The University of Iowa

STATISTICS & ACTUARIAL SCIENCE

Fall 2015

sampler

COLLEGE OF LIBERAL ARTS & SCIENCES

from the CHAIR

It is now well into the fall semester of a promising new year and this is my first opportunity to share news with you as department chair. Let me begin by thanking our previous chair, Luke Tierney, for his ten years of dedicated service and mentorship. Under Luke's stewardship, the department has made great strides. When I stepped into my new role as chair, I found the department in a very strong position, poised to capitalize on its many strengths in a world increasingly dependent on data and statistical thinking.

This past spring, we celebrated our 50th year as a department. Sadly, we also said good-bye to Bob Hogg, our inimitable founding chair. Bob was certainly missed but not forgotten at the very successful Semi-Centennial Symposium in April. At the symposium, we heard from many alumni, friends of the department, current students, and faculty members. Attendees were treated to a good mix of amusing stories, department history, current research, and a variety of perspectives on the promising future of actuarial science and statistics. One of the highlights was the inaugural Hogg and Craig (previously, the Craig) Lectures delivered by Professor Emeritus, Dick Dykstra. I personally enjoyed visiting with so many of you at the symposium. Please find more information about Bob Hogg and the Semi-Centennial Symposium in this newsletter.

We are delighted to welcome several new faculty and staff to the department. Sanvesh Srivastava (PhD 2013, Purdue) came on board this fall as an assistant professor in statistics. With expertise in machine learning, large data methods, and statistical computing, Sanvesh is involved in the university-wide informatics initiative. (Luke Tierney has just recently joined the steering committee of this initiative.) We also welcome two new lecturers, Erning Li and Michelle Larson. Erning already has a four-year history of excellence in teaching and research in the department. Michelle, an Associate of the SOA, received her PhD from the department in 2002, and comes to us with an impressive resume. Also joining us this fall is Saeid Amiri, a visiting assistant professor who most recently spent time at the University of Nebraska-Lincoln. Finally, we are delighted to have Irina Bassis join our extraordinary staff duo, Tammy Siegel and Margie Ebert. Irina took over for Dena Miller, who began enjoying retirement this past spring.

Of course, change is inevitable (except perhaps from vending machines), and this past year was no exception. Commensurate with the explosion of interest in the data sciences, our department has seen significant growth in numbers of undergraduate majors and pre-actuarial interest students. With over 120 statistics majors, 40 actuarial science majors, and 180 actuarial interest students, the department is a vibrant hive of activity. The department has also seen several program changes, all reflecting the promising future of the data sciences. This fall we introduced a U2G (5-year combined BS/MS) statistics degree and have already begun enrolling students. The department is now collaborating on two undergraduate certificates: the large data analysis (LDA) certificate, which was recently featured in the international *Biometrics Bulletin*, is jointly offered by the departments of

from the CHAIR *(cont.)*

computer science, statistics and actuarial science, and mathematics; and the social science analytics (SSA) certificate is jointly offered by the departments of political science, sociology, statistics and actuarial science, and geographical and sustainability sciences. The statistics MS and PhD programs have also seen positive changes that align with current best practices.

Some things do not change. Our outstanding actuarial program continues to thrive. The department now boasts four excellent tenured or tenure-track faculty members and a lecturer in actuarial science. This past spring, the program was again recognized by the SOA as a Center of Actuarial Excellence (CAE). This designation is shared by relatively few programs around the world. The department is especially proud of this award because it is a five-year renewal of the CAE designation originally awarded in 2009. That is a long run of excellence. Employers apparently got the memo as more than 40 companies participated in a recent job fair.

This has been a successful year for our students and alumni. This past year, we awarded 22 BS and 15 MS degrees in Actuarial Science, and our pass rates on the SOA exams continue to be exceptional. We also awarded 22 BS, 10 MS, and 2 PhD (Ryne VanKrevelen and Xiangmin Zhang) degrees in Statistics. All of these recent graduates find themselves well-equipped to make significant contributions. Without a doubt, their hard work, along with their Department of Statistics and Actuarial Science affiliation, will continue to pay dividends in the years ahead. Indeed there is evidence of such dividends in the successes of our alumni. Just this past year, 10 alumni became Fellows and 28 alumni became Associates of the Society of Actuaries; 3 alumni became Fellows and 6 became Associates of the Casualty Actuarial Society; and 5 alumni became Chartered Enterprise Risk Analysts. Congratulations to all of our graduates and alumni! Read more good news about our award-winning students and successful alumni in this newsletter.

Besides the CAE designation and student/alumni success, there are many other congratulations to be extended. We tip our hats to Professor Kate Cowles, who received a 2015 President and Provost Award for Teaching Excellence. This award recognizes the highest level of achievement in teaching and mentoring at the University of Iowa. Congratulations also to statistics graduate student, Bo Wang, who received the Council on Teaching's university-wide Outstanding Teaching Assistant Award. Kate and Bo's commitment to educating students aligns well with one of our department's most important missions. Finally, congratulations to Data Analytics Team UI! Undergraduates Amy Hahn, Padraic O'Shea, Kenong Su, and Xinhe Wang placed 6th of 25 teams at this spring's Midwest Undergraduate Data Analytics Competition, at Winona State.

Among other things, we are very proud of our student success. Such success would not be possible without talented, hard-working students, faculty, and staff, and, of course, your support. We are very grateful for the generous donations from alumni, friends, and companies which allow us to attract and support the best students. During the 2014-2015 academic year, we spent nearly $140,000 on our students. The vast majority of these expenditures were in the form of scholarships, actuarial exam fee reimbursements, and prizes. This is a big investment, but of course attracting the best students and watching them thrive makes it worthwhile. Thank you so much for helping to make our students and our programs successful.

I hope you will enjoy reading more news about the department, students, faculty, and alumni on the following pages. We would be happy to include any news you would like to share with former classmates in next year's newsletter. Please use the enclosed sheet to send your information, or send us an email. Finally, I would like to extend an invitation to visit me and the department any time you find yourself in the area.

Joseph B. Lang
Professor and Chair
Department of Statistics and Actuarial Science
University of Iowa

Remembering Bob Hogg

By Joe Lang, Professor and Department Chair

Robert V. "Bob" Hogg, Professor Emeritus of Statistics and Actuarial Science, passed away on December 23, 2014, in Highlands Ranch, Colorado, at the age of 90. Professor Hogg was an internationally renowned statistics textbook author, pioneering researcher, and an award-winning teacher. Blessed with a fun-loving, charismatic personality and a sharp mind, Bob has been aptly described as a giant in statistics.

Through his invaluable service to the profession, including a term as president of the American Statistical Association, Bob marshaled efforts to improve statistics education and left his mark in many other ways. The founding chair of the Department of Statistics and Actuarial Science at the University of Iowa in 1965, Bob will be remembered by his colleagues as an indefatigable and inspirational leader who fostered an atmosphere of mutual respect. He valued diverse contributions, promoted excellence, and energized the department with his mantra, "let's make learning fun." His legacy will endure. His convivial personality and especially his friendship will never be forgotten.

Bob was born November 28, 1924, in Hannibal, Missouri. (He was fond of reminding folks, tongue-in- cheek, that *another* famous author, Mark Twain, hailed from Hannibal.) After receiving his B.S. in mathematics at the University of Illinois, he matriculated at the University of Iowa in 1947. Fortunately for the university, he was to remain there until he retired 54 years later. Blessed with a gregarious personality and quick wit, Bob was a fixture on campus and in the Iowa City community. Whether handing out candy canes across campus dressed as Santa or telling (and re-telling) amusing stories at Rotary Club meetings, his love of the university and the community was conspicuous.

Bob earned his PhD in 1950, under the direction of Allen T. Craig, a statistician in the UI mathematics department. Allen, who would become Bob's long-time friend, mentor, and co-author, convinced Bob to join the faculty upon graduation. After 15 years in the mathematics department, Bob became the founding Chair of the newly formed Department of Statistics and Actuarial Science in 1965. Serving in this capacity for 19 years, Bob created a world-class department that valued diverse contributions and promoted excellence in all three areas: research, service, and teaching. He fostered an atmosphere of mutual respect and was fond of reminding everyone that learning should be fun—he practiced what he preached. Bob was an inspirational and effective leader loved by his staff and known for his skills as a consensus builder. He was a man of action and most importantly a strong advocate of his colleagues, especially junior faculty members.

