



The Y-Distribution

Brigham Young University

Department of Statistics

Vol. XIX July 2014

FROM THE CHAIR DR. H. DENNIS TOLLEY



I wish to express gratitude to our faculty, staff, and students for making this a successful year. I appreciate our alumni who have volunteered their skills and resources to our department. The efforts and support of the alumni are key to the success of our department.

The faculty have been busy this year on a variety of fronts. I hope to provide more than a glimpse of the things they are doing and the enormous impact they are having on the department and our students. Below are just a few of their projects.

Candace Berrett received two grants as co-PI this year. The NSF grant involves research on Scalable Statistical Validation and Uncertainty Quantification. She will also be working on a DOD grant with Shane Reese and Gus Williams (of the Civil Engineering Department at BYU) on Proliferation Detection. She continues to work in Bayesian spatial statistics and was featured on The Morning Show of BYURadio to talk about spatial statistics and its many applications in her work.

Natalie Blades has been active this year in helping with the Stat 121 development and has also taught statistics and biostatistics courses in Saudi Arabia, Grenada and at Johns Hopkins University. She is currently expanding her research interests in Metaanalysis of fMRI Imaging Studies, Ordinal Data Models, and Infectious Disease Epidemiology.

William Christensen, who was awarded the College's outstanding teacher award last year, was awarded the University's Maeser teaching

award this year. This honor is given to only three faculty members at BYU each year. William continues to be involved in research in multivariate methods and also in applications of statistical methods to chemistry problems.

Bruce Collings retired at the beginning of the calendar year. He is already missed and will be missed more as the fall semester begins and actuarial students seek advice and help in their career. In honor of Bruce's retirement, the Department created a Bruce Collings Actuarial Education Fund with donations from past actuarial students and friends. This fund uses the earnings on the principle to pay for the cost of the actuarial exams for our actuarial majors. Students passing actuarial exams FM, MFE, MLC, and C that are taken while attending BYU may apply for this award.

David Dahl has been researching Bayesian nonparametric methods to flexibly model heterogeneous data. He and his students are funded through NIH to develop these techniques and apply them to statistical models for protein structure prediction.

Dennis Eggett continues to keep busy with the Consulting Center and is working to increase the visibility of the Center. Dennis presented in the new faculty seminars to inform BYU faculty of the services available through the Center. In addition to his responsibilities with the Center and teaching, Dennis has an active role in research throughout the University.

David Engler, who was promoted last year to Associate Professor, completed his NIH grant in multiple sclerosis and continued his dental research collaborations. David is involved in on-going research in both of these areas. David is also currently active in working with business and actuarial students and is currently expanding his research area into financial data modeling.

Gil Fellingham, our associate chair, is blazing the trail in sports analytics. Many are familiar with "money ball," either through the book, the movie, or simply the concept, where the statistics of performance are matched with team needs to improve performance in competitive events. Gil has actively involved many undergraduate and graduate students in the data analytics aspect of this problem. Not only has this effort given undergraduates an exciting entry into data analytics, but the methodologies being developed are spreading into other areas of focus in the department. Gil's work is recognized both in the professional sports area and in international sports competition.

You may have read about the TV audience appeal of college basketball's Final Four that appeared in the Wall Street Journal. If so, you are aware of the work done by Scott Grimshaw, with graduate student Paul Sabin, in developing statistical models to evaluate audience appeal. Scott continues to forge new statistical applications in TV through his collaboration with BYUtv. He is also actively involved with the American Statistical Association's initiative on undergraduate statistics education.

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Brigham Young University
Department of Statistics
Friends and Alumni Open House Breakfast



If you are attending the JSM 2014 in Boston, Massachusetts please meet us at our annual Brigham Young University Friends and Alumni Open House Breakfast. We look forward to seeing you there.

Date: Tuesday, August 5, 2014
Time: 7:00 AM
Location: Room 259B Boston Convention Exhibition Center.

Matthew Heaton is active in his research area of spatial statistics and climate modelling. He recently received a grant from the NSF as PI, along with department co-PI's Candace Berrett and Shane Reese. They will study validation and uncertainty quantification for large spatio-temporal datasets. Matt is also working closely with researchers at NCAR in a variety of application areas. His work bridging Bayesian methods to large spatial problems is providing both he and graduate students many research opportunities.

