



# TEACHING OF STATISTICS IN THE HEALTH SCIENCES

Section of the American Statistical Association

**JULY 1993**

## EDITOR'S NOTES

This issue simply presents the agenda for our section at the 1993 annual Joint Statistical Meetings in San Francisco. I am pleased to say that our section has increased the number of contributed papers/posters over last year. It would be nice if we could maintain an increasing number of contributions in the future. The members should extend our thanks to those who have contributed. The section is also co-sponsoring several sessions and has invited and roundtable meetings lined up. Remember the general business meeting at 6:00 p.m. Tuesday.

We need some material for future newsletters! One idea is to review some of the software designed as tutorial programs in Biostatistics. I have received several requests about this type of educational material; it would be helpful if the section could respond with such a review. If anyone has ideas or skills that could improve or facilitate the newsletter please let us know. In addition, if anyone wants to take over editing the Newsletter please feel free to step forward and be heard. The Newsletter may need some new blood. At present there are about 715 paying subscribers to the Newsletter/Section, and we need to know what this group would like to do in the future.

See you in San Francisco.

Steve Verhulst

## Preliminary Program

### Joint Statistical Meetings

#### Section on Teaching Statistics in the Health Sciences

San Francisco Hilton  
Parc Fifty-Five

San Francisco, California  
August 8-12, 1993

#### NUMBER 39

Monday, August 9, 10:30 a.m. - 12:20 p.m.

#### **INNOVATIONS IN TEACHING: HOW CAN WE IMPROVE THE COMMUNICATION SKILLS OF STUDENTS? - Invited Papers**

*Section on Statistical Education, Section on Teaching  
of Statistics in Health Sciences*

Organizer: NOREAN RADKE SHARPE,  
Bowdoin Coll.

Chair: BARBARA MCKNIGHT, U of  
Washington

(10:35) Communication: Statistical Task &  
Statistical Tool. LINCOLN MOSES, Stanford U

(11:00) Lessons We Can Learn from Recent  
Research on Teaching: It's Not Just the Form, It's  
the Intent. JUDITH D. SINGER, JOHN B.  
WILLETT, Harvard U

(11:25) Writing and Statistics: Strange Bedfellows?  
TORI HARING-SMITH, Brown U

(11:50) Disc: DONALD L. BENTLEY, Pomona  
Coll.

(12:05) Floor Discussion

Number 80  
Monday, August 9, 2:00 p.m. - 3:50 p.m.  
**CONTINUING EDUCATION IN STATISTICS AND  
EPIDEMIOLOGY - Invited Papers**

*Section on Teaching of Stat. in Hlth. Sci., Bio.  
Sec., ENAR-WNAR, Sec. on Epidemiology, Sec. on  
Stat. Educ.*

Chair/Organizer: STANLEY P. AZEN, U of  
Southern California

(2:05) Continuing Education in Biostatistics and  
Epidemiology at NIH. VICTOR KIPNIS, NCI

(2:30) The  
Short Course.  
THEODORE  
COLTON,

Boston U  
(2:55) A  
Guide to the  
Design,  
Conduct and  
Analysis of  
Clinical  
Trials, With  
Computer  
Software.

JOYCE C. NILAND,  
City of Hope  
Med. Ctr.

(3:20) Disc:  
THOMAS C.  
CHALMERS,  
Harvard SPH

(3:35) Floor Discussion

Number 154

Tuesday, August 10, 12:00 p.m. - 2:00 p.m.

**POSTER SESSIONS - Contributed Papers**

(Letter indicates booth assigned)

*Sec. on Teaching of Stat. in Hlth. Sci.*

O. Type I Error Estimates & Effects of Cox  
Model Selection in Colon Cancer Data  
Set. CATHERINE M. TANGEN,  
THOMAS R. FLEMING, Southwest  
Oncology Group, CHARLES G.  
MOERTEL, Mayo Clinic.

P. A Factor Analysis Approach to Modelling  
AIDS Risk Behaviors Among Injection

Drug Users in San Juan, Puerto Rico.  
H.M. COLON, P.R. ROBLES, HARDEO  
SAHAI, T.D. MATOS, U of Puerto Rico.

Number 176

Tuesday, August 10, 2:00 p.m. - 3:50 p.m.

**TEACHING STATISTICS IN THE HEALTH SCIENCES:**

**AIDS AND EXAMPLES - Contributed Papers**

*Sec. on Teaching of Stat. in Hlth. Sci., Sec. on  
Epidemiology*

Chair: TAMARA ODOM-MARYON, City of  
Hope Med.  
Ctr.

(2:05)  
Teaching  
Bayes'  
Theorem  
Using Paper  
Dolls.

