



SILVER STATE-ISTICS

Nevada Chapter of American Statistical Association



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.

www.amstat.org/chapters/

Contents:

Coming Events	1
UNR News	1
From the President's Desk	1
Spring Dinner Meeting North.....	2
The UNLV West Side Story	2
K-12 Poster Competition 2017.....	3
Joining NV-ASA!	5
NV-ASA Officers & Others	5
Statistics and My Six-Year-Old	6



Coming Events




Our **Annual Meeting** will take place in Reno Saturday, October 14; stay tuned for more details and for announcements of other events to come.

Elections: Positions that will be up for elections this coming fall are President, Northern Vice President, and Secretary. Be thinking of people to nominate for these positions.

**UNR News**

Tomasz Kozubowski

Two new assistant professors of statistics will be joining the UNR Prob/Stat group: Yinghan Chen and Grant Schissler. 

From the President's Desk

Debra Stiver

Summer is upon us. NV-ASA, like many organizations, takes a bit of a break from formal business as members head off on vacation or take the opportunity to attend seminars and other professional conferences and conventions. It won't be long before thousands of statisticians will be traveling to Baltimore to participate in the 2017 Joint Statistical Meetings, held this year from July 29 through August 3. These meetings offer a variety of resources including continuing education courses, business and committee meetings, paper and poster presentations, and many opportunities to network and socialize with colleagues from all over the world. The 2017 JSM theme is "Statistics – It's Essential". Statisticians are essential as the keepers of quantitative methodology used for decision-making in every imaginable discipline. Nevada chapter members mirror this diversity in many ways. For example, NV-ASA board members are professionals working in areas that range from private consulting, K-12 education, academia, state and federal employment, and non-profit governance and organization.

It's time to announce the SAVE the DATE for the NV-ASA annual meeting and symposium. We hope to see you October 14 on the University of Nevada, Reno campus. The exact theme of this year's symposium has not yet been announced, but will address some of the "essential" tools of the science. It promises to include presentations provided by statistical professionals that are informative and perhaps even controversial. Our annual meeting event provides a great opportunity to meet the board members of Nevada ASA and be introduced to the perks and programs that are part of the chapter and the national association. The meeting has a casual setting where members, students, and speakers easily come together, socialize, and network. Please look for updates and information on the meeting and consider attending. The chapter welcomes all persons interested in statistics, from the high school student investigating a potential major in statistics to the professional academic statistician or practitioner in any field. ♦

Spring Dinner Meeting North

Debra Stiver

The Northern Nevada NV-ASA spring social was held at Mimi's Restaurant on April 28. It was attended by 15 NV-ASA members and friends representing a wide range of statistical interests.

The main event of the evening was a team presentation given by Dr Jennifer Lanterman, Assistant Professor in Criminal Justice at the University of Nevada, Reno, and Dr Veronica Blas Dahir, who holds dual positions of Director for the Grant Sawyer Center for Justice Studies and Director of Survey Operations for the Nevada Center for Survey, Evaluation, and Statistics, also at UNR. Their address focused on the role of both quantitative and qualitative methods in criminal justice research using data collected from focus group individuals incarcerated by the New Jersey criminal justice system. The research on recidivism rates represented an example of evaluation work that required the use of multivariate analytical methods as well as qualitative methods to provide details on studied phenomena that might otherwise be lost by relying singly on quantitative analysis. Participants enjoyed dinner and socializing after the presentation. ∞



The UNLV West Side Story

Charles Davis

On April 18 the chapter held "Statisticians at UNLV: the UNLV West Side Story" at the Bigelow Health Sciences building, inviting statisticians from that side of campus to describe their activities and involvements over lunch. Attendees included folks from across and beyond campus. The event was organized largely by JoJo Chien and Sheniz Moonie.

Qing Wu spoke on his research. "We aim to evaluate the underlying genetic risk of osteoporosis in healthy Caucasian women, in order to identify susceptible individuals for preventive interventions. With genotype data of 1209 unrelated healthy US Caucasian women from dbGap, we examined the distribution of risk alleles among this sample. Furthermore, the magnitude of association between BMD [bone mineral density] and GRS [genetic risk score] at the lumbar spine and femoral

neck was assessed by using multiple linear regression. Our finding revealed the genetic risk of low BMD among Caucasian women, the most vulnerable group."