Many in the department will remember how Bob went out of his way to encourage young faculty members and students. He would hand-deliver short notes of congratulation when a paper was published or peek his head into an office just to give a few words of encouragement. He never missed an opportunity to thank someone for a job well done. A wonderful mentor, he enjoyed team teaching with junior faculty right up to the time of his retirement. The department fondly remembers Bob's "final" colloquium talks. (There were 3 or 4 of these "final" talks, which would not surprise those who knew Bob.) He would begin by saying that "statistics is my friend" because it introduced him to so many interesting people from around the world. The "ham in hogg" was manifest in his telling (and re-telling) of amusing stories and jokes. Always the entertainer, Bob would end each of these talks with a modified rendition of the song, "Thanks for the Memories."

Bob was not only devoted to the department and the university. He also served the statistics profession in many ways. Among other things, Bob served as the President of the American Statistical Association in 1988. He was Program Secretary for the Institute of Mathematical Statistics (1968-1974). He twice chaired the Education Section of the American Statistical Association, and he was twice the Program

Bob Hogg (con't)

Chair of the ASA Winter Conferences. In 1991, he received the American Statistical Association's Founders Award. And in 2006, he received the Carver medal for his "exceptional service specifically to the IMS [Institute of Mathematical Statistics]." His vision and charisma served him well, and the profession has benefited greatly from his efforts.

Bob was a pioneering researcher who wrote many influential articles on topics including statistical independence, non-parametrics, quality improvement, robust and adaptive statistics, and statistics education. For his research contributions in non-parametric statistics, Bob received the Gottfried Noether Senior Scholar Award in 2001. This award is one of several prestigious awards bestowed on Bob over the years. In recognition of his outstanding research, Bob was an elected fellow of the American Statistical Association, the Institute of Mathematical Statistics, and the International Statistical Institute.

A gifted textbook author and a true scholar, Bob was an exemplar of how research can inform and energize teaching, and vice versa. Bob, along with his mentor, Allen Craig, co-authored a very successful mathematical statistics textbook that drew on their research and classroom experiences. This book, known simply as "Hogg and Craig," was innovative in its treatment of sufficiency and change-of-variable methods. Originally published in 1959, "Hogg and Craig" is now in its 7th edition (which added Joe McKean as a co-author). Printed in many languages, it is internationally renowned and continues to inspire a new generation of statistics students. Over the years, Bob co-authored several more successful statistics textbooks, including the eponymously titled, "Hogg and Tanis," "Hogg and Klugman," and "Hogg and Ledolter." All these books benefited from Bob's attention to detail and his clear writing style.

Students and colleagues remember Bob as an extraordinary teacher with a love of statistics that was infectious. Indeed, Bob fostered a culture of excellence in teaching in the Department of Statistics and Actuarial Science that lives on to this day. His lively teaching style was very effective, if a bit unconventional. One of his techniques was to good-naturedly "pick on" one randomly selected student, quizzing him or her throughout the class period. That this approach worked so well, and that students all report learning so much, is a testament to Bob's gift as a teacher and his ability to make learning fun. In recognition of his teaching efforts and effectiveness, Bob was honored with numerous awards. From 1990-1993 alone, he received the Governor's Science Medal for Teaching (1990), University of Iowa Teaching Award (1991), Distinguished Teaching Award from the Iowa Chapter of the Mathematical Association of America (1992), Faculty Excellence Award from the Iowa Board of Regents (1992), and the Distinguished Teaching Award from the Mathematical Association of America (1993).

Bob's interest in teaching went well beyond his own classrooms. He was internationally recognized as a leader in statistics education when he received the ASA's Founders Award in 1991. Always a promoter of quality improvement, he once toured the country, visiting businesses, industry, and academic programs to better understand how statistics education could be improved and modernized to better align with the way statistics was actually being used in practice. He also took advantage of his term as president of the American Statistical Association to emphasize the need to improve statistics education. Complementing these efforts, Bob authored and co-authored several influential papers on statistics education. Owing to Bob's many contributions, the statistics profession and classrooms are healthier than ever.

In 2003, Bob was the recipient of the University of Iowa's Faculty/Staff Distinguished Alumni Award. It is fitting to finish with a quote from Bob's profile at the award website (http://www.iowalum.com/daa/search/profile.cfm?ID=178): "The Alumni Association is proud to honor a man whose career has helped define the field of statistics, and whose work as an educator has benefited-and will continue to benefit-generations of students at the UI and throughout the world."

For more information about Bob Hogg, see for example, http://en.wikipedia.org/wiki/Robert_V._Hogg; Randles, R.H. (2007), "A Conversation with Robert V. Hogg," *Statistical Science*, Vol. 22, No. 1, 137–152, DOI: 10.1214/088342306000000637; and Randles, R.H. & Calvin, J.A. (1996), "The Professional Contributions of Robert V. Hogg," *Communications in Statistics - Theory and Methods*, 25:11, 2467-2481, DOI: 10.1080/03610929608831850. –January 3, 2015

Semi-Centennial Symposium:
50 YEARS OF EXCELLENCE

By Nic Arp, CLAS Director of Strategic Communications

In 1965, a brilliant professor in the University of Iowa Department of Mathematics named Robert "Bob" Hogg—who had earned his doctorate from the UI in 1950—helped create a brand-new department at the university dedicated to his disciplinary specialty, statistics and actuarial science. Hogg was its founding chair and served in that capacity for 19 of his astonishing 51 years of active teaching at the UI.

Fifty years later, when 130 of Hogg's colleagues, protégés, friends, and admirers came together to celebrate the semi-centennial anniversary of the Department of Statistics & Actuarial Science with a two-day symposium on April 24-25, 2015, Hogg's leadership was still very much present—even though he had passed away in 2014 at the age of 90. As Raúl Curto, Professor of Mathematics and Executive Associate Dean of the UI College of Liberal Arts & Sciences, said at the event while discussing the department's achievements, "Paramount in all of this is the towering figure of Professor Bob Hogg, who with his cheerful and positive attitude served as a role model for all of us who had the privilege of knowing him."

The department that Hogg helped establish with his mentor and friend, Professor Allen Craig, had much to celebrate at the symposium. From its humble beginnings with just five faculty members, it grew by Spring 2015 to include 14 tenured or tenure-track faculty (who are leaders nationally and internationally in their disciplines); eight lecturers and adjunct faculty; four affiliated faculty; and 390 students, including 14 doctoral candidates, 77 master's-level students, and 301 undergraduates. Among many other honors, since 2009, the department has been designated one of a handful of Centers for Actuarial Excellence by the Society of Actuaries.

The department has long-established close ties with the insurance industry, which has a large presence in the state of Iowa, and its faculty collaborate with departments in disciplines throughout the university, bringing statistical rigor and expertise to the study of a wide range of disciplines.

College of Liberal Arts & Sciences Dean Chaden Djalali noted at the symposium that the department has become essential to the mission of the college and the university. UI President Sally Mason seconded that assertion, saying, "As a scientist and a university administrator, I absolutely know how crucial statistics can be to teaching and learning and scholarship, especially at a major research university like the University of Iowa. We're very fortunate that the department has such a long history of excellence and achievement."

The symposium wasn't just an opportunity to celebrate the department's past, however. As Professor and Chair Joseph Lang said to open the gathering, it was also a time to focus on its exciting present and its bright future.