John Lawson has completed his book *Design and Analysis of Experiments with R*. An older version of this book using SAS has been available for several months. This new edition puts tools in the hands of statisticians to design and analyze experiments using the powerful R programming language. John's work in experimental design has opened up opportunities for him to be engaged in research in chemical experimentation. The new edition will be available in either December 2014 or January 2015.

Lynne Nielsen has done a remarkable job coordinating and helping to develop a new Stat 121 course. This course is based on the online course materials at Carnegie Mellon University. These materials have been modified by Lynne and her team to provide a specific online course for our students. Coupled with this, Lynne, Del Scott and others have pushed forward with a flipped class experiment. This is an effort to see if we can teach Stat 121 in a "one-lecture-two-labs-per-week" format. So far it appears that this model will work for a subset of students. Lynne is also a CoPI on a \$900,000 research grant from the Department of Defense to conduct research in the relationship between women and the stability of nations.

Both local radio and TV have carried news about Shane Reese. During the year he gave one of the BYU televised devotional talks. Additionally, Shane is working with BYU civil engineering professors Grant Schultz and Mitsuru Saito, and has developed a highway safety and crash model that is being used to focus on dangerous areas and conditions in Utah's highways.

Bruce Schaalje has always been a productive researcher in applying statistical methods to biological sciences. During the last few years he has expanded his research first into word print studies and, most recently, into general textual analysis. Much of the observational data in the world appears as words and sentences, not as numbers. Bruce's work in textual analysis represents an expansion of the department's research into a rich data area. This work will undoubtedly be followed by an expanded undergraduate curriculum offering.

Del Scott received the College of Physical and Mathematical Science Distinguished Citizenship Award this year. This is a singular honor, and recognizes over three decades of administrative and professional contribution to the department, the college, and to the university. Since being released as the department chair, Del has been active at developing a series of algorithms for the confidential storage and analysis of big data files.

Shannon Neeley Tass was granted continuing faculty status and was promoted to Associate Professor. She has been the anchor for the new Stat 201 course, designed as a first course for science and engineering students. Her research area is expanding into spatial statistics, especially focusing on Bayesian and/or spatial factor analysis, spatial point processes, and climate models.

Erika Ball has been a full time visiting instructor for the past 6 months. She will continue teaching and doing research through August 2015. She has been teaching our Stat 230-240 series and has been actively engaged in research with Shane Reese investigating supernova formations.

As we begin the new academic year, we do so with productive faculty and an enthusiastic student body. We currently have about 300 undergraduate majors. We also have 30 graduate students, 9 of whom are first-year students and 7 who are in our integrated program.

We are strengthening our network to better train and place graduates. To meet this goal, we are in the process of modifying our web page and making it more user-friendly and informative. Please take a look (statistics.byu.edu)

and offer any feedback that would improve the site. Please send your suggestions to Ruth Dauwalder at ruth@stat.byu.edu.

In closing, I would like to thank all of you again for your support. We are proud of the work that you do, and grateful for the association we share. ♦

STATISTICS 121 REVAMP

In spring 2014, an open source textbook Introductory Statistics course, created by Carnegie Mellon, will replace David Moore's Basic Practice of Statistics as the required text book for Statistics 121 (previously 221). The department has used this textbook for two decades but the continuing price increase has been an issue. The decision to adopt CMU's open source textbook was made in summer 2012 by the Statistics 121 committee who researched and evaluated nine different textbooks and their associated online courseware.