Sheniz Moonie described the methods she uses in the Nevada Behavioral Risk Factor Surveillance System, which is a random-digit-dialed, CDC-funded telephone survey that gathers chronic disease and risk behavior information for adults. This is a disproportionate stratified sample, requiring complex survey weighting applying a raking method to eight demographic variable margins.

JoJo Chien spoke on a public health issue prominent in the news recently. "The Zika virus (ZIKV) is spread largely by the bite of Aedes species mosquitoes, which has been previously known to cause dengue fever. Different from dengue fever, which could immediately cause death, ZIKV was verified to cause microcephaly in newborns if pregnant females are infected. The outbreak began in April 2015 in Brazil, and spread quickly to other countries in South and Central America. So far both ZIKV infection and microcephaly have no treatment, and preventing infection becomes the foremost strategy for intervention. Besides killing mosquitoes directly, most researchers concentrate on how to destroy the environmental conditions which may encourage the growth and survive of mosquitoes. Various environmental conditions are good for surviving mosquitoes, and weather conditions have been investigated to significantly correlate to mosquitoes. Location is one of the important elements to cause a large population of mosquitoes. The background knowledge can induce two further thoughts in ZIKV prevention. First, how early we can predict an outbreak of ZIKV infection when a certain measurement of weather condition (e.g., temperature or rainfall) is observed? Second, where can we identify populations vulnerable to ZIKV infection? Therefore, I applied the distributed lag nonlinear model for spatiotemporal analysis and disease mapping. The study area is Colombia with 32 departments, the main administrative area unit. The method can build an early warning system on ZIKV infection, and identify high-risk areas in Colombia. I believe the early warning system can help local health departments to make necessary interventions for preventing the outbreak of ZIKV infection in advance, and additionally know high-risk areas, which should be deployed interventions in priority."

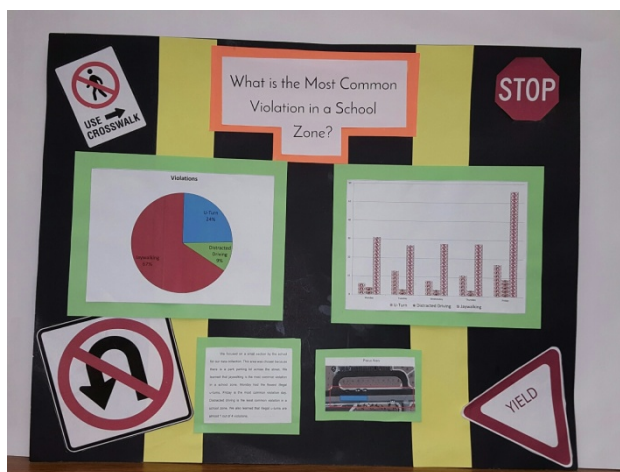
Du Feng also provided some remarks about her interactions with colleagues in the School of Nursing, where she is the only faculty member who is not a nurse. ☺

***** **K-12 Poster Competition 2017** *****

Charles Davis

Our 14th annual K-12 Poster Competition took place earlier this year, under the capable leadership of Tia Maria Price. Some 212 posters from 382 students in 19 schools were presented. As usual, the winning posters from our Nevada state competition were forwarded to the national competition; again, as usual, several of these earned awards at the national level, **as indicated below**. Here are the State winners.