There were thirteen invited talks by national and international leaders in the discipline, moderated by departmental faculty. Professor Emeritus Richard Dykstra (PhD 1968, Statistics) presented two Hogg and Craig Lectures, named for the department's founders. Six faculty members showcased their current research. Fifteen graduate students presented their research at a poster session. And students were presented with awards for outstanding performance in six categories. (Photo left: *Student awardees from left to right: Junga Seo, Dongyu Xu, Kenneth Clancy, Steven Manning, Zongsheng Sun, Raid Jarjour,Weijuan Luo, John Crowley, and Professor Joseph B. Lang).*

The group also traveled on two buses—"captained" by two of Bob Hogg's children, Allen Hogg (BA 1985, Philosophy; MBA 1997) and Mary Hogg (PhD 1996, Education)—to the Amana Colonies for a banquet, which was generously supported by a gift from Robert H. Taylor (MS 1952, Mathematics) of Solon, Iowa.

Though Bob Hogg wasn't at the Ox Yoke Inn in person for the banquet, you can be sure that he was there in spirit—telling and retelling stories, cherishing old friends and colleagues, and encouraging the scholars who will carry on his legacy for the next 50 years in the University of Iowa Department of Statistics & Actuarial Science.

faculty NEWS

New Faculty Spotlight

This year, the department welcomes three new faculty members: Sanvesh Srivastava, Assistant Professor; Michelle Larson, Lecturer; and Saeid Amiri, Visiting Assistant Professor. We are happy that they decided to join us—welcome on board!

Sanvesh Srivastava, Assistant Professor

What prompted you to select your specialty?

I came to Statistics by chance. I started as an analyst in finance after finishing my undergraduate studies at the Indian Institute of Technology (IIT), Kanpur, in 2007. While I liked the job, something was missing. After two months into the job, I decided to get a Ph.D. in Operations Research due to my professional experience in quantitative finance. Out of more than ten places I applied for graduate school, Purdue University probably was the only one with the statistics department. Fortunately, Purdue accepted my application and West Lafayette, Indiana, seemed like the right location for graduate studies. Needless to say, I was very happy to quit my job and start as a Ph.D. student in statistics. I thought I would do research in quantitative finance due to my professional exposure to world markets, but I enjoyed the collaborative and computational aspects of applied statistics more. This prompted me to pursue research in computational aspects in the statistical analysis of complex and large data obtained from recent advances in genomics, medical imaging, and recommender systems.

Who or what was the greatest influence in your career choice?

My mentors and teachers during the course of my undergraduate and graduate education have significantly influenced my career choice. Some contributions stand out: my adviser Rebecca W. Doerge; my postdoctoral mentor David B. Dunson; and my graduate school professors J.K. Ghosh and Chuanhai Liu. Incidentally, J.K. Ghosh happens to be our colleague Joyee's father.

Where did you grow up?

I grew up in a city named Gorakhpur in the Uttar-Pradesh state of India. Buddha—the real one—died very close to my hometown.

What is your favorite place to visit or to return to?

San Francisco would be my favorite place to visit.

What are your dreams? Bucket list items?

My dreams are currently focused on doing well in my research. For bucket list items, I would like to read and solve all the problems in at least 100 probability/statistics theory books.

Favorite books? Or anything you'd like to do in your spare time?

1) Elements of Graphing data; 2) Visualizing data; 3) Data Analysis using Regression and Multilevel Hierarchical Models.

Why Iowa City?

Having lived in the Midwest for some time, I feel that Iowa City has a distinct culture. This may well be due to the University of Iowa. Personally, I find the people incredibly friendly, helpful, and, most importantly, welcoming.

What are the best "teaching" moments thus far?

I am extremely fortunate to have the opportunity of teaching some very talented and hard-working students. My greatest fulfillment as a teacher comes from inspiring students to look beyond the topics covered in the class, to use their newly acquired tools and methods of statistics in their area of interest in particular, and to make sense of the world in general.

What makes you passionate about teaching?

Teaching is a learning experience, and it contributes to my own intellectual curiosities and ventures. Most importantly, I like to find new ways of instilling students with confidence and understanding through my teaching. I am confident that these students will change our future in unimaginable ways. Contributing to this change through teaching is probably one of the most satisfying parts of my job.

What is your favorite quote or song?

"Be the change that you wish to see in the world" (Gandhi).

If you had a $1,000 to spend as you like (no strings attached), what would you spend it on and why?

I would use this money to complete my collection of probability/statistics theory books so that I can check-off one of the items on my bucket list.

faculty NEWS

New Faculty Spotlight (cont)

Michelle Larson, Lecturer

What prompted you to select your specialty?

My degrees are in Actuarial Science (BS) and Statistics (PhD). I enjoy the computation and theory, but my first love is teaching. I am thrilled to be back with the department with a primary emphasis on teaching and service. The students have so much positive energy and are willing to work hard to stretch and to learn. These have been an exciting few months for me, being back on campus!

Where did you grow up?

I am originally from Chicago. I came to Iowa in 1984 to study Actuarial Science and followed my degrees by working for a few years at Northwestern Mutual in Milwaukee, and earning my Associate of the Society of Actuaries designation. I had met my husband while in school and returned to Iowa City to pursue a graduate degree and raise a family. During that time I worked with Actuarial Science students, did some teaching, and earned my Ph.D. I followed my degree with a post-doc and then returned to teaching at the local high school. Not leaving statistics behind, I established a successful AP Statistics program for the high school students.

What is your favorite place to visit or to return to?

I enjoy the mountains and especially snowboarding. Over the years we have had exciting vacations with my extended family at Mammoth Mountain, California.

Why Iowa City?

Iowa City is a wonderful place. It is exciting and vibrant. There is always something happening—whether it is a lecture, athletic event, downtown festival, or just visiting the local parks. My husband and I feel fortunate to have raised our children in a safe, educated community with strong Midwestern values. One of our favorite outings is to attend the steel drum concerts on campus.

Saeid Amiri, Visiting Assistant Professor

Saeid Amiri earned his Ph.D. in Statistics from the Uppsala University in 2011, then worked in Sweden and UK. In December 2013, Saeid joined University of Nebraska-Lincoln to work on Machine learning and statistical genetics as a Postdoctoral Research Associate. A few year later, in September 2015, he joined the University of Iowa.

Saeid's early research focused on computer-intensive method, categorical data, and ranked set sampling. His ongoing research includes statistical genetics, machine learning and high dimensional data. Besides developing statistical methods, Saeid is also interested in teaching statistical courses, working with and learning from scientists from other disciplines, especially in computer sciences.

Faculty Highlights

Kate Cowles was one of four recipients of the University of Iowa 2015 President and Provost Awards for Teaching Excellence. The Council on Teaching describes the award as "the highest level of achievement in teaching given at the University of Iowa." Among Kate's multiple contributions were serving on dozens of thesis committees in eight departments in six colleges; serving as the principal investigator and director of the NSF-funded Interdisciplinary Graduate Education and Research Traineeship program in Geoinformatics; assisting in the development of an undergraduate certificate in Large Data Analysis; serving as undergraduate adviser in Statistics for 13 years, and mentoring undergraduate honors theses and research assistantships.

People from left to right:
Amy O'Shea (advisor), Padraic O'Shea, Amy Hahn, Rhonda DeCook (advisor), Kenong Su, and Xinhe Wang.

Rhonda DeCook
On April 11-12, 2015, a team of our undergraduate statistics majors participated in the Midwest Undergraduate Data Analytics Competition (MUDAC). There were 25 teams competing where each team was given 24 hours to investigate and analyze a large dataset, provided by a real life company sponsor or client. At the end of the allotted time, the teams had to provide a short technical paper on the statistical methods they used, and do an oral presentation addressing the questions asked by the client. Our (The University of Iowa) team made it into the final round of competition among the top six teams. The team members included the following students: Padraic O'Shea, Amy Hahn, Kenong Su, and Xinhe Wang. The team advisors were Rhonda DeCook and Amy O'Shea. Congratulations to students and advisors!

Joyee Ghosh
Joyee Ghosh gave talks at the ENAR Spring Meetings in Miami, Florida, in March and at the departmental Semi-Centennial Symposium in April 2015. Joyee served as a committee member for the student paper competition organized by the Section on Bayesian Statistical Science (SBSS) of the American Statistical Association (ASA) for JSM 2015. One of her papers with former graduate student Andrew Ghattas, "Bayesian Variable Selection Under Collinearity," was published in August 2015 in *the American Statistician*. The paper was featured in a collection of articles on Bayesian Statistics by the ASA, and was given free online access for three months. Joyee's NSA grant was renewed for March 2015 through March 2016.

