

# TEACHING of STATISTICS in the HEALTH SCIENCES

**Cynthia R. Long**

**From the Section Chair**



JSM 2006 has almost arrived. Throughout this newsletter, you will find information regarding many Section sponsored activities. Note the excellent invited session on teaching

biostatistics to health care professionals organized by Janet Tooze, 2006 Program Chair, at 8:30am on Tuesday in the Convention Center. Also, you may want to stop by Poster 27 at 2pm on Monday; the poster describes the development of a course in biostatistics for biomedical graduate students at Cornell University. Our contributed session as well as many of our co-sponsored sessions also look very interesting. Patrick Tarwater, 2007 Program Chair, has organized attractive roundtables for Monday and Tuesday mornings and for Wednesday lunch that are also described. For those who attend, please let us know if you prefer the coffee or lunch roundtable setup. The entire JSM program can be found at <http://www.amstat.org/meetings/jsm/2006/onlineprogram/index.cfm?fuseaction=main>.

Seattle is such a fun city to visit that I imagine most of us are trying to figure out when we can sneak off for an afternoon at the Pike Place Market (don't miss the flying fish) or an evening of fine food and local wine and beer. But, don't forget to join us at the **Section mixer** from 5:30-7pm on Monday night!

## New Section Officers

Congratulations to Scott Evans, Harvard School of Public Health, and Janice Janosky, University of Pittsburgh School of Medicine, on their election as 2007 Chair-Elect and Council of Sections Representative, respectively. Jodi Lapidus, Oregon Health & Science University, has been named the 2008 Program Chair; she is also one of the speakers in our invited session mentioned above. We look forward to working with all of you.

We also need to fill the Publications Officer position. Renee Stolove has done an excellent job over the past 2 ½ years, but had to resign as she is now immersed in a PhD program—thanks for your service to the Section Renee! If you are interested in becoming involved in the TSHS Section, please consider serving the rest of Renee's term (through 2007). You can e-mail me ([long\\_c@palmer.edu](mailto:long_c@palmer.edu)) or catch me at the Section mixer.

See you in Seattle.

**Be Sure to Attend the TSHS  
Business Meeting and Mixer!**

**Monday August 7, 2006  
5:30 p.m.  
In the Sheraton-Cedar Room**

Come meet your fellow teachers of statistics in the health sciences, share food, good company, and (maybe) door prizes!

## BOOK REVIEW

**Teacher Man – A Memoir**

**Frank McCourt**

**Scribner, 2005. 258 pages, \$26.00**

**ISBN 0-7432-4377-3**



**Review by Daniel W. Byrne, Department of Biostatistics, Vanderbilt University Medical Center. (Pictured)**

“Yo, teacher man . . .”  
 “Call me Mr. McCourt.”  
 “Yeah. OK. So, you Scotch or somethin’?” In

fact, Frank McCourt is the Irish-American author of *Angela’s Ashes* and *‘Tis*. *Teacher Man* is his new memoir of his 30 years as a teacher in the New York City school system. Although McCourt taught English and creative writing to high school students, those who teach statistics - or any subject - will enjoy this book. Much of the book is dialogue between teacher and students shaped into stories. McCourt quickly learned that his students tuned out teaching but listened carefully to his stories. So, he taught by telling stories. For five periods per day, for 30 years, he polished his storytelling skills. Upon retirement, at the age of 66 he published his first book and won the Pulitzer Prize. At 69, he published his second book and observed “At that age it’s a wonder I was able to lift a pen at all.” His third book, *Teacher Man*, is an amusing and brutally honest memoir of his teaching experience. In a recent interview, he noted that once you write a book you are never bored again because you are busy carefully observing everything around you to see if it might be useful for your next book.

The level of honesty found in this memoir is rare today and one of the features of this book that makes it worth reading. According to McCourt “You can fool some of the kids some of the time, but they know when you’re wearing the mask,

and you know they know. They force you into truth. . . I decided to admit it when I didn’t have answers.” “I was finding my voice and my own style of teaching. I was learning to be comfortable in the classroom.”

Even if this book provided no useful information for someone who teaches statistics it would be worth reading – just for the pure joy of hearing these stories. Yet, this book does provide valuable lessons for those who teach statistics. Teaching statistics in the health sciences is not unlike teaching high school students English. The students are generally bored with these topics and the learning is often sub optimal. In many cases teaching statistics could be improved by including more storytelling.

McCourt also studied where the students excelled and he used that information to make his teaching more effective. He observed that students often forged excuse notes and their writing in these forgeries was exceptionally creative. Therefore, he created a writing assignment; write an excuse note from Adam or Eve to God. He became a highly effective teacher by entertaining his students but also by keeping them off balance. “Mr. McCourt, don’t get mad, but sometimes you’re like weird.”