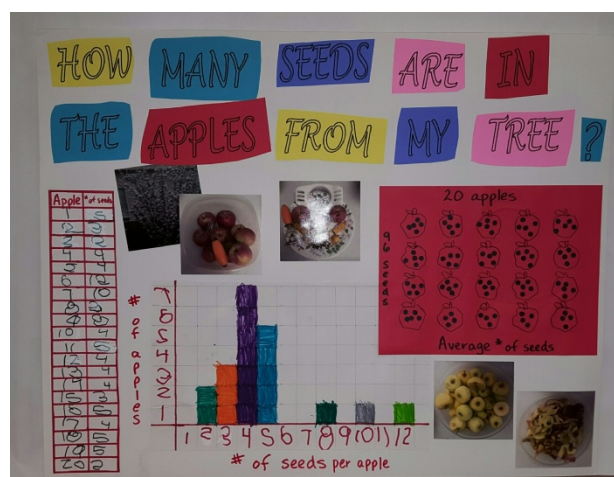
K-3 Category



First Place went to Fiona Esparza, Lauryn McKee, Calais Harris, and Cole Blazeovich, 3rd grade, Bozarth Elementary School, Las Vegas: **What is the Most Common Violation in a School Zone?** (advisor: Brandon Komuro).

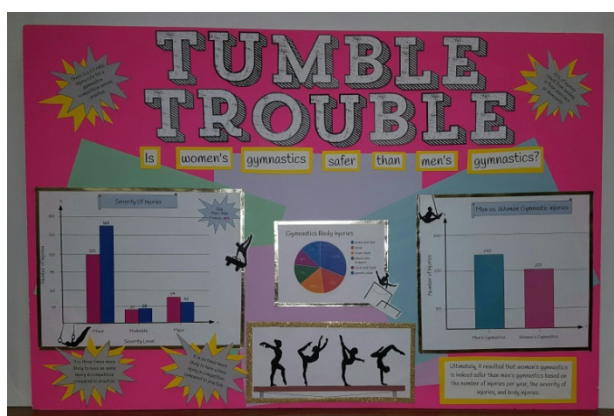


Second Place went to Allison Lee, Heaven DeLoney, and Giselle Serrano, 3rd grade, Bozarth Elementary School, Las Vegas: **What's Your Favorite Burger?** (advisor: Brandon Komuro).

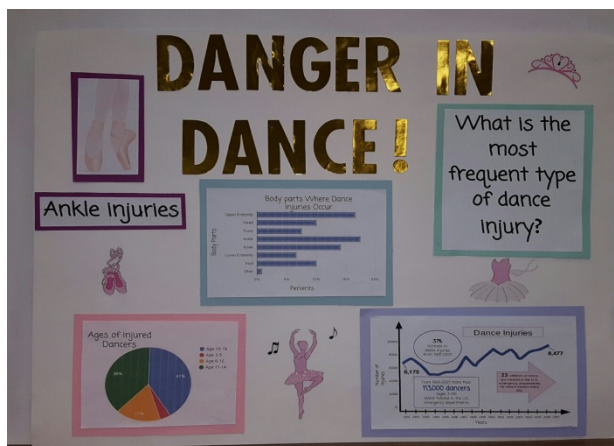


Third Place went to Michaela Hansen, kindergarten, Chansen Academy, Carson City: **How Many Seeds are in the Apples from My Tree?** (advisors: Alicia and Michael Hansen).

4-6 Category

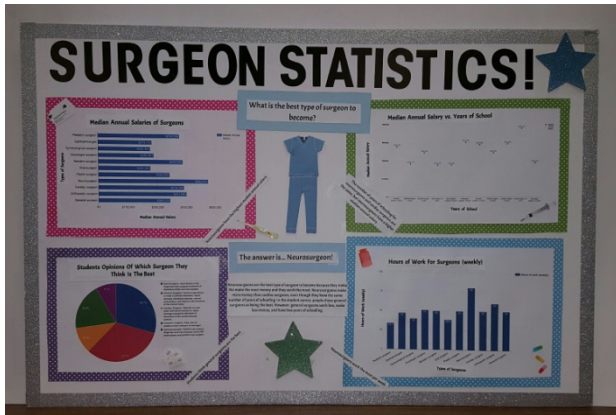


First Place went to Suebin Hur, 6th grade, Hyde Park Middle School, Las Vegas: **Tumble Trouble** (advisor: Judy Kraus). **Third Place Nationally!**