In addition, Joyee said that she "was honored to give a talk in the department's symposium. I think it was organized incredibly efficiently and was very successful. A big thank you to the organizing committee for their hard work and a special thank you to Tammy Siegel for remembering every little detail!"

Jian Huang
Jian Huang has been selected for the prestigious Thomson Reuters 2015 list of Highly Cited Researchers (**http://highlycited.com/**). According to the Thomson Reuters website, Highly Cited Researchers is a compilation of influential names in science that spotlights "some of the standout researchers of the last decade." The listings of Highly Cited Researchers feature authors whose published work in their specialty areas has consistently been judged by peers to be of particular significance.

Dr. Huang's ongoing projects include penalized methods for subgroup analysis, estimation of individualized treatment effects, methods and algorithms for high-dimensional statistical models. He regularly collaborates with colleagues at the University of Iowa, Rutgers University, Yale University, Shanghai University of Finance and Economics, and Zhongnan University of Economics and Law. These collaborative endeavors invited many presentations during the year.

On June 1, 2015, he presented a colloquium talk titled, "A concave pairwise fusion approach to subgroup analysis," at Wuhan University, School of Mathematics and Statistics. Soon after, he was in Kunming on June 25, 2015, as a colloquium speaker at Suzhou University, at the Center for Advanced Statistics and Econometrics Research, delivering a "Semi-penalized inference with direct FDR control" presentation. In early July 2015, Dr. Huang was at the Fifth IMS-China International Conference in Statistics and Probability (July 1-4, 2015), with the presentation titled "Sparse estimation by support detection with confidence."

Russell Lenth
Dr. Lenth published an article, "The case against normal plots of effect," for the *Journal of Quality Technology*. The article was published along with discussions from six other contributors.

His travels took him to Prague, the Czech Republic, where he gave a talk, "Flexible Post-Hoc Predictions," at the annual conference of the European Network for Business and Industrial Statisticians.

Faculty Highlights

Ambrose Lo
In his first year in Iowa, Ambrose Lo published a co-authored paper (with Ka Chun Cheung) entitled, "Characterizations of optimal reinsurance treaties: a cost-benefit approach" in *Scandinavian Actuarial Journal* (DOI: 10.1080/03461238.2015.1054303) and submitted a single-authored paper entitled, "A note on Hoeffding's covariance lemma: Its functional characterizations and applications."

Dr. Lo also gave a talk in the Semi-Centennial Symposium in April 2015 centering on the latter paper. As one of the principal investigators (other PIs are Elias Shiu, N.D. Shyamalkumar and Qihe Tang) of the Society of Actuaries Centers of Actuarial Excellence (CAE) Research Grant, Lo continued to work in the area of optimal reinsurance with multiple risks and optimization constraints. He also traveled to Liverpool and Toronto to give talks at the 19th International Congress on Insurance: Mathematics and Economics and the 50th Actuarial Research Conference in June and August respectively.

On the education side, Dr. Lo has written the *ACTEX Study Manual for CAS Exam S (Fall 2015 Edition)*, which is designed to help actuarial students pass the brand-new Exam S (Statistics and Probabilistic Models) offered by the Casualty Actuarial Society. Currently, he is actively working on the Spring 2016 Edition.

Elias Shiu
Elias Shiu is an Editor for the actuarial journal, *Insurance: Mathematics and Economics*. Dr. Shiu attended the 19th International Congress on Insurance: Mathematics and Economics, held in Liverpool in June 2014. The picture proves that the journal editors were there and they know how to have fun.

Aixin Tan
Dr. Tan was invited to give a talk at Northern Illinois University on "Multi-chain estimators and their standard error" in Spring 2015.

Qihe Tang
Dr. Tang's research interests took him near and far during the 2014-2015 academic year. For example, he was in China as a guest speaker on two occasions: for the Workshop on Financial and Insurance Risk Management at the Central University of Finance and Economics in Beijing (July 4-5, 2015); and for the 2015 International Symposium on Sino-American Risk Management and Insurance, Southwestern University of Finance and Economics, in Chengdu (July 10-12, 2015). In early November 2014, Dr. Tang presented at the INFORMS Annual Meeting in San Francisco. He also was a presenter at the R(ob) in Insurance (June 29 - 30, 2015) during the meeting at the University of Amsterdam in the Netherlands.

Along with guest speaking at conferences, Dr. Tang contributed talks on many occasions, including during the 9th International Conference on Extreme Value Analysis (EVA) at the University of Michigan, Ann Arbor, June 15-19, 2015; the 19th International Congress on Insurance: Mathematics and Economics (IME) at the University of Liverpool in the United Kingdom in June 2015; and during the 50th Actuarial Research Conference (ARC) in Canada at the University of Toronto (August 5 - 8, 2015).

Luke Tierney
This year, Dr. Tierney has continued work on improving the R computing framework that in recent years has become a mainstay for data analysis and statistical research, with a number of enhancements released with R 3.2.0 in April 2015. He presented talks on these developments at workshops in Mountainview, Cal., in January 2015, and Copenhagen, Denmark, in June 2015. Dr. Tierney has started collaborating with several computer scientists on ways to further improve R. This collaborative project should lead to some exciting new results in the coming years—stay tuned for future updates!

Dale Zimmerman
Like his colleagues, Dr. Zimmerman had a very busy and productive year: he was awarded a $30,000 grant from the University of Iowa's Center for Global and Regional Environmental Research for the "Modeling nonstationary spatio-temporal data on stream networks" project. He also gave several invited talks at the Graybill Conference in Fort Collins, Colo., in September 2014 and June 2015. Dr. Zimmerman also gave a talk at the USGS Stream Internet Workshop in Boise, Idaho, in April 2015.

In addition, Dr. Zimmerman taught a new—and very well-received—one credit graduate-level seminar course, *Sports Statistics*, in Spring 2015. Dr. Zimmerman plans on teaching this seminar every other spring.

student NEWS

Student Awards and Scholarships

The annual student awards were presented on April 24, 2015. The **Allen T. Craig Award** for outstanding teaching was presented to **Michael Mitsche** (15MS) and **Charlie Rowe** (15MS).

The **Henry L Rietz Award** is presented to a PhD student based upon their excellent performance on the Comprehensive Exam. This year's award winner is **Riad Jarjour**.

The annual **Lloyd A. Knowler Award** for outstanding achievement in actuarial science was presented to **Junga Seo** (15MS) and **Cody King** (15BS).

The **Allen T. Craig Scholarship** for 2014-15 includes two research assistantship appointments (valued at over $27,000 each) to **Zhijiang Liu** and **Anna Pritchard**, and a $2000 scholarship to **Bo Wang**.

We also presented several **Robert H. Taylor Awards** for academic achievement in Actuarial Science. This year's recipients are:

Taylor-Craig Award for outstanding performance in 22S:174
2014-15 (Undergraduate) **Kenneth Clancy**
2014-15 (Graduate) **Zongsheng Sun**

Taylor-Cosby Award for outstanding performance in 22S:179/180
2014-15 (Undergraduate) **John Crowley**
2014-15 (Graduate) **Weijuan Luo**

Taylor-Knowler Award for outstanding performance in 22S:182
2014-15 (Undergraduate) **Dongyu Xu**
2014-15 (Graduate) **Junga Seo**

Transamerica Scholarship
2014-15 **Kenneth Clancy**

Lloyd A. Knowler Scholarship
2014-15 **Nicholas Schlarmann**

Principal Financial Group Foundation Scholarship
2014-15 **Michael Hackbarth**

Harold W. Schloss Memorial Scholarship
2014-15 **Nicholas Schlarmann**

DW Simpson Scholarship
2014-15 **Dylan Schwers**

Richard D. Pearson Scholarship
2014-15 **Michael Hackbarth**

Students who passed at least one of the Society of Actuaries Exams were presented awards totaling $12,805 for 2014-15.