In October 2012, Professor's Del T Scott and Lynne Nielsen, along with Naomi Clemens (student assistant) went to CMU campus to train in developing, augmenting, and deploying an open textbook. This past year, Professor Lynne Nielsen, Andrea Thomas and Lacey Gunter (both adjunct faculty), and several teaching assistants have revised the four Statistics 121 exams and 40 online quizzes to align with the CMU sequence of topics. The Statistics 121 faculty and staff are revising the 42 lecture presentations to match the CMU sequence of topics. Del Scott piloted the CMU courseware this fall semester. Starting fall 2014, four different versions of Statistics 121 will be offered on campus:

- Traditional three lectures and one assigned lab per week format
- Flipped classroom with one class meeting and two assigned labs per week format
- Hybrid online class which meets one hour a week with no assigned labs
- Evening and Salt Lake Center sections which meets once a week for three hours with no assigned labs

The revamp of Statistics 121 and new course options will hopefully add to the learning success of our students and potential majors. ♦

DR. SHANE REESE GIVES DEVOTIONAL ADDRESS



On November 12, 2013, Dr. Shane Reese gave the University's devotional address and brought together ideas of both statistical and spiritual leaning. He spoke about making correct measurements of ourselves and others based on the Lord's measurement system and timescale. He mentioned that "perhaps the most important and difficult measurement we make in mortality is to assess where we stand as individuals." He stated that "if we do not take the time to assess where we are in our relationship with the Savior, we will likely find ourselves moving

backward." Dr. Reese shared experiences where he made "snap judgments" of others without sufficient data. He described a snap judgment that he made while stranded on the highway with his young family of a large, scruffy man he saw. To his surprise the man helped his stranded family by lending them his car. Dr. Reese then shared another occasion where he made a snap judgment of a friend. He assumed that his friend had it all together because he appeared to be very happy and talented in most things. Later on, Dr. Reese learned that his friend was struggling with family issues and financial woes. These experiences helped him realize the inaccuracy of snap judgments. From his experiences, we can all learn to be more

patient in our measurements of ourselves and the measurements of others. Dr. Reese stated, "As we hone our measurement skills, we will be more like our Savior, we will be more effective instruments in His hands, and we will understand a measure of His love both for us and for our brothers and sisters." ♦

*For the full address, visit:
speeches.byu.edu*

SPEED NETWORKING



The College of Physical and Mathematical Science in participation with the College of Engineering and Technology, College of Life Sciences, Marriott School of Business and the Department of Psychology held two speed networking events on Wednesday, August 28, 2013 and Friday, December 13, 2013. The purpose of this event was to find potential collaborators in the college.

Approximately 40 participants gave 3 minute talks about their research in an effort to identify potential collaborators.

Drs Grimshaw, Heaton, and Tass attended these events and reached out to faculty across the University. Dr. Grimshaw submitted an NIH grant proposal with a contact he made at the event, Steven Charles (of the Mechanical Engineering Department). Dr. Tass gave a presentation titled "Bayesian Spatial Factor Analysis for Combining Climate Models" and as a result was contacted by Dr. David Long, from Electrical and Computer Engineering, for a potential collaboration.

Dr. Heaton gave an overview of how the best statistical research is spawned from complex questions and datasets collected within other fields thereby leading to the development of new statistical methods. Building from this, Dr. Heaton gave a brief overview of his (and other professors in the department) areas of statistical expertise and invited others to contact the statistics department with difficult statistical questions because this could lead to more productive research for statistics faculty. ♦

DR. NATALIE BLADES REACHES OUT TO SAUDI ARABIA



Dr. Blades spent three weeks last fall at King Saud University in Riyadh, Saudi Arabia. She was invited to help develop the biostatistics curriculum for a new Master of Public Health program being developed under the aegis of the Vice Rector for the National Health System to improve public health in Saudi society and in the Gulf.

This was her second visit to ensure the biostatistics components met expected competencies and international standards. Dr. Blades has previously been involved in biostatistics training for public health education in Armenia, Finland, and Grenada and she is developing a similar collaboration with a medical college in Qinghai Province on the Tibetan plateau. ♦

BRUCE COLLINGS ENDOWMENT



In honor of Bruce's retirement, the Department created a Bruce Collings Actuarial Education Fund with donations from past actuarial students and friends. This fund uses the earnings on principle to pay for the cost of the actuarial exams for our actuarial majors. If you would like to make a gift, please see instructions on the last page of this newsletter. ♦

DEANS LIST

Fall 2013

Michelle Jackson
 John Yoo
 Nate Garrett
 Nathan Howell
 Matthew Bean
 Trevar Dahl
 Merrick Johnson
 Matthew Crowder
 David Arthur
 Breanna Barton
 Joseph Baughan
 Nathan Bean
 Naomi Clemens
 Bryce Cook
 Christopher Dixon
 Ngan Thi Kim Ngo
 Ammon Slade
 Devyn Woodfield
 Nok Wu

Winter 2014

Derek Montgomery
 Devin Eddington
 John Yoo
 Ryan Covington
 Daniel Lundy Campbell
 Kaitlin Gibson
 Tyler Hawkins
 Bradley Scott Hill
 Nathan Jerry Howell
 Anthony Mickelsen
 Michael Jang Teh
 Mikayla Prince



Please keep us up-to-date on your contact information!

