

# Editor's Letter

Mike Larsen,  
Executive Editor



Dear Readers,

This issue of *CHANCE* begins with an article by Jana Asher on collecting data in challenging settings. In particular, Asher describes her experiences conducting in-person survey interviews in East Timor. She gives us personal anecdotes, practical statistical advice, and an interesting story.

Qi Zheng explains the origins of the Luria-Delbrück distribution and its role in studying evolutionary change in *E. coli*. The statistical reasoning underlying the phenomenon has a connection to the distribution of slot machine returns.

Holmes Finch's article, "Using Item Response Theory to Understand Gender Differences in Opinions on Women in Politics," compares and contrasts item response models and how they describe a data set. The models are explained using formulas, pictures, and examples.

In Volume 22, Number 4, Jürgen Symanzik proposed a puzzle based on 10 data points and a set of seven instructions. Contest winner Stephanie Kovalchik, a graduate student at UCLA, provided a solution in the form of an amusing letter and an illustrative graphic. The 10 data values were flight times in seconds recorded on the log 10 scale of the Space Shuttle Challenger. Brad Thiessen earned honorable mention for his graph that included temperature and historical facts.

Bernard Dillard asks, "Who turned out the lights?" We are all concerned with energy demand and production. Bernard uses a discrete wavelet transformation to analyze electricity consumption data measured on a frequent time scale. The fit of the model is used in multiscale statistical process control. The ultimate goal is to be able accurately predict points of extreme energy demand and respond appropriately.

Students in virtually all statistics courses learn something of least squares estimation when studying prediction of an outcome from an explanatory variable. Ivo Petras and Igor Podlubny ask whether there is a reasonable alternative to the default criterion. "Least circles" is presented for your consideration.

To introduce students to concepts of design of experiments, instructors sometimes have students conduct taste tests of

various food items, such as gummy bears (see Vol. 23, No. 1). John Bohannon, Robin Goldstein, and Alexis Herschkowitsch compared dog food and pâté. Really, they did. Read about their design and the results in this issue.

Ronald Smeltzer shows us an early time-line bar graph by Philippe Buache depicting the water level of the Seine River in Paris from 1760 to 1766. The picture creatively and effectively depicts data in print before the advent of the modern printing techniques that we enjoy today.

Howard Wainer, in his *Visual Revelations* column, writes about the graphics in the 2008 National Healthcare Quality Report and State Snapshots. Usefully and accurately displaying information graphically is important and challenging. Wainer makes suggestions for improving some of the displays.

Continuing a series of articles on postage stamps, Peter Loly and George P. H. Styan discuss stamps issued in sheets with 5x5 Latin square designs. Color versions of the stamps, as well as previous articles on stamps, are available online at [www.amstat.org/publications/chance](http://www.amstat.org/publications/chance).

Jonathan Berkowitz's puzzle celebrates the 2010 Winter Olympics, which was held in his home city of Vancouver, British Columbia. The puzzle, titled "Employs Magic," is actually five smaller puzzles, each a cryptic five-square of 10 words.

Mark Glickman's *Here's to Your Health* column will appear in the next issue.

In other news, the Executive Committee of the ASA met recently and made decisions that impact *CHANCE*. First, the committee voted to continue *CHANCE* for another three years in both print and online versions. The next executive editor will serve 2011–2013. I'll enjoy reading *CHANCE* in the years to come. Second, the Executive Committee voted to make the online version of *CHANCE* free to the ASA's certified student members. This is a great development, because students are potential long-term subscribers and future authors. They also can be inspired by the significant role that probability and statistics can play in major studies and activities. I hope that other professionals will be motivated to submit articles to *CHANCE* to entertain and influence this group.

I look forward to your suggestions and submissions.

Enjoy the issue!  
Mike Larsen

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