Andrea Harlan, Zhuozhi Huang, Francis Jo, and **Xinhe Wang** were presented with **departmental statistics scholarships** during 2014-15 for their excellent performance in the classroom.

Lok Hang Au, Sara Chen, Anthony Dagner, Mary Feng, Justin Gorecki, Joel Henderson, Cody King, Mitchell Kinney, Leah Klejch, Nicholas Schlarmann, Austin Swanson and **Jared Westphal** were selected and awarded scholarships from the **Charles E. and Eleanore G. Wilson Scholarship Fund** for 2014-15.

Ph.D. Graduates

Xiangmin Zhang successfully defended her thesis, Nonconvex Selection in Nonparametric Additive Models, and was awarded a PhD in Statistics in December 2014. Her thesis advisor was Jin Huang. Presently, Ms. Zhang works as a statistician for the US Food and Drug Administration.

Ryne VanKlevlen defended his PhD thesis, Improved Interval Estimation of Comparative Treatment Effects, in May 2015. His advisor was Joe Lang. Ryne has joined Elon University as an adjunct Assistant Professor.

Congratulations to Xiangmin and Ryne on these significant accomplishments! Your advisors and the Department are proud to be part of your journey.

We want to hear from YOU!

The Sampler newsletter is sent to alumni and friends of the Department of Statistics and Actuarial Science at The University of Iowa. As always, we like to hear from our alumni. Please drop us a line and let us know about recent promotions, job changes, professional designations, name changes, etc. Please email us at statistics@uiowa.edu or actuarial-science@uiowa.edu or send updates to us at 20 East Washington Street, 241 Schaeffer Hall, Iowa City, IA 52242-1409. Thank you!

Questions, comments, address changes and alumni news can be sent to:

Newsletter Updates
Department of Statistics and Actuarial Science
The University of Iowa
241 Schaeffer Hall
Iowa City, IA 52242-1409

Telephone: (319) 335-0712
FAX: (319) 335-3017
E-mail: statistics@uiowa.edu or actuarial-science@uiowa.edu

Please Print:

Name _____ (maiden name when appropriate) _____

Year Graduated from Iowa _____ Degree _____Major _____

Professional Designations ❍ ASA ❍ ACAS ❍ FSA ❍ FCAS ❍ MAAA ❍ Other

Address Update

Street _____

City _____ State _____ ZIP _____

Home Phone _____E-mail _____

Employer Update

Employer/company name _____

Employer address _____

News Update

What is happening in your life and career?

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May we share this **News Update** in our next department newsletter? ❍ Yes ❍ No

Please Affix
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Newsletter Updates
Department of Statistics and Actuarial Science
The University of Iowa
241 Schaeffer Hall
Iowa City, IA 52242-1409

student SPOTLIGHT

Words of Wisdom

by J.T. (John T.) Crowley

J.T. Crowley is a junior majoring in actuarial science, mathematics, and statistics at the University of Iowa. He is currently the Vice President of Social Programming for the University of Iowa Actuarial Science Club. The Society of Actuaries holds an annual CAE Student Summit, a two day conference in August in Chicago, to which two students from each of the CAE designated schools are invited. One of the attendees this year was J.T. Crowley.

When I decided to study actuarial science at the University of Iowa, I did not anticipate having an opportunity to attend a CAE Student Summit. I am grateful for this valuable experience in which I learned from many talented actuaries and prospective actuaries. I especially appreciated the panel of FSAs—Melanie Beinlich, Amanda Hug, Sara Teppema and Joseph Wurzburger, who answered questions and provided guidance about how to be successful as an actuary. Here are a few of the pieces of advice that I believe to be particularly valuable:

- Get involved in activities on and off campus to develop time management skills.

Activities directly related to actuarial science, such as engagement within your school's actuarial science club, are obviously beneficial to you and your resume. You don't have to limit your involvement to strictly professional development organizations though. Any activity that gives you extra responsibilities will challenge you to prioritize your commitments and to develop strategies that will maximize the efficiency of how you use your time.

- Everyone is an individual.

This statement may seem redundant or cliché, but don't dismiss it as trivial quite yet. Think about this advice in terms of how you communicate with the people around you. In daily interactions you most likely alter the way you speak to people according to your relationship with them. For me, this behavior is especially prevalent when I send emails. I use a lot more of a formal style when I email professors or recruiters as opposed to the casual emails I send to classmates. The key is to be conscious of how your correspondence will be interpreted by different people. Avoid pigeonholing people together and expecting them to react the same. Many actuaries grow into leadership roles, so it is important for them to understand the mindset of the individuals with whom they work.

- Don't be afraid to seek out a mentor.

No one expects entry-level actuaries to know everything about the business in which they work. Consequently, it is a great idea to find someone who has traveled down the path that you intend to follow. By learning about their experiences, you may find answers to questions that you wouldn't have ever thought to ask. Similarly, students just entering the actuarial major could gain a lot of perspective by asking an upperclassman to serve as their mentor. The initial conversation may seem difficult to start, but many people would be happy to share their stories when asked.

- Ask the next question.

To demonstrate that you are engaged in a project, ask the question that will arise after you finish the step on which you are currently working. You can show that you comprehend the purpose of the given task by questioning the implications of the possible outcomes. Answering these questions before they occur allows you to work more efficiently instead of repeatedly stopping after each task. One key to keep in mind is that you should not ask the next question just for the sake of asking the question. Make sure you understand the response and take notes if needed to avoid repeating yourself later.

- Be able to summarize the importance of your current project in three sentences.

Especially as an intern or entry-level actuary, this last piece of advice is crucial and, at times, challenging. It is easy to get lost in the details of the task immediately in front of you. By only focusing on your role within the larger project, you limit the amount of knowledge you can gain. You are also less flexible as an employee since you don't learn how your work can be adapted and applied to similar projects. Asking questions about the importance of the larger project may not make it easier to finish your current task, but it is valuable to your professional development within the company. Don't be afraid to take time to ask about your coworkers' roles within the company and their thoughts about the implications of your project. Many companies expect interns to give a presentation about the importance of their projects at the end of the summer, so it is a good habit to develop right away.

Overall, the advice told students to keep working hard and to avoid complacency. By continually practicing communication, time management, and analytical skills, students will carry themselves a long way toward becoming the leaders of tomorrow.

Congratulations to Iowa alumni who earned professional designations this year!

SOCIETY OF ACTUARIES
Chartered Enterprise Risk Analysts (CERA)

November 2014 - Lin Lin (08MS)
November 2014 - Zhekan Wang (12MS)
January 2015 - Yi Wang (09MS)
March 2015 - Yaotian Lei (11MS)
July 2015 - Jun Yang (08MS)

SOCIETY OF ACTUARIES
Associates (ASA)

Society of Actuaries
Associates (ASA)

September 2014 – Kathleen Baustian (11BS)
November 2014 – Christopher M. Bitter (11BS)
December 2014 - Wan Row Ang (11BS)
December 2014 - Ling Du Savala (13MS)
December 2014 - Tarun Maniktala (11MS)
December 2014 - Zhihe Xiao (13BS)
November 2014 - Christopher M. Bitter (11BS)
November 2014 - Lin Lin (08MS)
January 2015 - Jun Hyun Kyung (12MS)
March 2015 - Kimberly Marie Cessna (09BS)
March 2015 - Shih-Ming Chang (12MS)
March 2015 - Miao Hu (12MS)
March 2015 - Tyler Laughlin (11BS)
March 2015 - Travis Wayne Reichter (13BS)
March 2015 - Rui Xu (12BS)
March 2015 - Weiwei Zheng (14MS)
May 2015 - May Ling Hu (13MS)
June 2015 - Peony Lin (08BS)
June 2015 - Jie Qiu (13MS)
June 2015 - Yaoping Wu (10MS)
June 2015 - Danlu Yang (12MS)
July 2015 - Ruofei Huang (13MS)
July 2015 - Brooke Stadel (14BS)
July 2015 - Tian Sun (12MS)
August 2015 - Andrew Rietgraf (14BS)
August 2015 - Yiling Kuo (13MS)
August 2015 – Yangho Choi
(05MS, 07PhD Applied Math)
August 2015 – Miles Tague (09MS, Mathematics)