To update your address, email
statsec@stat.byu.edu or online under Alumni &
 Friends at statistics.byu.edu

MS Statistics Graduates

April 2014

Zachary Bradshaw - Predictive Bayesian Modeling of Future Career Success for NBA Draft Prospects

Andrew Brock - Latent Class Models and Movie Ratings

Jared Fisher - Bayesian Semiparametric Modeling of Major League Baseball Players' Career Home Run Hitting Performance Curves

Daniel Halterman - Variable Selection and Spatial Covariance Modeling of Excitation-Emission Matrix Data

Matthew Heiner - Skill Importance in Women's Soccer

Nicholas Martineau - Bayesian Dynamic Expected Points for NBA Players, Lineups and Matchups

Chace McNeil - Analysis of a Controlled Clinical Study of the Effect of Laser Use in the Treatment of Periodontitis Using Linear Mixed Effects Models

Colin Montague - Measuring Team Chemistry in Collegiate Volleyball

Paul Sabin - Analysis of the NCAA Men's Final Four TV

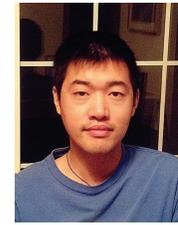
Brittany Spencer - A Model for the Classification of Supernovae an Application of Gaussian Process

June 2014

Madeline Bezzant - Latent Class Analysis of Breast Cancer Data

Jordan Johns - Functional Data Methods: Characterization of Standing and Sitting from a Chair

Christa Schank - Heart Failure and Longitudinal Cognitive Test Score Trajectories in Older Adults

39TH ANNUAL SUMMER
INSTITUTE OF APPLIED STATISTICS

This year we were honored to have **Dr. Liang Zhang** present at our 39th Annual Summer Institute of Applied Statistics. Dr. Zhang is a Staff Applied Researcher at LinkedIn. He

obtained his PhD degree at Duke University in Statistical Science in 2008. He worked at Yahoo! Inc. as a Scientist from 2008 to March 2012. Liang has done plenty of work and published many papers on applying statistical approaches to real world Internet applications where we usually find massive data. He also has years of experience of using Map-Reduce and Hadoop system for his own statistical research. Liang's research interests include recommender systems, computational advertising, statistical modeling and analysis for large-scale data. His presentation was entitled, "Statistical Computing for Big Data."

We would like to thank all those who attended. Next year's Summer Institute will be held June 17 - 19, 2015. ♦

2013 - 2014 SEMINAR SPEAKERS

For the Fall 2013 and Winter 2014 Thursday Seminars, we had over 10 presenters. They included Veronica Berrocal, Kate Clader, Kevin Shafer, Brigham Frandsen, David Engler, Amy Richardson, Jennifer Hoeting, Todd Moon, Tyler McCormick, Yan Sun, Darron Billeter, Brian Hartman, Wendell Kerr, Erika Ball, David Long, Russ Reeve, Taylor Nadauld, Doug Nychka, Jie Wang, Abel Rodruquez, Miriah Meyer, Cary Tuckfield, and Richard Warr.

Some of the topics spoken on included Spatial and Networking Based Statistical Modeling of Activity Pattern Data, Continuum-State Hidden Markov Models, Model Building with Bayesian Compressive Sensing, Designing Visualizations for Biological Research.

