



# The American Statistical Association

## San Francisco Bay Area Chapter

Since 1928

### CALENDAR

OCT 24, 1990 WEDNESDAY James Deiterick  
"Probabilities of the Next Major Bay Area Earthquakes"

NOV 1, 1990 THURSDAY Joel Swartz  
"Mathematical Models of Smoking and Lung Cancer"

DEC 13, 1990 THURSDAY Panel Discussion and Holiday Party  
"Bay Area Statistics in the 1990s: How Are We Doing,  
Where Are We Going?"

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### JOINT GENERAL APPLICATIONS PROGRAM

**SPEAKER:** James Deitrick, Ph.D.,  
U.S. Geological Survey

**TOPIC:** "Probabilities of the Next Major Bay Area Earthquakes"

A recent news release from the U.S. Geological Survey indicated that the probabilities of earthquakes measuring 7.0 or greater on the Richter scale from the Hayward and San Andreas Faults were greater than they were once believed to be. Dr. Deitrick was the chairman of the committee that calculated those probabilities.

Dr. Deitrick will explain to us how those probabilities were calculated, what data was used, and other interesting facts about this important problem.

**DATE:** Oct 24, 1990 (Wednesday)  
3:30 - 4:00 Coffee  
4:00 Presentation

**PLACE:** California State University, Hayward  
North Science Building  
Room 206

**DIRECTIONS:** From I-880 in Hayward, take the Jackson Street exit east and turn right onto Harder Rd. Continue up Harder to the Campus and park in pay lot G. From the Peninsula, take the San Mateo-Hayward bridge into Hayward. This highway becomes Jackson Street. Turn right onto Harder Rd. continuing up to the campus.

**NOTE:** The pay lot costs \$1.50 and accepts quarters only.

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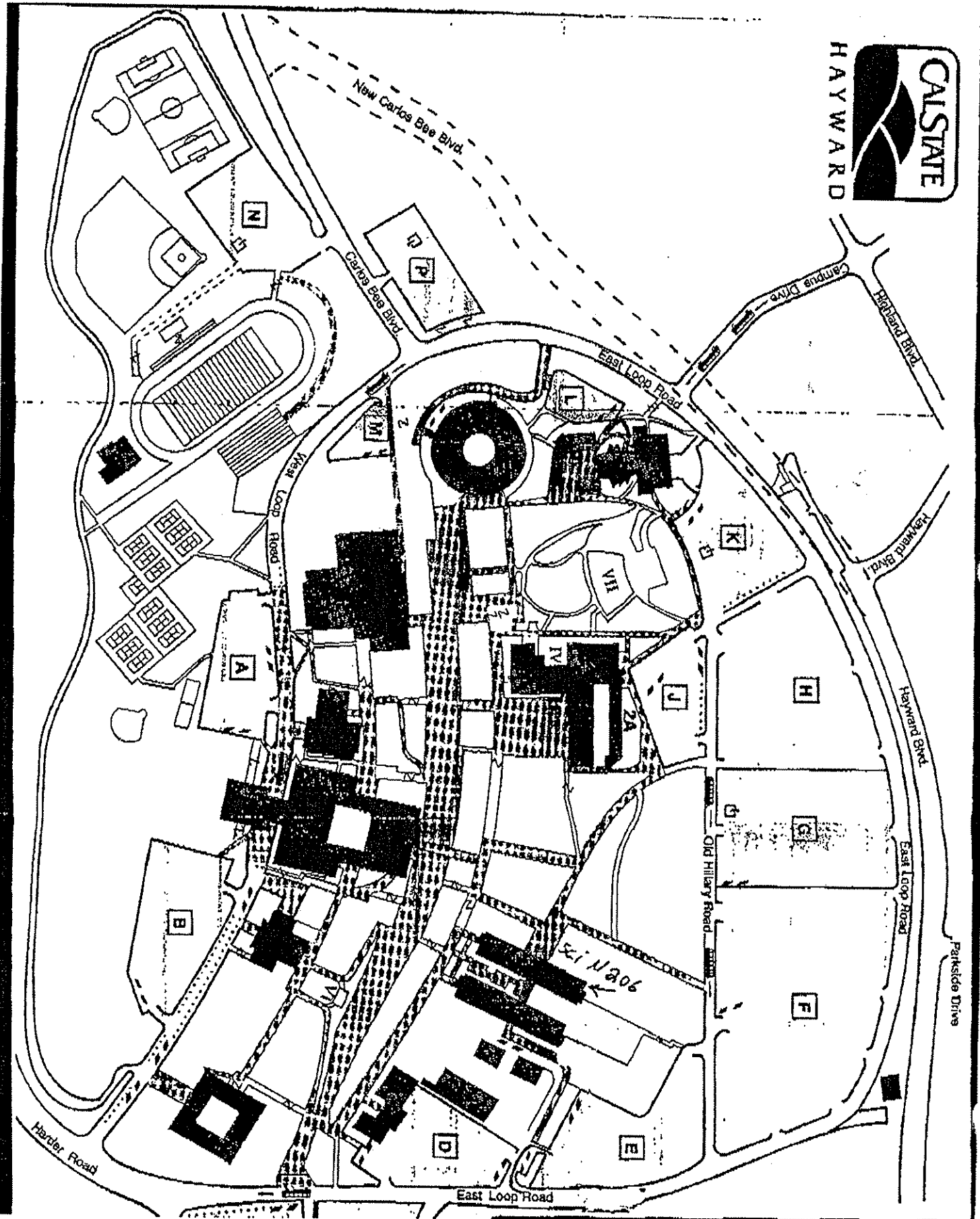
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**BIostatistics PROGRAM**

