# The American Statistical Association

## San Francisco Bay Area Chapter

**Since 1928**

*May, 1994*

## Joint Biostatistics and General Applications Program

### Optimal Dose Estimation in Pharmaceutical Development of Agricultural Products

**Speaker:** James R. Schwenke, Ph.D.
Department of Statistics, Kansas State University
Applied Research Consultants, Inc.

One step in the process to develop a new agricultural drug is to determine an optimal dose or dose range. In general, an optimal dose is defined as the dose above which no significant improvement in response is detectable. The Center for Veterinary Medicine (CVM) of the Food and Drug Administration (FDA) has published guidelines which describe methods for estimating an optimal dose or dose range. Recent simulation studies indicate that these methods either underestimate the true optimal dose or tend not to converge. Current research has been directed toward developing alternative procedures.

This presentation will summarize the standard methods for estimating an optimal dose. A case study will be presented highlighting several methods for estimating an optimal dose.

**Date:** May 12, 1994

**Time:** 6:00 - 6:30 Refreshments
6:30 - 7:30 Talk

**Place:** Hotel Diva
440 Geary, between Mason and Powell, San Francisco
Valet parking is available at the hotel for $6. There are also many other garages in the area including the large, city-owned garage at Union Square, two blocks away.

## Seeking Employment

I am a trained and experienced Ph.D. applied mathematical statistician with specializations in Systems and Decision Theory. My knowledge base includes:

- system and signal spectral transforms
- statistical signal representation, properties and processing
- optimization (optimal control theory, linear and nonlinear programming)
- statistical decision theory (Bayesian maximization, ANOVA, multivariate analysis, regression , risk and cost-benefit maximization)
- statistical detection and error control coding (maximum likelihood, maximum a priori, M-ary hypothesis testing ,block and sequential coding)
- computer-based processing and simulation skills (PC's, mainframes, networks)
- experimental statistical data analysis techniques
- technical writing expertise

I would be very happy to discuss your data processing needs and the manner that I would employ my skills in statistics, system modeling/analysis; and mathematical analysis on your behalf. I am flexible and enjoy new challenges.

Sheldon Rashba Ph.D, 1290 Hopkins Ave.#27, Berkeley, CA 94702. 510-527-8242

## Join the SF Bay Area ASA Chapter

If you are not currently a member of the local chapter of the ASA and would like to join, send a note with your name and address to

Jim Lenihan
1 Appian Way #702-2
South San Francisco, CA 94080

Please enclose a check for one year's membership, $9, payable to "ASA, Bay Area Chapter". Student membership dues are $3 per year. You may also join the local chapter when paying dues to the national organization.

## Newsletter Submissions

If you have a job opening, announcement, or other piece of information you would like to share with chapter members, send it to me to include in an upcoming newsletter. The quickest and most reliable way to send something is through e-mail to the chapter's mailbox. The Internet address is

sfasa@stat.berkeley.edu

Information can also be sent through regular mail to

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