We'd like to thank all of those who participated in our Thursday Seminars. ♦

ALUMNI UPDATES

Ben Ahlstrom (BS '95, MS '97) is in his 8th year as a statistician with Amgen, inc. in Longmont, CO. Ben works in the development and manufacture of biologic medicines. Although he primarily supports engineers and scientists with design and analysis of experiments, over the past nine months he has also worked on an interesting project for the product complaints group. The team created an Excel based tool to forecast staffing levels needed to accommodate current and future complaint levels, which fluctuate due to new product introductions and other factors.

Rich Amon (BS '02) is currently the Deputy Executive Director of the Department of Administrative Services for the State of Utah. The Department provides shared services including finance, facilities, construction management, fleet operations, purchasing, records, and risk management for all state government agencies. The Department has approximately 490 employees ranging from accountants to grounds crews. Among other services, the Department self-insures state government (including public schools and higher education institutions) for auto, property, and liability coverage.

Ezekiel Ansah (BS '13) is currently a defensive end for the Detroit Lions and received the 2013 Mel Farr Rookie of the Year Award. You can follow him on twitter @Ziggy_Ansah.

Mark Barton (BS '77) is now working as a software developer for StatCrunch.

Brent Belliston (BS '70) is retired from working as a statistician and also was an adjunct faculty member for 25 years teaching Statistics and Operations and Supply Chain Management at Boise State University. Brent returned from serving as President of the Maryland Baltimore Mission 2 years ago and was called to serve as First Counselor in the Boise Idaho Temple Presidency.

Daena Bock is currently working for BDM Consulting, Inc of New Jersey. BDM provides biostatistical and programming services for pharmaceutical and biotech companies. Daena is currently working with 3 different clients in the Boston area in areas of oncology, biochemical warfare, and pediatric growth.

Phil Broadbent (BS '06) currently leads the pre-sale efforts for retail in the west for the Teradata Advanced Analytics COE. He focuses on bringing analytics to retail pricing & forecasting, supply chain, and digital marketing solutions.

Phil currently resides in the Houston, Texas area and has 3 boys with his wife, Jennie.

Andrew Brock (BS '12, MS '14) accepted a Statistician position at Savvysherpa in Draper. Andrew is enjoying a little vacation time before starting on July 7.

Larry Bunch (BS '85) is currently working on the Boeing 737 software certification. The reason it is now going through certification is because: the DO-178B process was conceived 10 years after the first 737 rolled out of production; the FAA granted the 737 a waiver of the software certification mandate for 20 years. That waiver is now no longer granted.

Isaac Christensen (BS '06) currently works at Altius Health Plans (subsidiary of Aetna) and has been involved in the pricing of individual and small employer products for 2015.

Rob Davy (BS '95) works at Capital Needs and Utilities Analysis as a Database Manager and a Utilities Metering Coordinator at Brigham Young University. The team is currently working to get all of the 2015 budget year items approved, and Rob continues to see that all utilities are metered, calculated, and billed properly each month.

Jared Dean (BS '02) just had a book published in May of 2014. http://www.sas.com/store/prodBK_66081_en.html. Jared is also a Senior Director of Research and Development at SAS Institute. He is responsible for the development of SAS's worldwide data mining solutions. This includes customer engagements, new feature development, technical support, sales support, and product integration.

Brian Derrick (BS '00) has been a financial advisor with the firm Edwards Jones since 2005 in Peoria, AZ. Brian earned the professional designation AAMS (Accredited Asset Management Specialist) from the CFP (College For Financial Planning) in 2008.

Dianne (Hansen) Eaton (BS '88) is currently serving as the Mission President Wife in the Washington Federal Way Mission. Dianne and her husband have just completed their first year of service and will be in Washington for 2 more years.

Robert Egan (BS '71, MS '73) retired from IBM after 30 years, in January 2003, where he was General Manager of IBM's Intermountain Region and Vice President, Operations for the Western US. After that, Robert taught statistics and chaired the math department for 2 years at LDS Business College, then was called as mission president of

the South Africa Cape Town Mission in 2005-08. Robert and his wife are returning to South Africa as senior missionaries in January 2015.

Ryan Eliason (BS '09, MS '13) has been enjoying working for Cigna (Health Insurance Company in Hartford, Connecticut). He recently became an Associate of the Society of Actuaries (ASA), and has been well utilized in forecasting Cigna's aggregate claim costs.

