

## SILVER STATE-ISTICS



**NEVADA Chapter of American Statistical Association** 

**Nevada Chapter Newsletter** 

Vol. 7 No. 2

#### **NV-ASA** Website has moved!

The NV-ASA website has a new home. It is now hosted by the national ASA www.amstat.org/chapters/nevada/

#### Dear Nevada ASA Members and Friends,

Read on for information on what our Chapter has been up to and what we are planning for the future. Please keep an eye on our website for more details on all upcoming events.

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- Annual Meeting and Symposium, Las Vegas, Oct. 16
- Dinner Meeting, Reno, Nov. 18
- Statistics Users Lunch, Carson City, tbd
- Dinner Meeting, Las Vegas, tbd
- Nevada K-12 Poster Competition 2011
- Elections for Southern Vice President, Treasurer, and Chapter Representative

## 

Hokwon A Cho

Has the time come to look back over our profession? As time goes on perhaps memory fades, but I hope that we will not forget what nearly happened to Statistics last Spring. On March 1, the University of Nevada, Reno (UNR) announced a proposal for curricular review that included possible closure of its degree programs in statistics in the Department of Mathematics and Statistics. I was extremely surprised and disappointed to read of this possibility. While mindful of the seriousness of State budget deficits and cuts, I was still stunned by the justification: that introductory statistics courses are offered by several departments across campus, and that the upper level courses and graduate programs in the Department have low enrollments and degree production.

We understand that the immediate reason for that proposal was the severe lack of operating budgets from the State of Nevada caused by the national (and international) economic recession. The economic status of Nevada was one of the worst in the nation, and now is even worse than ever before. Of course, Statistics cannot claim an exemption from the budget-trimming considerations, but we were all completely dismayed. A couple of us in our NV-ASA Chapter in Las Vegas and many statisticians including officers in the national ASA sent a bundle of supporting letters to the Provost Office at UNR. Almost two months later, around the end of April, very gladly we received the news that Statistics program at UNR has been saved.

As a statistics practitioner, this incident brought many thoughts to my mind. First, why statistics? It occurred to me that significant gaps might exist between the statistics that others know and the statistics we are doing. Perhaps there is a discrepancy between two perspectives on statistics: as a scientific tool; or as a science in its own right. Others, especially the top decision-makers, may have the first perspective much more than the second.

How might these gaps occur or develop? Perhaps because other disciplines use statistics as a tool and it is being taught under the subset of their own categories, the public can easily overlook statistics as its own science. Consequently, statistics is being unfairly treated compared to other subjects as just a supporting tool. If we carefully look at the argument mentioned in the above, I can see that their justification was not just pointing out the statistics teaching aspect, but how they seem not to appreciate statistics as an independent science. To make the discussion short, it may be that our profession is at least partly to blame for failing to make our perception of statistics as its own science more prominent.

During the past several years, I have had a strong impression that the computational aspects of statistics have been excessively stressed. Some even say that statistics is (≡) the science of data analysis. Of course, this is just mentioning one aspect of Statistics and ignoring the others. It is natural to want to make the best use of advanced technology (and software) in computation. But it would be much more desirable to also promote a view of statistics as a philosophical methodology without degrading its unique domain.

The first World Statistics Day (Oct. 20) is just around the corner. To encourage our neighbors and the community to come to a more balanced and appropriate perspective on statistics, I would like to urge all of us to willingly take on the role of ambassador for our science of Statistics.

## 

Chad Cross, Sheniz Moonie, and Paulo Pinheiro presented "Biostatistics and Epidemiology in UNLV's School of Community Health Services" May 13, 2010 at Marie Callender's in Las Vegas. Their talks focused on academic and research activities taking place in their School, as well as their own professional backgrounds and interests.

Chad studied population biology at Purdue University and pursued graduate work in quantitative ecology, mathematics, and statistics at Old Dominion University. He completed a post-doc in spatial statistics at the USEPA and subsequently worked as a statistician for the USEPA for several years. He currently is Associate Professor of Biostatistics at UNLV. His research interests include spatial statistics, nonparametric methods, and finding solutions to problems involving nonstandard data sets.