**SPEAKER:** Joel Swartz, Ph.D.  
State of California Department of Health Services

**TOPIC:** "Mathematical Models of Smoking and Lung Cancer"

The purpose of this study is to use a mathematical model to predict the time course of smoking induced lung cancer. Smoking among white men in the U.S. peaked in 1960, but lung cancer rates have continued to increase. Since the relative risk for lung cancer drops within five years of smoking cessation, it is possible that smoking induced lung cancer began to decline as early as the 1970s.

The model consists of two parts. The first part uses simulation to reconstruct the smoking history of the population by age and birth cohort using data from the NCHS Health Interview Study on prevalence. This simulation is necessary because lung cancer risk for an individual depends upon the age of starting smoking and the age of stopping smoking. In the second part, the risks of lung cancer for individuals with given smoking histories were calculated using Whittemore's modification of the multistage model.

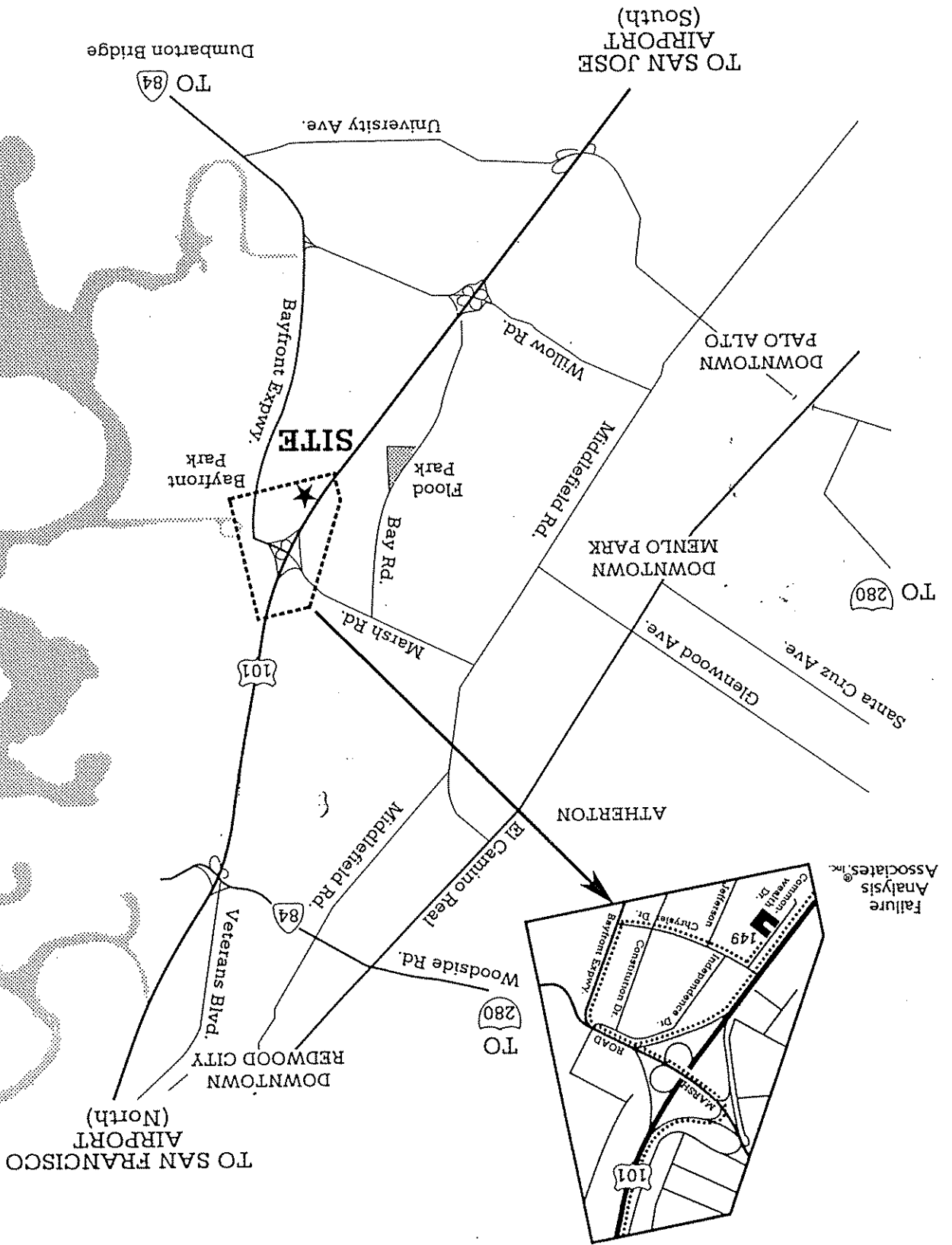
The model predicted a 12% decline in smoking induced lung cancer for white males over the period 1970 to 1985. By contrast, the total lung cancer rate for this group increased by 26% over this period. The predictions of the model were shown to be robust to a wide range of relaxations of assumptions.