Jeffrey Enos (BS '04) works for the U.S. Census Bureau in the Los Angeles Regional Office as a Data Collection Coordinator. Jeffrey manages the field data collection for the U.S. Census Bureau across a part of the Los Angeles region covering the states of Alaska, Washington, Oregon, Idaho, and Hawaii. He also covers parts of California, including the San Francisco Bay Area and Orange and San Diego counties in California. Some examples of the surveys he manages are the American Community Survey (ACS), which replaced the long form of the decennial census, the Current Population Survey (CPS), which provides monthly employment and unemployment statistics, and several others.

Chris Garrard (BS '93) is working as a developer for the Remote Sensing / GIS Lab at Utah State University, where one large project he is working on involves modeling carbon sequestration in forests. Also, Chris gets to teach classes on GIS programming and he is writing a book on geoprocessing with Python.

Richard Giberson (BS '92) is currently working at Aon Hewitt, which is part of Aon plc. Richard is on a team which takes outsourced responsibility for the management of corporate pension plan investment portfolios. In many cases, they are managing liability-hedging portfolios as pension plan sponsors look to reduce risk and then settle pension obligations.

Christopher Games (BS '97) lives in the Seattle area and works for Boeing. Christopher is currently the Director of Engine Strategy for Boeing Commercial Airplanes where he works with the aerospace industry to determine what engines and technologies to put on our airplanes. He is married to fellow Statistics major Tana (Pratt) Games. They have 5 children, one daughter and 4 boys (including a set of identical twins).

Travis Gray (BS '07) is currently working for the Denver Health Practice of Milliman as an Associate Actuary. This is an exciting time to be an actuary, with all the change and commotion centered around implementation of the Affordable Care Act. Travis is staying busy helping clients with rate filings for the ACA marketplaces in the individual and small group markets and figuring

ALUMNI UPDATES CONTINUED -

out the impact of the 3Rs (risk adjustment, transitional reinsurance, and risk corridors). Travis, his wife, along with their three children really enjoy living in Denver.

Kimberly Hare (BS '06) is currently working for SAS as a consultant in the Federal practice. Kimberly works with the Data Management and Business Intelligence software offerings. And yes, SAS is as dreamy to work at as they say.

Suzanne Hendrix (BS '90) Suzanne and Kent Hendrix are owners of Pentara corporation, a consulting company with 10 contractors (many of whom are BYU alumni) that was started in 2004 and specializes in Alzheimer's and Parkinson's disease, and phase I studies. Pentara was recently involved in analyzing a clinical trial in Alzheimer's disease that had a positive effect in a treatment group that was supposed to be a placebo group, but resulted in slowing of Alzheimer's disease progression in early Alzheimer's patients. The sponsoring company believes that the active ingredients intended to cause an injection site reaction to help preserve the study blinding are responsible for the effect that was seen.

Doug Hicken (BS '11) is currently working with Accenture as a part of their Finance & Risk group. Doug is working on a large Global Finance Systems Transformation for a large capital markets client in Southern California. His focus is on their Business Intelligence (BI) platform and the creation and testing of brand new reports to be delivered both to internal and to external parties. However, Doug will be leaving Accenture in the coming months to pursue an MBA at the Marriott School of Business with a full, merit based, tuition scholarship.

Brady Hofmann (BS '11) is currently working at Veracity Networks as a Linecost Analyst. Brady reviews and analyzes the bills from Veracity carriers. His work has contributed to the company saving \$200,000 in two years.

Andre Kaiser (BS '13) will be starting his second year of law school this fall at the University of Colorado-Boulder.

Bryon Jackson (BS '72) is currently Vice President and Treasurer for Itron, Inc. in Liberty Lake Washington. Itron treasury was recently recognized with the Adam Smith Award from Treasury Today magazine in London. Byron lives with his wife in Prescott, Arizona. He has three daughters and nine grandchildren. He is president of the Prescott Chapter of the BYU Management Society.

Boyd Law (BS '06) is working in Portland, OR with Kaiser Permanente as a health actuary. He works primarily on large group pricing and revenue projections for the KP northwest region.