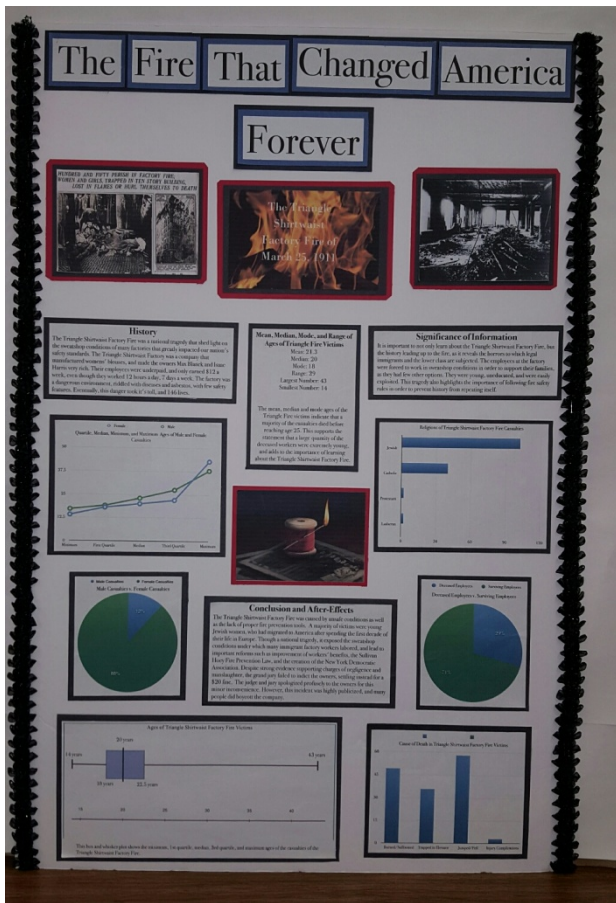
Second place went to Krista Hoo, 6th grade, Hyde Park

Middle School, Las Vegas: ***Danger in Dance*** (advisor: Judy Kraus).

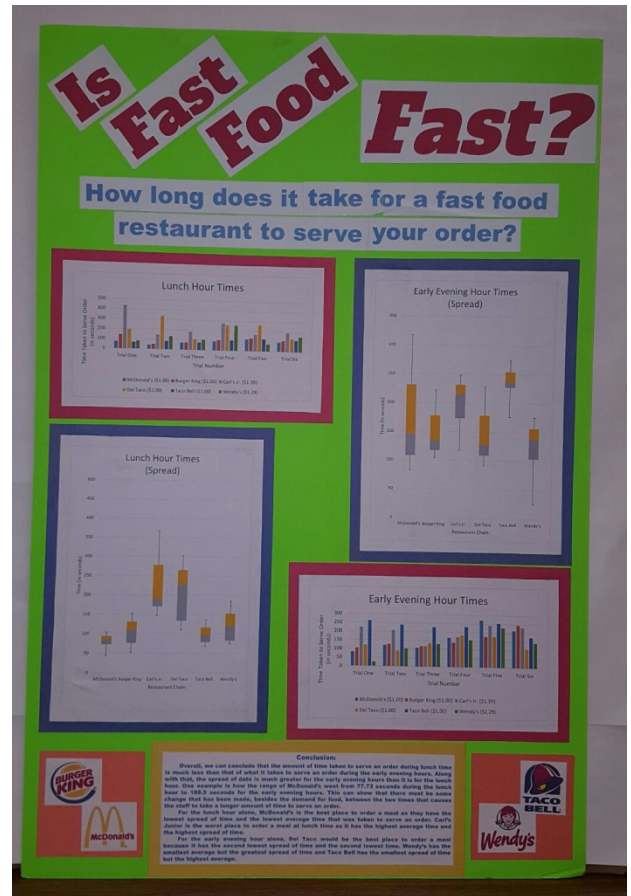


Third place went to Linh Pham and Ha Pham, 6th grade, Hyde Park Middle School, Las Vegas: ***Surgeon Statistics*** (advisor: Judy Kraus). **Honorable Mention Nationally!**