**DATE:** Nov 1, 1990 (Thursday)  
3:30 - 4:00 Coffee  
4:00 Presentation

**PLACE:** Failure Analysis Associates  
149 Commonwealth Drive  
Menlo Park

**DIRECTIONS:** From I-101 in Menlo Park take the Willow Road exit east. Turn left at the Bayfront Expressway and left at Chrysler, and left again at Commonwealth. Visitors parking is in the front of the building. Go in the main entrance. The receptionist will give you directions to the lecture. From the East Bay, take the Dumbarton Bridge. When you get to Willow Road, stay to the right; you will be on the Bayfront Expressway. Chrysler is the second stoplight past Willow. Turn left on Chrysler and left again on Commonwealth.

# NEIGHBORHOOD AREA MAP



AMERICAN STATISTICAL ASSOCIATION 1991 WINTER CONFERENCE

# STATISTICS AND THE ENVIRONMENT

New Orleans, Louisiana • January 3-5, 1991 • Hyatt Regency Hotel

## FOCUS

Practical Applications of Theory and Methods Used in Environmental Statistics

## HIGHLIGHTS

Featured Speakers • Invited and Contributed Papers • Poster Sessions • Tutorials

## TOPICS

Global Warming • Spatial Statistics • Superfund Site Characterization  
Environmental Indicators • Chemometrics • Risk Analysis  
Health Effects • Graphical Assessment of Network Trends  
Fisheries and Wildlife • Water Resources • Ecology

☛ For More Information Contact

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**ANNOUNCEMENTS:**

Lenny Ayyangar  
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P.O. Box 10850  
Palo Alto, CA 94303

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 date that your dues expires (This is a revision of previous printed date conventions.) If you are overdue please send \$8 to:

Changes of address should be sent to the chapter treasurer, Lenny Ayyangar at the address listed below.

**ADDRESS CHANGES/DUES:**

**SF Bay Area Chapter Business**

Ph.D. in Probability and Statistics from University of Moscow seeks research or teaching position in Mathematical Statistics (primarily Nonparametric Estimation), Applied Statistics and Data Analysis, Applied Probability or Stochastic Processes. Contact: Yuri Koshevnik, 411 Great Road, Apt 15, Acton, MA 01720 (508) 264-0627.

**APPLICANTS**