Kenny (Guinan) Lian (MS '05) currently works as a clinical statistician in Abbvie lab in Chicago area

John Liechty (MS '94) is currently part of the Marketing department in the Smeal College of Business at the Pennsylvania State University and has a joint appointment with the Department of Statistics. In addition, John is a partner at In4mation Insights – an analytic Marketing Research firm

Laurie Lough (BS '00) is a stay-at-home-mom, and runs the charity that supports her son's charter school.

Dana (Roberts) Matekovic (BS '94) works with Big Data and Open Source Software as a Research Analyst for Datalogix in Westminster CO.

Denis Maynes (BS '79, MS '85) is currently using statistics in order to improve the security of high-stakes tests (tests that people take which can affect their lives). Recently, he presented at the annual conference of the Association of Test Publishers, the annual conference of the Society of Industrial and Organizational Psychologists, and the annual conference of the National Council of Measurement in Education. He will be speaking at the International Conference of Forensic Inference and Statistics next August. While most of Dennis' work is in applied statistics (i.e., finding evidence of test fraud), he is actively pursuing research in this area, also.

Aleena Mosher (MS '13) is a statistician at the University of Alabama at Birmingham (UAB) working in the School of Public Health on the REasons for Geographic and Racial Differences in Stroke (REGARDS) study. It is a project sponsored by the National Institute of Health and focuses on learning more about the factors that increase a person's risk of stroke. Aleena recently worked on analyses relating physical activity, pulse pressure, and alcohol consumption to stroke risk, each for papers in various stages of publication. Aleena is also in the data cleaning phase on a large project that will investigate the relationship of stroke and childhood socioeconomic factors.

Mark Nielsen (MS '11) is working at Merrick Bank and started a new position as a Marketing Analyst. His current project is working on creating an HTML reporting tool that reviews the results of all our prior marketing testing strategies. Also, Mark and his wife are anxiously awaiting their first little boy, who should arrive in September!

Andrew Olsen (BS/MS '11) is currently researching the convergence of Markov chains at The Ohio State University with the application of Bayesian methods that account for differences in how respondents use rating scales. He is also an intern at JPMorgan Chase and will graduate with his Ph.D. next summer.

Jessica Olsen (BS '07, MS '12) is now entering her fourth year with Adobe. Jessica works on a specialized team that performs statistical analysis on digital marketing data. They are called the Predictive Analytics team, and are considered by many to be on the cutting edge of consulting services in the company. The team works with many Fortune 100 clients helping them optimize their websites. Most recently, they have been exploring how to use Hadoop to deal with the massive amounts of data generated by web traffic.

Justin Olsen (BS '12) will graduate from The Johns Hopkins University with an M.S.E. in Financial Engineering in December. During school, Justin has been working on a large scale Monte Carlo simulation to model energy prices across multiple markets with an energy consulting company in Palo Alto, California.

Richard Payne (BS '13) is currently working on his PhD at Texas A&M University. Last year, Richard and his team were finalists in the Capital One Modeling Competition and presented at Capital One headquarters in McLean, VA and Plano, TX. Richard is currently researching Bayesian Big Data with Dr. Bani Mallick.

Jamis Perrett (BS '98, MS '99) is currently working as Product Analysis Platform Lead for the Statistics Technology Center in the Regulatory organization at Monsanto (St. Louis, MO). He and his team design and analyze the agricultural studies that are submitted to the US and international regulatory agencies for product approvals of GM row crops.

Michael L Peterson (BS '85) Michael earned an MBA from BYU and was hired in 1989 by Goldman Sachs & Co. to work in their San Francisco office with a team that managed \$7 billion in client's assets. In 2000 Michael was hired by Merrill Lynch to help them form their high net worth platform – which is now industry leading. In 2004, Michael left Merrill Lynch and started a fund to provide financing for smallcap companies with great business models but in need of capital. His involvement in these companies lead him to serving as Chairman, CEO and on the board of directors of three publicly traded companies. Michael is currently the Executive Vice President, Chief Financial Officer of Pacific Energy Development, a New York Stock Exchange listed developer of shale oil and gas wells.