Prior to receiving a faculty appointment with the UNLV School of Community Health Sciences, Sheniz worked

as a statistician and epidemiologist (chronic disease and clinical focus) while obtaining her doctoral degree in Epidemiology and Biostatistics from Saint Louis University. She served as a statistical data analyst in the Division of Pulmonary and Critical Care Medicine of the Washington University School of Medicine and has worked as a Biomathmatician in the private sector. Her research area is pediatric asthma including state surveillance and clinical management. She currently serves as both biostatistician and epidemiologist, providing statistical guidance and study methodology support for faculty, staff and students in multiple disciplines throughout UNLV, government health organizations, and non-profit organizations.

Paulo recently joined UNLV as an Assistant Professor of Epidemiology. His PhD thesis at the University of Miami is titled "Cancer in Hispanics". He has a special interest in Statistics; his main research focuses on describing and improving the quality of the indicators characterizing the cancer experience of racial and ethnic minorities. In the past, he has frequently used both Logistic Regression and Survival Analysis (the Cox Model and Relative Survival Analysis) to study health disparities. His main interest now is to study cancer in Nevada

Lively discussion of a variety of statistical and other issues followed their presentations. And, as usual, NV-ASA folks were the last customers to leave the establishment.

#### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## A First-Timer's Experience at JSM

Alicia Chancellor Hansen

In August 2010, I attended the Joint Statistical Meetings (JSM) in Vancouver, British Columbia, Canada. Although I have been a member of both the American Statistical Association (ASA) and the Nevada Chapter of the American Statistical Association (NV-ASA) since 2003, I had never had the time, money, or inclination to attend this "largest gathering of statisticians in the world."

However, over the past year I had begun feeling like my job had shifted more and more from focusing on statistics to focusing on management. I wanted to feel reconnected to my chosen field and thought attending JSM would help.

My husband decided to accompany me on the trip and we embarked on a road trip from Carson City on Friday, July 30, arriving in Vancouver on Sunday, August 1. The trip up was fun, but the best part of the week was just starting!

The Vancouver Convention Center facilities were amazing. Most of the rooms had gorgeous views of the harbor. Visiting Vancouver so soon after the Olympic Winter Games was also exciting, with the outdoor torch perched just outside the Convention Center and the city still primed for tourism with cheery smiles and lyrical speech.

When I checked in, I was delighted by the thick Program Book I was given. As our work policies require, the accounting technician that had reviewed my travel request had requested an "agenda" for the conference. I chuckled at the thought of dropping this monster "agenda" on her desk! Every evening I spent time pouring through the sessions offered the next day, marking those of interest and debating which ones to attend. There were so many options it was hard to choose! Every session was jam packed with useful information and great ideas on ways to utilize statistics.

The most interesting portions of the conference were the roundtable luncheons. These small group discussions on various topics were a rare opportunity to discuss statistics topics in depth with others who have the same interests and hear their thoughts and ideas. The opportunity to learn and make contacts was extremely valuable. The additional cost of these luncheons was definitely repaid.

I also greatly enjoyed attending the President's Invited Address where we were treated to a look at the increasing importance of data and analysis by Jim Goodnight, founder of SAS. The Deming Lecture highlighted a fascinating talk about healthcare quality and reform by Brent James of the Institute for Health Care Delivery Research. The awards ceremony and Presidential Address was both heart-warming and drove home the point that much is being done by many gifted statisticians and much still needs to be done.

Walking around the Expo was a lot of fun. Just wandering through the booths, I received inquiries into whether I was looking for a job, free gifts, tons of information about online statistical resources, the opportunity to buy books of interest at discounted prices, and the chance to smell the popcorn many attendees were enjoying.

I greatly enjoyed my time at JSM. On the way home, I considered what I had learned, how I could utilize the information gained back at the office, and why I hadn't attended before.

I had had the opportunity to attend JSM in cities closer to home (where a passport was not required!), but had never made the time or allocated the money to go. I didn't really consider the benefits I might gain. Having now attended, I would highly recommend attending JSM to anyone who is truly interested in learning more about

statistics and excelling in their chosen field. The opportunities for learning, networking, and simply being excited about statistics were priceless. It was great to be surrounded by so many people who are fascinated by the beauty and wonder of data. JSM was just what I needed to reignite my passion for statistics.