*Teacher Man* is a difficult book to read – not because, like most statistics books, it is difficult to understand but because physically it is difficult keep possession of this book. Nearly everyone that I have spoken to about this book has reported a similar story. No sooner has the rightful owner of this book brought it into their home than a spouse, child, or even an in-law has absconded with it. Even Ben Yagoda, who makes a living as a book reviewer for *The New York Times*, has reported this problem. Those who are considering reading this book should also be warned of another problem. It can be very difficult to stop reading. So, although I highly recommend this book, I would advise: do not start reading this before an important deadline and bring it home in a brown paper bag.

## JSM 2006 is Coming Soon

Janet Tooze  
TSHS 2006 Program Chair



**JSM is almost here! TSHS is sponsoring two sessions and co-sponsoring several others. Why not plan to attend all of them?**

### Sponsored Sessions

**Monday 08/07/2006 2:00 PM to 3:50 PM**

***Challenges and Innovative Methods for Teaching Biostatistics in the Health Sciences***  
(197) (Contributed Papers)

**Chair:** Dongseok Choi, Oregon Health & Science University

2:05 PM **The Implications of the Increasing Sophistication of Statistical Methods in The New England Journal of Medicine** —

Suzanne Switzer, Smith College; Nicholas J. Horton, Smith College

2:20 PM **How To Reduce the Risk of Nervous Breakdown in Physicians Taking an Introductory Biostatistics Course** — Patrick

Arbogast, Vanderbilt University

2:35 PM **Basic Biostats: Online Learning versus Onsite Learning** — John McGready, Johns Hopkins University

2:50 PM **The Design and Evaluation of Computer-Assisted Instruction on Biostatistics: an Example of Central Limit Theorem** — Lai-Chu See, Chang Gung University; Yu Hsuan Huang, Chang Gung Memorial Hospital; Yi Hua Chang, Chang Gung University; Pei-I Peng, Chang Gung University

3:05 PM **Enhancing Medical Students' Understanding of Risk Information Using a Large Group Interactive Audience Response System** — Fredric Wolf, University of Washington; David Masuda, University of Washington; Linda Pinsky, University of Washington

3:20 PM **Learner-Centered Approach to Biostatistics in Health Sciences Settings** — Ralph M. Turner, University of the Sciences in Philadelphia

**Tuesday 08/08/2006 8:30 AM to 10:20 AM**

***Teaching Biostatistics to Health Care Professionals without Equations***  
(226) (Invited Papers)

**Chair:** Janet A. Tooze, Wake Forest University School of Medicine

8:35 AM **Teaching Research Design to Health Sciences Professionals** — Stephen W. Looney, LSU Health Sciences Center

9:00 AM **Teaching Statistical Concepts through Visualization** — Edward H. Ip, Wake Forest University School of Medicine; Gary Wolgast, Wake Forest University School of Medicine

9:25 AM **Effective Teaching of Applied Biostatistics for Clinicians Enrolled in a Research Training Program** — Jodi Lapidus, Oregon Health & Science University

9:50 AM **Disc: Ralph O'Brien**, The Cleveland Clinic

**See also our Cosponsored sessions and Posters on page 4, and our Roundtables on page 5.**

JSM 2006, Continued

## Cosponsored Sessions

### Sunday 08/06/2006

2:00 PM to 3:50 PM **Statistical and Quantitative Literacy 2006** (17) Topic  
Contributed Papers

4:00 PM to 5:50 PM **"Bad" Statistical Methods: What Are the Costs?** (49)  
Invited Panel

### Monday 08/07/2006

8:30 AM to 10:20 AM **Directions for the Second Statistics Course** (86) Invited  
Papers

10:30 AM to 12:20 PM **Having an Impact in a Multidisciplinary Setting** (131) Invited  
Panel

2:00 PM to 3:50 PM **Contributed Posters**  
(210)

### Wednesday 08/09/2006

2:00 PM to 3:50 PM **A Statistician's Summer Reading List: Modern Topics To Check Out** (454) Invited Papers

### Thursday 08/10/2006

10:30 AM to 12:20 PM **Misuse of Statistical Methodology** (527) Invited Panel

**There's more! -- See the TSHS Roundtables (coffee or luncheon) on the next page...**

## TSHS Roundtables at JSM 2006!

**Patrick Tarwater**  
2007 TSHS Program Chair



We are sponsoring three roundtables this year with two of them using the new Coffee Roundtable format. Two sessions are about teaching methods using distance learning technologies and the other a discussion for everyone about leadership, mentoring, and professionalism among other ideas.

