

# ASAP Newsletter



The Philadelphia Chapter of the American Statistical Association

January 2007

<http://www.amstatphilly.org/>

## PRESIDENT'S CORNER

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Happy New Year! We hope that the holiday season brought some rest and relaxation with family and friends, and that 2007 will be both productive and fun for you.

Congratulations to our newly elected officers, and thanks to those who will be returning to assist in chapter activities for another year: **Bill Pikounis** (Vice President) has ably organized chapter events for our Princeton-Tenton ASA neighbors to the north; **Alex Hanlon** (Treasurer) brings an important academic perspective to our activities; and **Susan Li** (Secretary) builds upon past chapter help judging DVSF posters. We welcome new newsletter editor **Kyle Matschke** (Wyeth) and thank **Cindy Gargano** (Outreach Officer) and **Debbie Panebianco** (Webmaster) for their continued expert support.

We are excited about our 3<sup>rd</sup> annual **Mid-Winter Gathering**, to be held once again Friday, January 26<sup>th</sup> at the Sedgeley Club on Philadelphia's historic Boathouse Row. This year we are pleased to offer you two distinguished speakers addressing the use of statistics in the courtroom: **Will Fairley** (President, Analysis and Inference, Inc.) and

**Mary Gray** (American University). In addition to their comments, we look forward to catching up with old friends and making new ones. Space is limited, so please RSVP ASAP -- details can be found on pages 3-5 and on our homepage at [www.AmstatPhilly.org](http://www.AmstatPhilly.org). The cost is ridiculously low thanks to the continued generosity of our sponsors: Merck, ICON, Centocor, GSK and Wyeth.

Also please make note now of our **spring meeting** in late March and our **summer short course** in late June or early July. In March we expect that **Simon Zhou** (Wyeth) and **Alan Hartford** (Merck) will address PK/PD issues, and **Winston Richards** (Penn State Harrisburg) will describe his work examining infant mortality following the partial core nuclear meltdown of Three Mile Island Nuclear Generating Station on March 28, 1979. Ideas for a summer short course are gladly encouraged. Also, please mark your calendars for Wednesday, April 4 when we will need a small cadre of statisticians to judge **DVSF science fair** posters ([www.dvsf.org](http://www.dvsf.org)).

With the inauguration of the 110<sup>th</sup> Congress on January 4, it is appropriate to note the passing on September 1 of **Warren Mitofsky** at the young age of 71. Warren is primarily responsible for making political exit polling as close to an exact science as humanly possible. We were honored to have him speak at our fall meeting in October, 2005 in a point-counterpoint format with **Steve Freeman** (UPenn), author of the recently published book, "Was the 2004 Presidential Election Stolen?: Exit Polls, Election Fraud, and the Official Count." Warren, a gregarious and outspoken man, was elected Fellow of ASA in 1989, and was a credit to our profession. You can read more about him in the September, 2005 ASAP newsletter and in the December 31 issue of the New York Times Magazine, dedicated to "The Lives They Lived."

Lawyers have a special name for their volunteer work: pro bono. We shouldn't need to call it anything special, but should make it an important part of our everyday schedule. Whether you help judge science fair posters or assist with educational outreach efforts, there are plenty of opportunities to serve your profession. One area of desperate need is supporting teachers of AP Statistics, many of whom are tapped for the job without any particular training. While it is a credit to the increasing regard with which statistics is held generally, there is a critical need to help, recruit and train the next generation of statisticians. For additional volunteer ideas contact Bob Starbuck ([StarbuR@wyeth.com](mailto:StarbuR@wyeth.com)), who is coordinating activities for ASA on a regional level.