JSM 2011... Miami, Florida... I hope to see you there! ★



July 30 - August 4, 2011 Miami Beach Convention Center Miami Beach, Florida

## 

The Chapter's Annual Meeting will be held Saturday, October 16, along with the Fall Statistics Symposium in the Room 213 at the Student Union, UNLV. We will start at 10:00 am, to allow our Reno and Carson City contingent time to make the early morning flight. Lunch will be included (details and costs to follow), along with our usual Annual Meeting. The affair should finish by 3:00 pm.

The Symposium is also to celebrate the first *World Statistics Day* (Oct. 20) that has declared by the United Nations. Speakers for the Symposium will include:

**Dr. James Symanowski**, Head of Biostatistics at the Nevada Cancer Institute, speaking about statistical issues in clinical trials; and

**Dr. Girish (Gary) Aras**, Director of Global Biostatistics and Epidemiology at Amgen, speaking about statistical applications in the pharmaceutical industry.

**Dr. Charles Davis**, Principal Statistician of EnviroStat, speaking about life as a statistical consultant in the environmental regulatory area.

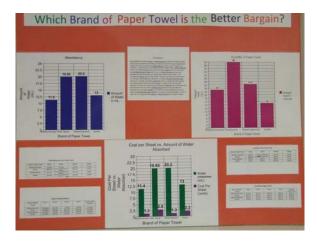
Registration details will be distributed by email and also posted on our website as they are finalized. ◆



Nevada continues its national prominence in the Statistics Poster Competition. This year 237 entries were received from 440 students in 17 schools. All posters judged Honorable Mention and above in our State competition were forwarded to the National competition.

The poster shown here, "Which Paper Towel is the Better Bargain" was created by Camryn Wojtowicz, a sixth-grader at Lied Middle School in Las Vegas. This poster won third place in its group in the Nationals.

All NV-ASA prize winners receive a modest cash award and certificate as well, and plaques are given to the schools of the first-place winners. All winning posters can be seen on our website.



# \*\*\*\*\*\*\*\*\* Fall Dinner Meeting in Reno \*\*\*\*\*\*\*\*

Our northern group will host a Dinner Meeting in Reno Thursday, November 18. Our speaker will be Ania Panorska of the UNR Department of Mathematics and Statistics and our Chapter's Northern Vice President. She will be speaking on Stochastic Models for Climate Extremes. Details will be distributed via email and also posted on our website as they are finalized. \*\*

## 

This Fall the Chapter Representative, Southern Vice President, and Treasurer positions are up for election. Our Constitution provides for a staggered election of officers, in order to ensure continuity. The Chapter Representative is the liaison between NV-ASA and the National ASA; this is a three-year term, in accordance with national requirements.

The Southern Vice President's primary duty is as cochair of the Program Committee. This is a two-year term. The Treasurer is responsible for the Chapter's monies and for maintaining the membership roster; this is also a two-year term. Members (whose dues are up-to-date) are eligible to vote, and will receive ballots shortly. Newly elected officers are announced during the Annual Meeting.

If you don't receive your ballot, please check with our Treasurer (<u>Kaushik.ghosh@unlv.edu</u>, 702-895-0392) to confirm that you've paid your dues for the current year!

## **Joining NV-ASA**

Only a minority of the people who receive this newsletter are members of the Nevada Chapter of the American Statistical Association (MV-ASA). Dues are nominal: at most \$20 per year, \$10 a year for members of the national ASA, and \$0 for student members of the national ASA.

There are two ways to join. You can join NV-ASA when you renew your national ASA membership (or join for the first time); this can be done on-line at <a href="https://www.amstat.org">www.amstat.org</a>. Otherwise, whether or not you are a national ASA member, you can join through PayPal on our website <a href="https://www.amstat.org/chapters/nevada/">www.amstat.org/chapters/nevada/</a> or by contacting our Treasurer Kaushik Ghosh. Any way you do it, please obtain an information form from our website, complete it, and send it to Kaushik at the address listed on the form.