ALUMNI UPDATES CONTINUED -

Neal Peterson (BS '05) and **Emily (Dickson)**

Peterson (BS '05). Neal is currently working as an anesthesiologist for the United States Air Force. Emily is a part time consultant for EMB Statistical Solutions which specializes in pharmaceutical research.

Matt Poulton (BS '05) is currently employed with Western Governors University. There are a number of exciting projects that they are building at this time. One is an HTML tag that they have loaded onto our all courses of study (online text books). All this data is flowing into a large Hadoop cluster which captures everything that a student is doing on each page of text they study at the university. Matt is also working on a large scale text mining/ social network analysis to analyze all the Facebook Schools App data that WGU students create. Another initiative Matt has developed in the last couple of months is the ability to scrape large online forums to extract networking analytics.

Lori Lyn Price (BS '97) is a biostatistician at Tufts Medical Center in Boston and works on several NIH grants in addition to smaller consulting project and grant preparation. In addition, Lori Lyn is a candidate for her Master's in History from the Harvard Extension School. Her thesis covers the analyzing of medicinal recipes from the 1600s which allows her to combine statistics and history.

David Quinn (BS '12) is working as an Actuarial Analyst for Mercer's Government Humans Services Consulting line of business. Most of his projects are based around helping states implement and measure the impact of the Affordable Care Act on their Medicaid programs.

Sahar Qumsiyeh (MS '97) In 2007 Sahar finished his PhD in Statistics from the Middle East Technical University in Ankara, Turkey. In January 2014, Sahar returned from his mission in England. He is currently searching for a job possibilities.

Susan Rosengren (BS '03) recently joined with Dr. William Walker on a Spina Bifida study at Seattle Children's Research Institute.

Jesse Seegmiller (BS '75) is the Controller and Director of Business Operations and the Endowment Fund Manager for Southern Virginia University.

Landon Segó (BS '99) is leading a project at PNNL to develop an open source big data tool for R-users called Tesseract. Its purpose is to enable data scientists to analyze and visualize big data in R with minimal effort (i.e. minimal lines of code) while still retaining the breadth and flexibility of R and its contributed packages. Additional details at tesseract.r-data.org.

Stacey (Evers) Syphus (MS '00) has just celebrated her 13th anniversary working for SAS Education. Stacey is the curriculum manager for SAS Enterprise Guide and SAS Studio – the new web-based programming interface is offered free to all SAS users (aka SAS University). Her main responsibilities include authoring and teaching SAS training courses.

Samuel Tenney (Minor '13) is working at Aon Hewitt in Denver as a retirement actuary. Samuel recently worked on a plan termination project involving the freezing of pension benefits for half of a company's population while replacing the lost benefits with a defined contribution (DC) plan.

Melinda Trego (BS '86) Melinda and her brother (Robert Chappell, EE) founded EyeTech Digital Systems, Inc. 18 years ago when they released the first Windows-based eye tracking computer "mouse." This year they are launching AEye – an eye tracker and computer all in one small package—ideal for integrating into kiosks, televisions, entertainment modules, games, etc. Melinda manages the operations and finance of the business, while Robert manages the technical development.

Joel Underwood (BS '01) is currently working as Manager of Homebuilding Operations for Pulte Homes. Joel works with process improvement and provide quantitative support/business case development to the Sr. VP of Homebuilding Operations.

Rob Versaw (BS '12) was recently hired as a Senior Probabilistic Risk Assessment Specialist at Palo Verde Nuclear Generating Station. Palo Verde is the largest electricity producing plant in the United States.

Erik Wenzel (BS '11) is working in Houston for AIG Life and Retirement as a life insurance actuary. Erik's responsibility is to calculate the monthly deferred acquisition cost (DAC) asset for a block of fixed annuities. He has passed all of his actuarial exams and will obtain his FSA this August.

Don West (BS '67) is currently a Sr. Software QA Engineer at Henry Schein in American Fork. Don also produces the DVD for the annual UVU Auto Expo which awards scholarships to UVU Auto

Trade students. He also enjoys and participates in music, having played in bands since his Sophomore year.

Jordan Wright (BS '12) is one of two co-founders of a startup company called Comfy that helps students find a place to live. You can see their website at www.rentcomfy.com. Their mobile app called Comfy is available for iPhone.

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