SOCIETY OF ACTUARIES
Fellows (FSA)

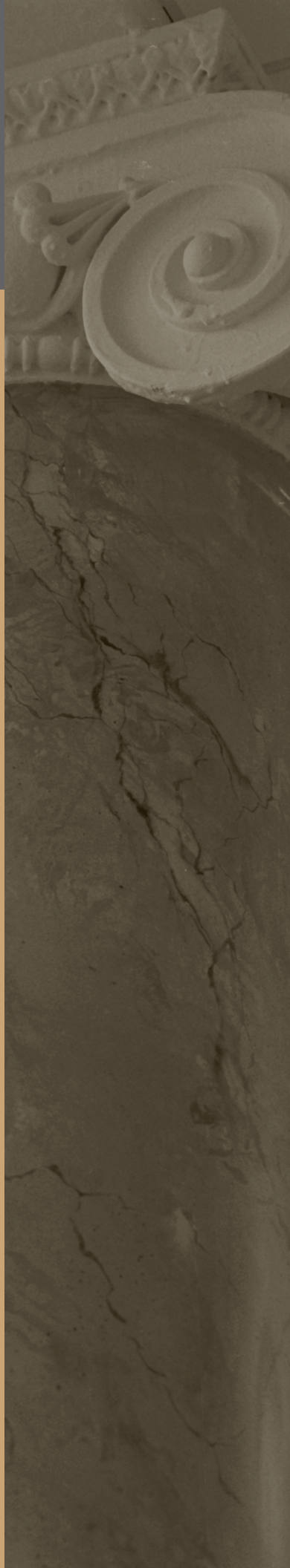
December 2014 - Xi (Grace) Liu (08MS)
December 2014 - Heliang Qu (08MS)
December 2014 - Tingting Xiao (08MS)
March 2015 - Weijie Hu (08MS)
March 2015 - Preston Lee Schnoor (10BBA)
March 2015 – Rachelle A. McDermott
(née Altenhofen) (08BS)
March 2015 – Lu Yu (10MS)
March 2015 – Julieta Zambrano Maxfield (05BS)
August 2015 - Scot Allan Glasford
(07BA Math & Econ)
August 2015 - Jun Yang (08MS)

CASUALTY ACTUARIAL SOCIETY
Associates (ACAS)

2015 - Daniel Benzshawel (11BS)
2015 - Glen Eric Meyer (92BA Mathematics)
2015 - Seung Han Lee (12MS)
2015 - Jeremiah N. Reinkoester
(10PhD Mathematics)
2015 - Ming Keen Tran (12BS)
2015 - Jieqing Zhu (09MS)

CASUALTY ACTUARIAL SOCIETY
Fellow (FCAS)

2015 - Kevin P. Donnelly (98BA Math)
2015 - Chao Tan (09MS)
2015 - Lili Peng (09MS)



alumni UPDATE

Chris Najim

JLT Specialty Insurance Services Inc. has appointed ***Chris Najim, Ph.D., FCAS, MAAA****, as senior vice president of analytics and consulting. Najim will assist clients in quantifying nontraditional risk exposures to gain a better understanding of potential gain and loss scenarios. Najim served as vice president and senior actuary at Swiss Reinsurance America Corporation, where he performed pricing analyses for regional and national treaty accounts across both property and casualty lines of business.*

Press release about Chris's appointment below.

JLT Specialty Insurance Services Inc. (JLT Specialty USA), a U.S. subsidiary of Jardine Lloyd Thompson Group plc. (JLT), one of the world's leading specialty-focused providers of insurance, reinsurance and employee benefits related advice, brokerage and associated services, is pleased to announce the appointment of Chris Najim as Senior Vice President of Analytics and Consulting.

Najim will work alongside JLT Specialty brokers and other client facing professionals to provide clients with insurance program analytics needs – including retention and limit analysis for a variety of different risk classes. He will also lead efforts to deliver JLT Specialty's proprietary modeling tools such as the "D&O Broker Analytics Model" to its client base. In addition, Najim will assist clients to quantify non-traditional risk exposures to gain a better understanding of potential gain and loss scenarios.

"We are pleased to welcome Chris to the JLT Specialty family and our analytics team as a senior analytical expert," said Mike Giacobbe, Executive Vice President, Head of Analytics and Consulting. "Chris has the ability to take the most complex situations and devise optimum, non-customary solutions for clients that are rooted in critical and detailed analysis. We look forward to leveraging his analytical approach and are confident he will be invaluable in delivering our unique modeling tools to our clients – helping them support risk decision making."

Since 2007 Najim served as Vice President and Senior Actuary at Swiss Reinsurance America Corporation, where he performed pricing analyses for regional and national treaty accounts across both property and casualty lines of business. He also led several teams responsible for updating and improving treaty pricing models at the firm.

Previously, Najim was an Associate Actuary at Safeco Personal Insurance from 2004 to 2007, where he led research on the firm's personal auto rating and underwriting model. Prior to that, he held a number of analytical and actuarial roles involving statistical analyses and specialty products. Najim holds a Ph.D. in Statistics from the University of Iowa. He previously earned a M.S. in Statistics from the same university, and a B.A. in Mathematics from Knox College. He is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries.

This announcement comes as JLT continues its strategy in expanding its USA capabilities around key specialty areas of energy, technology, construction, financial lines, credit, political & security and aerospace.

About JLT Specialty Insurance Services Inc.

JLT Specialty Insurance Services Inc. is the U.S. platform of the leading specialty business advisory firm Jardine Lloyd Thompson Group. Our experts have deep industry and product experience serving leading U.S. and global firms.

About Jardine Lloyd Thompson Group plc.

Jardine Lloyd Thompson is one of the world's leading providers of insurance, reinsurance and employee benefits related advice, brokerage and associated services. JLT's client proposition is built upon its deep specialist knowledge, client advocacy, tailored advice and service excellence.

JLT is quoted on the London Stock Exchange and owns offices in 39 territories with more than 10,000 employees. Supported by the JLT International Network, it offers risk management and employee benefit solutions in 140 countries.

alumni SPOTLIGHT

Neal Rozendaal (03BS in Statistics, Political Science and Economics)

Neal Rozendaal not only graduated with three degrees from the University of Iowa (including the degree in Statistics) but also developed quite an interesting "second" career as a non-fiction writer. We talked to Neal about his passions and where his life has taken him from Iowa City.

Tell me a bit about your family and your Iowa roots.

I grew up on a farm outside the town of Lynnville, Iowa. My father was a farmer and my mother looked after my three siblings and me. My grandparents were our neighbors, and most of my extended family lived nearby. Today I live in suburban Washington, D.C., with my wife Ashley and my one-year-old daughter, Magnolia.

It was a wonderful experience growing up in small-town Iowa. I graduated from Lynnville-Sully High School with very high marks. I had several prestigious college offers, but I ultimately decided to remain in-state and attend the University of Iowa. I had grown up a Hawkeye fan, so being able to go to Iowa was a dream come true.

Among your majors, you have "economics, statistics, and political science" listed. How did you come to statistics?

I graduated from the University of Iowa with three majors, which was obviously pretty time-consuming! My "favorite major" (strange as that may sound) was always economics. It was a subject I enjoyed studying and understood well.

When I told my academic advisor I was going to pursue an economics degree, she strongly advised me to pick up a second major to make me a more marketable job candidate after graduation. I had always enjoyed math, so statistics came to mind. I changed my track to an economics/statistics double major, and the political science major came last.

I would take five or six classes every semester, with one of them being a stats class. I usually found I spent about as much time studying for my statistics class as I did my other four or five classes combined. Statistics was incredibly rigorous...earning that major was definitely an accomplishment!

While at the university, who was your major influence?