~Paul Johansen

## CALENDAR OF EVENTS

<b>Friday, January 26</b>	<b>ASAP Mid-Winter Gathering</b>
Tue-Fri, February 6-9	Drug Information Association Meeting
Tue, February 27	PASTA meeting
Sun-Wed, March 11-14	ENAR in Atlanta ( <a href="http://www.enar.org/meetings.htm">www.enar.org/meetings.htm</a> )
Wed, April 4	Delaware Valley Science Fair judging ( <a href="http://www.dvsf.org">www.dvsf.org</a> ),
<b>Late March</b>	<b>ASAP Spring Meeting</b> ( <a href="http://www.AmstatPhilly.org">www.AmstatPhilly.org</a> )
<b>July</b>	<b>ASAP Summer Short Course</b> ( <a href="http://www.AmstatPhilly.org">www.AmstatPhilly.org</a> )
Sun-Thu, July 29-Aug 2	Joint Statistical Meetings in Salt Lake City ( <a href="http://www.amstat.org/meetings/jsm/2007">www.amstat.org/meetings/jsm/2007</a> )

### ASAP MID-WINTER GATHERING Friday, January 26, 2007 – The Sedgeley Club (Boathouse Row)

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### Teaching an Audience of One: The Judicial Reception of Statistical Evidence

Mary W. Gray  
American University, Washington DC  
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#### Abstract

Although courts have gradually come to accept that statistics can play a crucial role in securing justice, often their understanding of the underlying concepts is tenuous at best. Some examples of uses and misuses of statistics in legal settings will be described. The level of statistical sophistication of the talk will be that used in presenting evidence to judges and juries.

#### Biosketch

Mary W. Gray  
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Professor Gray is the author of books and papers in the fields of mathematics, mathematics education, computer science, applied statistics, economic equity, discrimination law, and academic freedom. She has lectured throughout the United States, Europe, the Middle East, and Latin America. Her current research interests include applications of statistics in litigation, ethical issues in statistics, intellectual property and academic freedom, and language and gender issues in mathematics. Her

work has been supported by grants from the National Science Foundation, the Alfred P. Sloan Foundation, and the Karim Rida Said Foundation in London.

Professor Gray has served as consultant and expert witness on issues of university governance, academic freedom and tenure, faculty personnel policies, economic equity, and technology in higher education in the United States, the Middle East, and Eastern Europe. She has a visiting appointment at the King's College (London) School of Medicine and is a member of the Risk Assessment Advisory Panel for the Public Health Agency of Canada. In 2003 she worked on a U.S. AID project on education in Iraq and is currently a consultant to the Kurdistan Regional Government on statistics and information technology.

The first president of the Association for Women in Mathematics, current president of the Caucus for Women in Statistics, and past president of the Women's Equity Action League, Dr. Gray has been a member of boards and committees of such organizations as Amnesty International, the American Civil Liberties Union, the American Middle East Education Foundation, and the American Association of University Professors, has served as vice-president of the American Mathematical Society, is a fellow of the American Association for the Advancement of Science, and was recently elected to membership in the International Statistical Institute. Professor Gray has been chair of the Board of Directors of Amnesty International USA, International Treasurer of Amnesty International, and chair of its international Development Committee. President Bush awarded her the Presidential Award for Excellence in Science, Engineering, and Mathematics Mentoring.

Dr. Gray has previously taught at the University of Kansas, the University of California, Berkeley, and California State University, Hayward, (now California State East Bay) and has worked at the National Bureau of Standards (now the National Institute of Standards and Technology) and as a consultant for a number of government agencies and private firms. She has served several terms as chair of her department and as Director of the Women's and Gender Studies Program at American University. Her undergraduate degree is from Hastings College, her Ph.D. is from the University of Kansas, and she has studied in Germany on a Fulbright grant. She also has a J.D. degree from Washington College of Law, American University and is a member of the District of Columbia and U.S. Supreme bars. She has been awarded honorary degrees by the University of Nebraska and Hastings College.

# Scientists and Lawyers, Truth and Justice: Do They Mesh?

**William B. Fairley, PhD**  
**President, Analysis & Inference, Inc.**  
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## Abstract

The public cannot make up its mind about statistics, or about statistics in the courtroom. Is voodoo statistics redundant? Are expert witnesses in league with the devil? Do statisticians only have a PR problem here, or is there substance to the skepticism?

## Biosketch

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## Curriculum Vitae

Will Fairley received a Ph.D. in Statistics from Harvard University, attended the London School of Economics as a Fulbright Scholar, and graduated from Swarthmore College in Economics with High Honors.