HENRY B.  
SLOTNICK,  
U of North  
Dakota

(2:20)  
Introductory  
Biostatistics  
and  
Epidemiology  
Instruction at  
the University  
of Louisville  
School of

**DON'T FORGET SECTION MEETINGS:**

**TUESDAY, AUGUST 10, 7:00 AM: SECTION  
ON THE TEACHING OF STATISTICS IN THE  
HEALTH SCIENCES  
EXECUTIVE COMMITTEE**

**TUESDAY, AUGUST 10 6:00 P.M.:  
SECTION ON THE TEACHING OF  
STATISTICS IN THE HEALTH SCIENCES  
BUSINESS MEETING**

Medicine. STEPHEN W. LOONEY, R.  
PRASAAD STEINER, U of Louisville.

(2:35) Improved ANCOVA Test. ABBESS RAJIA,  
U of Vermont, HOWARD H. STRATTON,  
SUNY, Albany

(2:50) Modelling Anthropometric Data in  
Developing Countries. MAGUED I. OSMAN,  
Emirates U

(3:05) Which Cholecystectomy Patients May Need  
Common Bile Duct Exploration? FATEN F.  
ELZEKY, Memphis State U, J. C. HALL, Baptist  
Memorial Hosp., M.A. ELTORKY, U of  
Tennessee, Memphis

(3:20) Tests for Special Structures on the  
Dispersion Matrix Associated with a Two-Way  
Mixed Model. H.I. PATEL, Berlex Labs, Inc.

(3:35) Floor Discussion

Number 203

Tuesday, August 10, 4:00 p.m. - 5:50 p.m.

**ASSESSMENT ISSUES RELATED TO TEACHING AND LEARNING STATISTICS - Invited Papers**

*Sec. on Stat. Educ., Sec. on Teaching of Stat. in Hlth. Sci.*

Organizer: JOAN B. GARFIELD, U of Minnesota

Chair: DAVID S. MOORE, Purdue U

(4:05) What Should We Assess? JOAN B. GARFIELD, U of Minnesota

(4:30) Feeling Certain about Uncertain Things: The Role of Beliefs and Attitudes in Learning Statistics. IDDO GAL, U of Pennsylvania

(4:55) Issues in Assessing Conceptual Understanding in Probability and Statistics. CLIFFORD KONOLD, U of Massachusetts

(5:20) Disc: GEORGE W. COBB, Mount Holyoke Coll.

(5:35) Floor Discussion

Number 261

Wednesday, August 11, 10:30 a.m. - 12:20 p.m.

**STATISTICAL GRAPHICS AND ANIMATION FOR INSTRUCTION/CLASSROOM - Invited Papers**

*Sec. on Stat. Graph., Sec. on Stat. Educ., Sec. on Teaching of Stat. in Hlth. Sci., IMS*

Chair/Organizer: JOE NEWTON, Texas A&M U

(10:35) Integrating Dynamic Graphics into a

Linear Regression Course. SANFORD WEISBERG, R. DENNIS COOK, U of Minnesota

(11:05) Exploratory Dynamic Graphics for Survival Data. E. NEELY ATKINSON, M.D., Anderson Cancer Ctr.

(11:35) Methods for the Analysis of Data from Designed Experiments. WEI-YIN LOH, U of Wisconsin

(12:05) Floor Discussion

Number 325

Thursday, August 12, 8:30 a.m. - 10:20 a.m.

**TEACHING OF STATISTICS IN THE HEALTH SCIENCES USING A GEOMETRIC APPROACH - Invited Papers**

*Sec. on Teaching of Stat. in Hlth. Sci., Sec. on Stat. Educ., Sec. on Stat. Graph*

Chair/Organizer: RICHARD CHAPPELL, U of Wisconsin, Madison

(8:35) Direction: The Invisible Player. ROBERT E. JOHNSON, Virginia Commonwealth U, DAVID G. HERR, U of North Carolina, Greensboro

(9:00) Teaching the Geometry of Nonlinear Models. DOUGLAS M. BATES, U of Wisconsin, Madison

(9:25) Understanding Chi-Squared, Consistency, and Efficiency. ROBERT E. KASS, Carnegie Mellon U

(9:50) Disc: PETER B. IMREY, U of Illinois

(10:05) Floor Discussion



**See you in San Francisco**

(This map not to be used for navigational purposes.)



**Teaching of Statistics in the Health Sciences**  
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This newsletter will publish official notices, articles, book reviews, descriptions of research in progress, reviews of research, letters, and announcements judged to be of interest to members of the subsection. Materials and manuscripts should be submitted to:

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**TEACHING OF STATISTICS IN THE HEALTH SCIENCES**