Why should you join? NV-ASA events provide opportunities for networking and contact with other statisticians working in a wide variety of areas in Nevada. But in addition to that, a major reason is that your dues support the outreach activities of the NV-ASA including the K-12 Poster Competition and Career Days. Our financial needs are not great, so long as we all pitch in our modest amounts. \( \mathcal{H} \)



Charles B Davis

The Predictioneer's Game, by Bruce Bueno de Mesquita

I hadn't come across an interesting non-technical book related to statistics in quite some time when this fellow appeared on Jon Stewart's Daily Show. The cover promises the author's insights into "Using the Logic of Brazen Self-Interest to See and Shape the Future". The subject isn't statistics per se, but statistical decision analysis is one of the foundations of game theory. De Mesquita is a Political Science professor at New York University, a Senior Fellow at Stanford University's Hoover Institution, and a private consultant. In the latter two roles he often deals with issues in national and

international relations and security, which surely keep him busy these days.

Chapter 1 illustrates basic principles in a rather more close-to-home setting: buying a new car. I won't give away the details, to perhaps encourage you to read the book yourself, but here are the final two paragraphs of the chapter:

"When you buy a car this way, that day at 5:00 p.m. you make a deal that is as close to the seller's minimum price as you can ever hope to get. You are in charge of the negotiation and entitled to feel really good about the deal you struck.

"You may be surprised to learn that buying cars and negotiating international crises are not all that different. In fact, I'll show you how we go from buying a car to negotiating the North Korean nuclear threat. But before we do that, it's time to dissect game theory a bit to reveal the principles that allow us to anticipate and shape the future."

The book contains numerous retrospective historical applications (How could we have predicted/detected Enron's misdeeds, for example, or why did ancient Sparta collapse just 33 years after its victory in the Peloponnesian War?), but just as many discussions about current topics and the future (such as Middle East security and of course global warming). Just a bit of a warning: he takes the term "brazen self-interest" very, very seriously.

## **Proofiness: The Dark Arts of Mathematical Deception**, by Charles Seife

I'm eagerly awaiting this one. It was just published (9/23/2010) and should be on bookstore shelves any day now. According to the New York Times book review of 9/17/2010, it expounds on "the art of using bogus mathematical arguments to prove something that you know in your heart is true — even when it's not". It takes many familiar names to task, including Senator Joseph McCarthy, Supreme Court Justice Antonin Scalia, the Bush Administration, Al Gore, and Quaker Oats. NY Times reviewer (Steven Strogatz of Cornell University) closes with the following: "But 'Proofiness' reveals the truly corrosive effects on a society awash in numerical mendacity. This is more than a math book; it's an eye-opening civics lesson."

#### **F**rom our Constitution:

"The purpose of this Chapter is to be a state and local area leader in promoting all aspects of sound statistical science and practice, including the advancement of statistical education, professional practice, and research."

Chapter shall sponsor educational, professional and scientific activities that benefit professional statisticians, students, and users of statistics. The Chapter shall promote effective unified action amongst all groups having an interest in or concern with statistics and probability. The Chapter shall foster communication between the statistical community, other scientific organizations, and the media for the enlightenment of the general public and enhancement of the general welfare. The Chapter shall promote the proper application of statistics in all fields, shall work for the improvement of statistical education at all levels, and shall seek opportunities to advance the statistics profession and professional work opportunities." \*

# ECONOMICA DE CONTROL D

President: Hokwon A. Cho (through 2011)
Past President: Charles B. Davis (through 2011)
Southern Vice President: Andy Chance (through 2010)
Northern Vice President: Anna Panorska (through 2011)
Secretary: Wei Hong (through 2011)
Treasurer: Kaushik Ghosh (through 2010)

Chapter Representative &

Publicity Committee Chair: Deb Stiver (through 2010) Education Committee Co-Chair: David W. Thiel Unofficial Webmaster: Alicia Chancellor Hansen Unofficial Historian & Photographer: Dorothy Wilson

#### Editor:

Charles B. Davis

## **Typesetting**: Hokwon A. Cho

Silver State-istics welcomes news items and letters from members and friends of the NV-ASA on matters of interest to the Chapter and the profession. Manuscript or items can be sent as a Microsoft Word document, PDF, or within an e-mail.

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For contact information, see our website.



www.amstat.org/chapters/nevada/