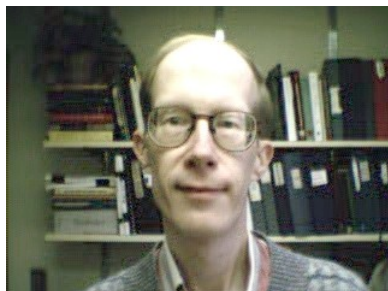
<b>Morning/Coffee sessions</b>		<b>Luncheon</b>
<p style="text-align: center;"><b>Monday August 7</b> <b>7:00 to 8:15 a.m.</b> <i>Online Based Approaches to Statistical Education</i> John McGready, MS Johns Hopkins School of Public Health</p> <p>John states "In this session, we will discuss online approaches to basic statistical education. I will give demonstrations of how we teach a "statistical reasoning"-centric course online at Johns Hopkins, and we will discuss the approaches and experiences of the session participants. We also will brainstorm on how to take an intensive, real-time, interactive laboratory-based course in statistical computing and make it web-ready. For years, we have taught two-week intensive courses in data analyses at Johns Hopkins and want to pursue it as an online offering. The varied and innovative perspectives of session participants guarantee to make this an exciting and informative exercise."</p>	<p style="text-align: center;"><b>Tuesday, August 8</b> <b>7:00 to 8:15 a.m.</b> <i>Productivity versus Professionalism in Biostatistics</i> Lemuel Moye, MD PhD University of Texas School of Public Health</p> <p>Dr. Moye states "While productivity is and will be a fundamental attribute of the competent statistician, there are other core themes that must be allowed to develop, appear, and exert their influences. The presence of self-control and patience, of moral excellence and compassion, and of discipline and flexibility are as critical to the development of the junior scientist as is the acquisition of technical skills. The presence of these traits engenders collegiality, persuasive strength, responsibility, administrative diligence, influence, and vision (i.e., the qualities of charitable leadership)."</p>	<p style="text-align: center;"><b>Wednesday, August 9</b> <b>12:30 to 1:50 p.m.</b> <i>Distance Teaching and Learning in the Health Sciences</i> Robert Harris, PhD University of Texas School of Public Health</p> <p>He states "This roundtable will offer a chance to share experiences, compare strategies and tactics, and talk about limitations of distance learning formats and possible opportunities. The convener has become a student and practitioner of distance learning using a hybrid of interactive television and internet media to teach multiple linear and logistic regression to graduate students in public health".</p>

### Section Officers and Officers-Elect for TSHS

Chair	Cyndy Long	(563) 884-5157	<a href="mailto:LONG_C@palmer.edu">LONG_C@palmer.edu</a>
Chair-Elect 2006	Marlene Egger	(801) 587-3335	<a href="mailto:MEGGER@DFPM.UTAH.EDU">MEGGER@DFPM.UTAH.EDU</a>
Chair Elect 2007	Scott Evans		
Past Chair	Walter Ambrosius	(336) 716-6281	<a href="mailto:wambrosi@wfubmc.edu">wambrosi@wfubmc.edu</a>
2006 Program Chair	Janet Tooze	(336) 716-3833	<a href="mailto:jtooze@wfubmc.edu">jtooze@wfubmc.edu</a>
2007 Program Chair	Patrick Tarwater	(915) 747-8277	<a href="mailto:Patrick.M.Tarwater@uth.tmc.edu">Patrick.M.Tarwater@uth.tmc.edu</a>
2008 Program Chair	Jodi Lapidus		<a href="mailto:lapidusj@ohsu.edu">lapidusj@ohsu.edu</a>
2006 ENAR Pgm Chair	Todd Nick	(513) 636.0462	<a href="mailto:todd.nick@cchmc.org">todd.nick@cchmc.org</a>
Secretary-Treasurer	Gloria Caldito	(318) 675-6803	<a href="mailto:GCaldi@lsuhsc.edu">GCaldi@lsuhsc.edu</a>
Publications Officer	<i>Open position</i>		
Council of Sections Rep.	Lynn Ackerson	(510) 891-3556	<a href="mailto:lma@dor.kaiser.org">lma@dor.kaiser.org</a>
Council of Sections '07	Janice Janosky		
Newsletter Editor	Ed Gracely	(215) 991-8466	<a href="mailto:egracely@drexelmed.edu">egracely@drexelmed.edu</a>
Book Review Editor	Daniel Byrne	(615) 322-4228	<a href="mailto:daniel.byrne@vanderbilt.edu">daniel.byrne@vanderbilt.edu</a>
ASA Staff Liaison	Monica Clark	(703) 684-1221	<a href="mailto:monica@amstat.org">monica@amstat.org</a>

American Statistical Association  
 TSHS Newsletter  
 Ed J. Gracely, Ph.D. Editor  
 Family, Community, and Preventive Medicine  
 Drexel College of Medicine  
 2900 Queen Lane  
 Philadelphia, PA 19129  
 215-991-8466 (phone)  
 215-843-6028 (fax)  
 egracely@drexelmed.edu

### FROM THE EDITOR



Lots of good things at JSM this year. Hope to see a lot of you there!

Enjoy this issue.

As always, if you have something to contribute, send it along!

*Ed*