I had some great professors at the University of Iowa. Because I had three majors, I had three professors as advisors, one for each area of study. In economics, Forrest Nelson taught me principles of econometrics that helped meld my statistics and economics majors together. Within the political science department, the election forecasting work done by Michael Lewis-Beck was absolutely fascinating to me.

In the statistics department, my advisor was Kate Cowles. I remember Professor Cowles as a very kind soul, someone concerned with not only our academic careers but also our personal growth and development. As I mentioned, statistics was a rigorous major, but she was always encouraging and there to help guide us through any challenge.

What made the biggest impact when you were a student?

Honestly, the thing that had the biggest impact on me at Iowa didn't happen at Iowa. After my junior year, I had an opportunity through the University to pursue a summer internship in Washington, DC. The organization I worked for wasn't a good fit for me, but I fell in love with the city of D.C.; I loved the energy and history of the city, and I liked how it was a major city that didn't overwhelm you with skyscrapers. When I was offered a job in D.C. after graduation with the Bureau of Labor Statistics, I had complete confidence that D.C. was the place for me. I'm still working here twelve years later. I'm grateful to the University of Iowa for the real-world experience my internship provided me, which helped set me off down my career path.

What are your fondest University memories?

I was warned growing up not to choose what school to attend based on sports allegiances. It's a fair warning, but for me, it's not surprising that most of my favorite memories while at Iowa revolved around sports. On New Year's Eve my freshman year, the Hawkeye men's basketball team hosted Indiana, which was led by Luke Recker and Coach Bob Knight. The arena was electric that afternoon, and the Hawks earned a memorable win. Two years later, I'd be rooting *for* Recker when he transferred to Iowa City.

Our football team was terrible for much of my time at Iowa, but that just made it so much sweeter when the team went undefeated in the Big Ten in 2002. I traveled with some Hawkeye friends to Minneapolis to see Iowa clinch the Big Ten championship that year, a trip I'll never forget.

I had always watched Hawkeye sports on television, so it was a bit surreal for me to be able to see all these great Iowa moments in person. I can recall walking across campus on Monday and passing the great Hawkeye athletes I had cheered for on Saturday. That was a thrilling environment for a super-fan like me!

You have such an unusual combination of interests and careers – from economist to sports writer. How did that happen?

Being an economist is my job, but sports writing is my passion. I love that I get to tell human stories, the achievements and trials of real people. I also love statistics, and sports was my initial introduction to that subject; I remember memorizing the statistics on the backs of my basketball cards growing up, analyzing stats when I thought I was analyzing sports!

My goal as a sports writer is to tell readers a story they haven't heard before. I like sharing stories people may not be familiar with and telling familiar stories in unique and unusual ways. For instance, Duke Slater was a legendary figure in Hawkeye sports history: a great, inspirational man who should not be forgotten. I was motivated to write a biography about him, because even today's generation can learn from his achievements, intelligence, and demeanor.

Benjamin Franklin once suggested that people should do something worth writing about or write something worth reading about. I'll never achieve anything close to what Slater achieved in his life, but I have the good fortune to be able to write about him and tell others what he accomplished. In my mind, that's the next best thing.

What prompted your interest in sports? In sports writing?

I have had an interest in sports since I was a little kid. I remember being so proud when I was five years old because I was the only one in my kindergarten class who could correctly identify UCLA as Iowa's upcoming opponent in the 1986 Rose Bowl.

My interest in sports writing came about much later and almost accidentally. I heard that a guy named Lyle Hammes was writing a book called *Hawkeye Greats, By the Numbers*. This book featured biographies of Hawkeye football and men's basketball players by the jersey numbers they wore at Iowa. After speaking with Hammes on a few occasions, he felt that I knew more about some of the older players than he did, so he asked if I'd be willing to write the chapters of the book that discussed those players. I agreed, and I wound up writing half the book and being listed as the book's co-author alongside Hammes.

The largest sports book publisher in the country, Triumph Books, received a copy of *Hawkeye Greats*. They liked it so much that they contacted us and asked if we would be interested in writing another Hawkeye book for them as part of a book series they were doing. We agreed, and I co-authored *What It Means to Be a Hawkeye* in 2011. It remains the best-selling book of the three I've written, filled with interviews of Hawkeye football players spanning seven decades.

In 2012, I wrote my third book, a biography of Hawkeye legend Duke Slater. Slater was the greatest African-American football player of the first half of the twentieth century. He played football at Iowa from 1918-1921 and was a two-time All-American. When the College Football Hall of Fame opened in 1951, Slater was the only African-American inducted in the inaugural class. He then went on to have a tremendous pro football career, overcoming deep-seated racism as the first black lineman in NFL history and the only African-American player in the entire NFL for most of the late-1920s.

Slater was also a tremendous student, graduating from the University of Iowa College of Law in 1928. After he retired from football, he became a prominent Chicago attorney and was elected in 1948 as the second black judge in the history of the city of Chicago. Slater Hall at the University of Iowa is named in his honor, yet today, many Hawkeye students don't know anything about this incredible man. He's a man the University of Iowa should be proud to call an alumnus.

I'm currently finishing up my fourth sports book, which should be released by the end of 2015, but this one is unrelated to the Hawkeyes. It's a reference book for the sport of women's football, a subject I find fascinating. Football is the most popular sport in this country by far – for men, anyway. At the same time, we accept that women play numerous less-popular sports, yet many fans would find the notion of women playing football outlandish. For years, many pioneering women have defied public skepticism and tackled the last bastion of male-dominated sports, and my next book will be an attempt to document their history. These are the types of overlooked and unheralded stories I love to tell.

Do you think you might be writing exclusively one day? Please elaborate on "yes" or "no."

I would love to say yes, but it's doubtful. Writing can be a very lucrative vocation, if you're writing about a subject other than sports! Sports writing is not particularly profitable; I find that people tend to prefer to watch sports rather than read about them. But I truly appreciate my readers and the support I do receive.

What are you looking forward to when you visit the state (Iowa)? Anything you miss in particular?

I love and will always love the state of Iowa. It is so laid-back and peaceful, a place where you can take a full, deep breath. I try to make it back once a year, taking in a football or basketball game when I can. My advice to Hawkeye students is to enjoy every moment of your time in Iowa City...it's an experience you will carry with you the rest of your life.

Invited **SPEAKERS**

Lizhen Lin, Assistant Professor, Department of Statistics and Data Science, University of Texas at Austin, "Nonparametric Statistical Inference on Non-Euclidean Spaces."

Patrick Breheny, Assistant Professor, Department of Biostatistics, the University of Iowa, "Estimating False Inclusion Rates in Penalized Regression Models."

Qihang Lin, Assistant Professor, Department of Management Sciences, Tippie College of Business, the University of Iowa, "An Accelerated Proximal Coordinate Gradient Method and its Application to Regularized Empirical Risk Minimization."

Peiyong Qu, Professor, Department of Statistics, University of Illinois at Urbana-Champaign, "Weak Signal Identification and Inference in Penalized Model Selection."

Russell Lenth, Professor Emeritus, Department of Statistics and Actuarial Science, the University of Iowa, "Getting the Most from Least-squares Means."

Dale Zimmerman Professor, Robert V. Hogg Professor, Director of Graduate Studies, Department of Statistics and Actuarial Science, the University of Iowa, "Fluvial Variography: Characterizing Spatial Dependence on Stream Networks."

Jae Youn Ahn, Assistant Professor, Department of Statistics, Ewha Womans University, Seoul, Korea, "On the Multivariate Minimal Copulas."

Luke Tierney, Ralph E. Wareham Professor of Mathematical Sciences, Department of Statistics and Actuarial Science, the University of Iowa, "Some Performance Improvements for the R Engine."

Zhongyi Yuan, Assistant Professor of Risk Management, Smeal College of Business, The Pennsylvania State University, "Multivariate Extreme Risks in Insurance with Regular Variation."

Sanvesh Srivastava, Post-Doctoral Researcher SAMSI and Department of Statistical Science, Duke University, PhD in Statistics Purdue University, "Expandable Factor Analysis."

