for NIH. Joyce is also past President of the Chapter.

Roxy Peck is Associate Dean, College of Science and Mathematics, and former Chair of the Statistics Department at California Polytechnic University, San Luis Obispo. Dr. Peck received her Ph.D. from the Riverside campus of the University of California in 1979. She has published three books, the most recent as co-editor of *Statistical Case Studies: A Collaboration Between Academe and Industry*. Roxy is Chair-elect of the Section on Statistics Education, ASA, and is Chapter

Representative to ASA for the Southern California Chapter.

Also to be recognized is **Dr. Robert Newcomb** of the University of California, Irvine. Bob was recently elected to two national ASA positions: Secretary-Treasurer of the Statistical Graphics Section and Vice-Chair of District 6.

RAND STATISTICS SEMINAR SERIES

Sponsored by the Statistics Group

SPEAKER: Jun Liu
Statistics Department
Stanford University

TOPIC: Sequential Monte Carlo, Mixture
Kalman Filter, and Target Tracking

TIME: 4 pm, Thursday, November 5, 1998

PLACE: Conference Room 1822
RAND
1700 Main Street
Santa Monica, CA 90401

ABSTRACT: In treating dynamic systems, sequential Monte Carlo (SMC) methods use discrete samples to represent a complicated probability distribution and use rejection sampling, importance sampling, and weighted resampling to conduct on-line estimation. We propose two additional operations -- marginalization and partial rejection control -- to improve performance of such algorithms. Marginalization suggests that one can gain efficiency by integrating out some components from the system before using a SMC method. When applied to a conditional Gaussian state space model, this approach gives rise to an efficient online algorithm: the mixture Kalman filter (MKF). Partial rejection control is a way to use future information to help generating "good" Monte Carlo samples to represent the current state. The method is particularly useful when there are outliers among observations or when the system engages in sudden changes (such as tracking target with maneuvering). Both techniques are first illustrated by a simple state-space model example and then applied to do 2-dimensional target tracking in clutter environment.

Refreshments will be served in Conference Room 1822 from 3:30 to 4 pm.

For further information, please contact Ron Fricker at (310) 393-0411 (x6102).

SCASA OFFICERS:

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Please send items for the next issue of The Southern California Statistician to Harold Dyck (hdyck@mail.csusb.edu)

Chapter Web page :

<http://orion.oac.uci.edu/~rnewcomb/statistics/scasa/scasa.html> or, through the "Chapters" page of <http://www.amstat.org/>.

Please mark the enclosed ballot and return as soon as possible. We hope to install the new officers at the Fall Kick-Off.

JOB OPPORTUNITIES

Two statistician positions at **Charles R. Drew University of Medicine and Science.**

Individuals interested in either of the two positions should fax **Frank Galvan** <frgalvan@cdrewu.edu> their resumes at the following number: (323) 563-9333.

Charles R. Drew University of Medicine and Science is near the intersection of the Harbor and Century Freeways in Los Angeles. The Drew University research unit advertising the positions, SPECTRUM Services and Research, is located at 1774 East 118th Street, Building K, Los Angeles, CA 90059.

PhD LEVEL STATISTICIAN:

Requirements: PhD in statistics; demonstrated knowledge of

advanced statistical analysis techniques; demonstrated ability to interpret statistical analysis results and identify their potential limitations, using SAS, STATA and SPSS; demonstrated ability to assist in writing professional papers for reporting research findings on statistical analysis. Starting salary range: \$50,000 to \$60,000, depending on experience.

MASTER'S LEVEL STATISTICIAN/PROGRAMMER

Requirements: MS in statistics; demonstrated ability to perform a variety of statistical computer programming, statistical data analysis, and database management using SAS, STATA and SPSS. Ability to compile statistical reports and assist in the development of research study designs. Starting salary range: \$35,000 to \$43,000, depending on experience.

Have you paid your chapter dues? Please check the mailing label. If you are in arrears, contact the Chapter Treasurer, Jim Sayre at (310) 825-5250. If you have a change of address, notify Bob Newcomb at [949] 824-5366.

American Statistical Association, Southern California Chapter
 c/o Harold Dyck, Cal State Univ. San Bernardino
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