He has published over forty articles in professional journals in statistics, applied statistics, and economics. He is the co-editor, with Frederick Mosteller, of Statistics and Public Policy, Addison-Wesley, and author of the articles, "Statistics in Law" in the Encyclopedia of the Statistical Sciences, and "Public Policy and Statistics" in the International Encyclopedia of Statistics.

He has taught statistics at New York University, Harvard's Kennedy School of Government, and Harvard Law School, where he co-taught one of the first courses in statistics for lawyers.

He has completed a great many consulting projects for major corporations, government agencies and law firms. Law-related projects take place in connection with settlement negotiations, pre-litigation phases of cases, litigation, arbitration, mediation, and administrative hearings. He has testified in federal and state courts, and other forums.

An interest in legal applications of statistics and probability began through collaboration with Michael Finkelstein, then a partner in a major New York law firm. They wrote "A Bayesian Approach to Identification Evidence" in the Harvard Law Review, January 1970. The article has since been widely cited in court opinions and by legal scholars in textbooks on evidence. He continued his interest in evidence with articles in the Journal of Legal Studies, University of Chicago Law Review and the Boston College Law Review.

## **DRUG INFORMATION ASSOCIATION MEETING**

**February 6-9, 2007 in Philadelphia, PA**

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The DIA will be holding an upcoming meeting, *Electronic Document Management (EDM) Conference: Reconnecting the Process to the Delivery of Safe and Effective Medical Products*. Topics will include:

- **Important New Initiatives - "Convergence of Disciplines"**
- **NEW Session on Records Management**
- **Medical Writing for eSubmissions**
- **US Regulatory Update**, led by Stephen E. Wilson, Director of Division of Biometrics III, CDER, FDA
- **Regulatory Town Hall Q & A**, with Stephen E. Wilson, of CDER and FDA and Kim W. Nitahara, Chief Executive Officer of META Solutions, Inc.

Visit <http://www.diahome.org/product/11363/07003.pdf> to download/reference the full meeting program.

## **PASTA: PHILADELPHIA AREA STATISTICS TEACHERS ASSOCIATION**

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PASTA, Philadelphia Area Statistics Teachers Association, was successfully revived on November 15th at Germantown Academy. Cindy Gargano gave a brief overview of what the ASA and ASAP could offer statistics teachers, and the rest of the time was used to openly exchange ideas. Please see the minutes posted on the ASAP website. Our next meeting will be on February 27th from 4-6 pm at Springside School in Chestnut Hill, Philadelphia, PA. The topic will be two parts, Part I : Experimental Design and Part II : A Behind the Scenes Look at How Science Projects Are Judged. Attending math teachers are asked to bring a science teacher, and the ASAP is asking for statisticians who have judged science fairs to share their experiences. Also, if you would like to give a high level overview of some experimental design concepts relevant to high school science projects, we would love to have you speak. If you cannot attend but have ideas and/or thoughts on this topic, please contact Cindy Gargano at [cynthia\\_gargano@merck.com](mailto:cynthia_gargano@merck.com).

In addition, Bill Pikounis and Cindy Gargano will give a brief presentation on careers in the pharmaceutical industry at Drexel University's Department of Biostatistics and Epidemiology career day on January 24th. We are looking forward to meeting the students and hope to help local schools with their career days--and possibly organize one of our own!

## TREASURER'S REPORT

BALANCE FORWARDED (11/18/06)	\$3075.36
<b>INCOME:</b>	
ASA Chapter Dues	
August, 06	\$246.00
September, 06	\$133.00
<i>Subtotal</i>	\$379.00
<b>TOTAL INCOME:</b>	<b>\$379.00</b>
<b>EXPENSES:</b>	
Mid-Winter Gathering	
Sedgeley Club Reservation 1/26/07	\$600.00
<i>Subtotal</i>	\$600.00
<b>TOTAL EXPENSES:</b>	<b>\$600.00</b>
BALANCE FORWARDED (01/07/07)	\$2854.36



[www.nearingzero.net](http://www.nearingzero.net)

## ASAP CHAPTER OFFICERS

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