7-9 Category

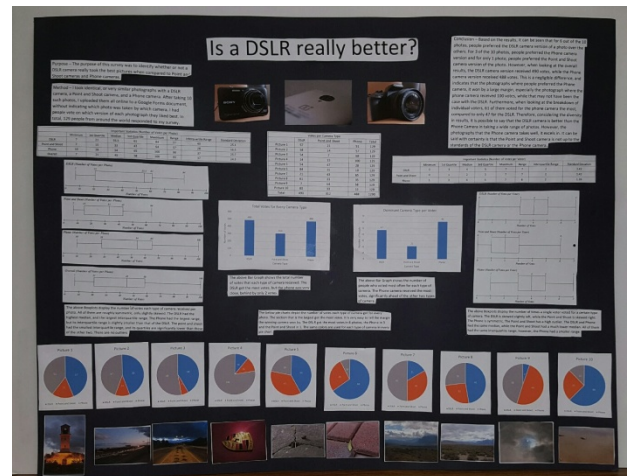


First Place went to Jocelyn Lotterhos, 8th grade, Southern Highlands Preparatory School, Las Vegas: ***The Fire That Changed America Forever*** (advisor: Susan Kilodny). **Second Place Nationally!**

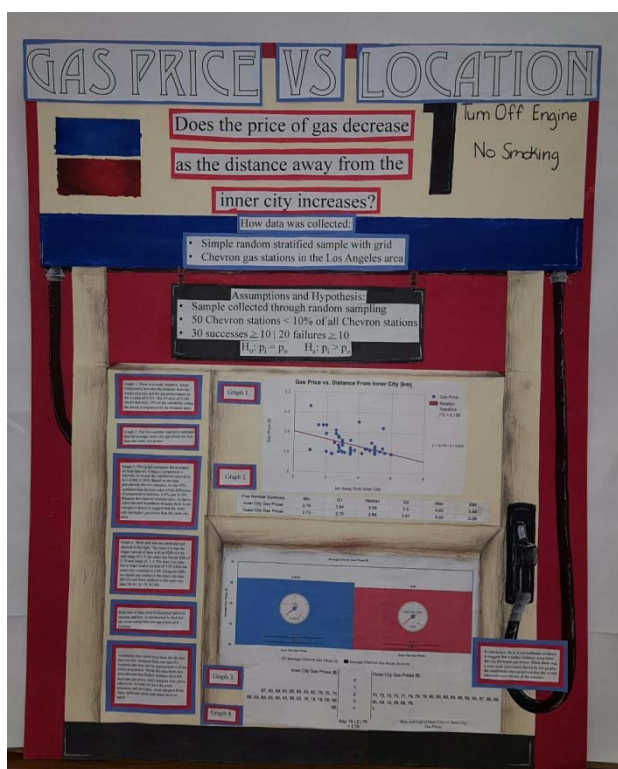


Second place went to Aryaman Bisen, 7th grade, Hyde Park Middle School, Las Vegas: ***Is Fast Food Fast?*** (advisor: Denise Romonoski). **First Place Nationally!**

10-12 Category



First place went to Srivardhan Jangili, 11th grade, Palo Verde High School, Las Vegas: ***Is A DSLR Really Better?*** (advisor: Tara Crouch).



Second place went to Gabrielle Marushok and Stephanie LeClaire-Vazquez, 12th grade, Palo Verde High School, Las Vegas: **Gas Price vs Location** (advisor: Tara Crouch).

All winners receive a certificate of achievement; 1st, 2nd, and 3rd place winners receive cash prizes, and the schools with first place posters receive a plaque recognizing the students' accomplishments. **The National winners received plaques and cash prizes; first place national winners and their advisors also receive TI-84 Graphing Calculators.** €



Joining NV-ASA!

Only a minority of the people who receive this newsletter are members of the Nevada Chapter of the American Statistical Association (NV-ASA). Dues are nominal: \$20 per year, \$10 a year for members of the national ASA, and \$2 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/chapters/. Otherwise, whether a national ASA member or not, you can join through PayPal on our website or by contacting our Treasurer Chris Tong. Any way you do it, please obtain an information form from our website, complete it, and send it to Dr. Tong 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 help 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. *

NV-ASA Officers & Others

Voting officers are

President:	Debra Stiver (2014-2017)
Past President:	Debra Stiver (2016-2017)
Northern Vice President:	Alejandra Livingston (2017)
Southern Vice President:	Charles Davis (2015-2018)
Secretary:	Gayle Allenback (2016-2017)
Treasurer:	Chris Tong (2017-2018)
Chapter Representative:	Anna Panorska (2017-2019)

Also involved are

Webmaster:	Alicia Chancellor Hansen
Newsletter co-Editor:	Charles Davis
Newsletter co-Editor:	Hokwon 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. *Silver State-istics* is published by the Nevada Chapter of the American Statistical Association.

