



# SILVER STATE-ISTICS

NEVADA Chapter of American Statistical Association



Nevada Chapter News Letter

Vol. 7 No. 1

## Census 2010

It's in our Hand!

Visit <http://2010.census.gov/>

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 <http://www.nevada.edu/~nvasa/> for more details on all upcoming events.



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## COMING EVENTS

Be on the lookout for announcements of future NV-ASA events:

- Nevada K-12 Poster Competition 2010.

## PRESIDENT'S MESSAGE

Hokwon A. Cho

First, I thank my predecessor, Dr. Charles Davis, who served as president for the past four years for his effort and leadership. Also I am very happy and honored to be able to serve as your new President for the next two years. In mid-October 2009, when I was asked by members of the Executive Committee to run for NV-ASA President, the first thing that came up to my mind was the sincere responsibility for the duty. After several days' consideration, I decided to accept their offer with the same excitement and zeal for advancing the profession that I had when I served as Chapter Representative from 2002 to 2007. I will try to maintain these efforts to implement our goal with all members and friends.

Since the Nevada Chapter of ASA was formed we have been continuously growing under lots of difficulties. One of them, perhaps unique among all ASA chapters, is the geographical spread between the north region (Reno-Carson City) and the south region (Las Vegas and Vicinity). However, I am sure that there will be at least one way to overcome this obstacle. Instead of being continually fragmented, we must seek a sublimating way to make this weak point into a strength in order to help maintain unity in our profession. We will, needless to say, continue to work together. I challenging you all to continue and improve on this tradition.

I have several concerns to mention for our strategic goals and issues; these are about membership, activities, and program development. I have considered the following suggestions to promote our operational goals and increase participation in the upcoming programs:

- outreach to other disciplines,
- telling neighbors about the NV-ASA Chapter and activities,
- listening neighbors' interests relating to statistics,



probability, statistics, and stochastic models in climate and hydrology. She has experience in academia, statistical consulting, research (Desert Research Institute 2000-2002), as well as industry, and held management positions in Blue Cross Blue Shield of Tennessee (1997-1999). Her undergraduate



education is in mathematics from the University of Warsaw. She holds an MS in Statistics from the University of Texas at El Paso and a PhD in Mathematics from the University of California at Santa Barbara.

## Hokwon Cho

Hokwon Cho is the new NV-ASA President. He is on the faculty of the Math Sciences Department of UNLV. His academic background includes a BA in Statistics from Korea University and MA and PhD in Statistics & Applied Probability from the University of California at Santa Barbara. His main areas of professional interest are in statistical decision theory, sequential methods, linear models and approximation, nonparametric statistical methods, and clinical trials, particularly in the development of those methodologies related to applications. He is also interested in areas of numerical methods, including radial basis functions, the method of fundamental solutions, and applications of partial differential equations.



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. ✱



## "How DO You Spell Chief Biostatistician?"



Alicia Hansen presented the keynote address at the Fall 2009 Annual Meeting, with this as her topic. She described numerous aspects of her position, including that it was created only fairly recently (1989), is officially called the Chief Research and Statistical Analyst in the Nevada State Health Division, and that it is a salaried rather than classified position.

Her office is charged with collecting, managing, analyzing, and disseminating various types of health and epidemiological data. These data are used to

- Paint a complete picture of the burden of disease in Nevada,
- Identify health disparities,
- Provide information for data-driven decision making,
- Evaluate the effects of existing interventions, and
- Provide the assessments needed for policy makers.

The last of these becomes particularly exciting around the time of legislative sessions!



## 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 [www.amstat.org](http://www.amstat.org). Otherwise, whether or not you are a national ASA member, you can join through PayPal on our website [www.nevada.edu/~nvasa/](http://www.nevada.edu/~nvasa/) or by contacting our Treasurer Kaushik Ghosh. Any way you do it, please obtain an information form from our website,



## "The Use of Statistics in NGO Program Development Projects in Kenya"



During the Fall 2009 Career Day Deb Stiver related some of her experiences from NGO (Non-Governmental Organization) programs in Africa. Ms Stiver travels to Kenya every summer to provide assistance to rural communities, along with university faculty and students in areas such as engineering, statistics, and hydrology. Rural clinics in Kenya are in much need of training in data collection, storage, and analysis. Their resources are very scarce and electricity is not available on an on-

going basis; thus, computers cannot always be utilized. The group that travels to Kenya every summer takes on several assignments with a variety of very purposeful missions; among these are the use and effectiveness of mosquito nets, school programs, health care programs, and water availability programs. Ms. Stiver dedicates much time during the year to organize, fundraise, and gather volunteers in support of these projects.



Among other areas, she discussed finding and testing drinking water sources (pictured above), and health care and disease prevention. Statistical data collection and analysis are critical to carrying out these activities. Deb pointed out just how much can be done using fairly simple technologies and concepts, such as graphs, so long as they are done well and with care to understand the data and any communication and reliability issues that may be involved. And, just as importantly, one must collect information to document the program's accomplishments to its sponsors in order to maintain its viability and longevity. ♥

## “So You Want to DO Statistics! What’s It Like Out There?”

Charles Davis of EnviroStat (Las Vegas) gave Fall 2009 Career Day participants some insights from his career as a free-lance statistical consultant. Charles was an academic for some sixteen years before becoming heavily involved in statistical consulting related to environmental regulation; a couple of papers enabled/forced a shift into full-time consulting, accompanied by a move to Las Vegas. He pointed out that statisticians make valuable contributions in real-world matters because they think differently from most people about randomness and uncertainty.

His talk was organized around four lessons:

- Understand the problem before you solve it!

- Communicate with your audience!
- Integrity in statistics and
- Love your data.

These were illustrated using real-life problems from his experience. The first involves the idea of “Type III Errors”, being solving the wrong problem or using the wrong model (of course all models are at best approximations of reality), using early EPA groundwater protection statistical regulation as an example. A prime example for the second is the EPA’s Data/Decision Quality Objectives (DQO) process, created literally to force people to think about a problem quantitatively before spending money sampling. He observed that when working with clients, it is important to understand that they do not lack intelligence but can often benefit from looking at their problems through a statistician’s eyes. Also, to be effective, the statistician must often go more than half-way in understanding the client’s language and concepts, even becoming familiar with their TLAs (three letter acronyms)

For the third he reminded us of David Michael’s recent book *Doubt Is Their Product: How Industry’s Assault on Science Threatens Your Health*, which attacks certain consulting statisticians by name (see the review in the previous Newsletter). The fourth reminds us to try to understand our data and their limitations before calculating, and worries about automated “data mining” processes and other systems that allow data to flow to conclusions or actions without intelligent insight. ⌘

## The NV-ASA Mission

From 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.”

“The 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.” ♣

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***NV-Chapter Current Officers***  
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President:	Hokwon A. Cho (~ 2011)
Past President:	Charles B. Davis (~ 2011)
Southern Vice President:	Andy Chance (~ 2010)
Northern Vice President:	Anna Panorska (~ 2011)
Secretary:	Wei Hong (~ 2011)
Treasurer:	Kaushik Ghosh (~ 2010)
Chapter Representative & Publicity Committee Chair:	Deb Stiver (~ 2010)
Education Committee Co-Chair:	David W. Thiel
Unofficial Webmaster:	Alicia Chancellor Hansen
Unofficial Historian & Photographer:	Dorothy Wilson

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For contact information, see our website.



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