© 2017 Nevada Chapter of American Statistical Association

For contact information, go to www.amstat.org/chapters/

Our address for regular mail is now

NV-ASA
PO Box 3311
Sparks, NV 89432-3311



Statistics and My Six-Year-Old

By Alicia Chancellor Hansen

May 2017

Attending Statistics Conferences

I have been a member of NV-ASA since 2003 and have served in nearly every officer position. I have planned and participated in numerous symposia, annual meetings, dinner speaker events, career days, and other events. Since having my first child 6 years ago, my children have tagged along to many of these events. My husband, Michael, and I jokingly say our two oldest attended their first statistics conferences before they celebrated their first birthdays, and we have pictures to prove it! ☺

(At right: Kaushik Ghosh, Charles Davis, Alicia and Michaela Hansen, Anna Panorska, and Hokwon Cho at the NV-ASA 2011 Fall Symposium and Annual Meeting at UNR - October 2011)



(Below: Nathaniel Schenker, Jeff Hardcastle, Derek Morgan, Michaela, Alicia, and Tristan Hansen, Kyra Morgan, Charles Davis, Deb Stiver, David Thiel, Jessica Jaynes, and Kaushik Ghosh at the NV-ASA 2013 Fall Symposium and Annual Meeting at UNR – October 2013)



In 2012, my husband and daughter traveled to San Diego with me for the Joint Statistical Meetings (JSM.) My daughter got to feed her first giraffe at the San Diego Zoo, among other adventures she took on that trip. Technically, my son came along too, as I was almost 3 months pregnant with him. We again hit the road for the 2014 Symposium and Annual Meeting in Las Vegas. My husband took the kids (our “Dependent Variables”) to the new butterfly experience at Springs Preserve while the Symposium was going on. More fun and learning about life.

For reasons I can’t recall now, I attended the 2015 Fall Symposium and Annual Meeting at UNR by myself. Everyone was confused!



We now have three children. Due to a work conflict, we weren't able to attend the Symposium and Annual Meeting last fall in Las Vegas, so our youngest missed out on experiencing her first statistics meeting before her first birthday. I'm guessing, though, that the kids may join us for at least part of the event this fall in Reno. I wonder what exploits we will enjoy...

Participating in the NV-ASA K-12 Statistics Poster Competition

For the past 14 years, it has been my pleasure to play a bit part in the NV-ASA K-12 Statistics Poster Competition, the brain child of David Thiel and now carried forward by Tia Price, by posting the information on the competition, including the winning posters, on our Chapter website. This year, I finally had a child old enough to participate. Hooray! My kindergartener made a statistics poster. The looks I got from people I told this to were priceless. The response boiled down to amazement.

Gathering and analyzing the data was a family affair. The bumper crop of apples from our tree last fall inspired us to ask, "How many seeds are in these apples?" Michael oversaw the data collection, with our son's help, and an ingenious method for a kindergartener to calculate an average, involving 98 small black stickers and a page of 20 apple outlines. I worked with our daughter on a data table and bar graph. We put her poster together and sent it in ... <cue suspenseful music>

She won third place in the K-3 category. Michael called me at work when he saw the email with the results. I was ridiculously, tearfully thrilled! When the prize money arrived, I gave her the check. She asked me where the money was... My husband took her to the bank and cashed the check in exchange for gold dollars. What an amazing learning experience!



Is there a point to this tale? Maybe ... maybe not... Is the lesson that you can mix family and career? I believe that you can and I have. Will my kids grow up to be statisticians? Doubtful ... but possible. Kids generally have minds of their own. The journey is fun though and has taken us on many awesome expeditions. We have all learned a lot, about the wonders of statistics and the marvels of life. Here's to continuing our statistical adventures!