Jesse Windle, Visiting Assistant Professor in Computational and Applied Mathematics Duke University, PhD University of Texas in Austin, "A Tractable State-Space Model for Dynamic Covariance Matrices."

Susan VanderPlas, PhD Candidate, Department of Statistics, Iowa State University, "Statistical Graphics for High-Dimensional Data, with Application to High-Throughput Biological Data."

Irina Gaynanova, PhD Candidate, Statistical Science Cornell University, "Multi-Group Classification via Sparse Discriminant Analysis."

Matthew Bognar, Lecturer, Department of Statistics and Actuarial Science, the University of Iowa, "Bayesian Modeling of Inhomogeneous Marked Spatial Point Patterns with Location Dependent Mark Distributions."

Alexandre Poirier, Assistant Professor at the University of Iowa in Economics and the Henry B. Tippie College of Business, "Efficient Estimation in Models with Independence Restrictions."

Mladen Kolar, Assistant Professor of Econometrics and Statistics at the University of Chicago Booth School of Business, "Estimating Time-Varying Networks."

Maochao Xu, Assistant Professor at Illinois State University, Normal, Illinois, "TMV-Based Capital Allocations for Multivariate Risks."

Hongmei Jiang, Associate Professor of Statistics at Northwestern University in Evanston, Illinois, "Local Empirical Likelihood Inference for Varying-Coefficient Density-Ratio Models Based on Case-Control Data."

Yazhen Wang, Professor of Statistics at the University of Wisconsin, Madison, Wisconsin, "Statistics in Quantum Paradigm."

Pavlo Krokhmal, Associate Professor, Donald E. Bently Faculty Fellow of Engineering, Department of Mechanical and Industrial Engineering, Applied Mathematical and Computational Sciences Program, the University of Iowa, "Certainty Equivalent Measures of Risk in Decision Making and Optimization Under Uncertainties."

Simon Urbanek, Member of the Statistics Research Department at AT&T Labs Ph.D. Statistics, University of Augsburg, Germany, "RCloud and Iotools - Tools for Collaboration and Distributed Computing Using R."

Tianbao Yang, Assistant Professor, Computer Science, the University of Iowa, "Distributed Optimization for Big Data Learning."

Gary Christensen, Professor Electrical and Computer Engineering and Radiation Oncology, the University of Iowa, "Modeling Mechanical Properties of the Lung using Image Registration and the Shape Collapse Problem in Image Registration."

Frederick J. Boehmke, Professor, Political Science, the University of Iowa, "Accounting for Right Censoring in Interdependent Duration Analysis."

Kris De Brabanter, Assistant Professor, Department of Statistics, Iowa State University, "Kernel Regression in the Presence of Correlated Errors."

In Memoriam

Class of 1933
Bernard Louis Hirsh, BA'33, MS'34
Died May 2015

Norman Rosenberg, BA
Died September 2014

Class of 1934
Jacob Friedman, MS
Died August 2014

Class of 1936
Laurence Kenneth Smith, BA
Died September 2014

Burton E. Moore, MS
Died May 2015

Christian Ludwig Strom, MS
Died September 2014

Class of 1937
Mary Lucile Green, MS
Died May 2015

Class of 1938
Mary Eloise Grosscup, BA
Died October 2015

Class of 1939
James Shumard McCollum, BA, MS'40
Died October 2015

Class of 1940
Donovan Thomas Blankley, BA
Died September 2015

Class of 1947
Roy Edwin Wild, BA, MS'47
Died May 2015

Class of 1948
Manuel Paul Chinitz, BA, MS'49
Died April 2015

George Royal Jordan, MA
Died April 2015

Robert Vincent Hogg, MS, PhD'50
Died January 2015

Class of 1951
Sidney Dean Nolte, MS
Died October 2015

Class of 1952
C. Yun Chao, BA, MS '53
Died May 2015

Mark Erling Leum, MS
Died July 2015

Class of 1957
George Leonard Saarloos, MS
Died October 2015

Thomas Frederick Milton, MS
Died September 2015

Class of 1960
Marilyn Helen Gravert, BA
Died June 2015

Richard Arnold Willey, BA
Died August 2014

Class of 1964
Gerald Lester Sievers, MS, PhD'67
Died October 2014

Class of 1977
Timothy Joseph Herr, BS
Died October 2014

Class of 1982
Kernon M. Gibes, MS
Died May 2015

Select Publications (2015)

Ghosh, J. and **Ghattas, A. E.** (2015). Bayesian variable selection under collinearity. *The American Statistician,* 69(3), 165-173.

Ghosh, J. (2015) Bayesian model selection using the median probability model. *Wiley Interdisciplinary Reviews: Computational Statistics,* 7:185-193. doi10.1002/wics.1352.

Ghosh, J. and **Tan, A**. (2015). Sandwich algorithms for Bayesian variable selection. *Computational Statistics and Data Analysis*, 81, 76-88.

Jiang, D. and **Huang, J.** (2015). Concave 1-norm group selection. *Biostatistics,* 16, 252-267.

Breheny, P. and **Huang, J**. (2015). Group descent algorithms for nonconvex penalized linear and logistic regression models with grouped predictors. *Statistics and Computing*, 25, 173-187.

Huang, J., Liu, L., Liu, Y. and Zhao X. (2014). Group selection in the Cox model with a divergent number of covariates. *Statistica Sinica*, 24, 1787-1810.

Tan, A., Doss, H. and Hobert, J.P. (2015) Honest importance sampling with multiple Markov chains. *Journal of Computational and Graphical Statistics.*

Lang, J. B. (2015). A closer look at testing the 'no-treatment-effect' hypothesis in comparative experiments. *Statistical Science*, 30(3), 352-371.

Li, J., **Tang, Q.** (2015). Interplay of insurance and financial risks in a discrete-time model with strongly regular variation. *Bernoulli* 21 (3), 1800-1823.

Tan, A., Doss, H. and Hobert, J.P. (2015) Honest importance sampling with multiple Markov chains. *Journal of Computational and Graphical Statistics.*

Tang, Q., Yang, F. (2014). Extreme value analysis of the Haezendonck–Goovaerts risk measure with a general Young function. *Insurance: Mathematics and Economics* 59, 311-320.

Tang, Q., Yuan, Z. (2015). Interplay of insurance and financial risks with bivariate regular variation. Contribution to *Extreme Value Modeling and Risk Analysis: Methods and Applications* (eds. D. K. Dey and J. Yan), Chapman & Hall/CRC, 2015.

Li, J. and **Zimmerman, D.L.** (2015) Model-based sampling design for multivariate geostatistics. *Technometrics*, 57, 75-86.

Zimmerman, D.L. (2015). Comment on "Efficient prediction designs for random fields" by W. Muller, J. Rendas, and H. Waldl, *Applied Stochastic Models in Business and Industry*, 31, 195-197.

academic NEWS

Center of Actuarial Excellence

Congratulations to the Actuarial Science program, in the University of Iowa Department of Statistics and Actuarial Science, for once again being designated a Society of Actuaries Center of Actuarial Excellence (SOA-CAE). The department is especially proud of this award because it is a five-year renewal of the CAE designation originally awarded in 2009. That is a long run of excellence. We tip our hats to all faculty, staff, and students who were behind this prestigious achievement.

Below please find an excerpt from the SOA's award letter and the SOA's description of a CAE and benefits (to students, alumni, program faculty, the department, and the university) of CAE status.

From the SOA's award letter (January 2015):

"In addition to meeting the CAE criteria, the Centers Excellence Committee recognizes Iowa's accomplishments in the following areas: (1) Strong, steady stream of actuarial research that easily meets the research criterion of CAE and (2) Willingness to explore innovative teaching methods."

New Certificate Programs

Our department is now participating in two undergraduate certificate programs: the Certificate in Large Data Analysis, and the Certificate in Social Science Analytics.

The Certificate in Large Data Analysis is administered by the Department of Computer Science and is supported by coursework from the Department of Mathematics and the Department of Statistics and Actuarial Science. The certificate is designed for undergraduates studying math, computer science, and statistics, and will encourage students to gain the necessary experience to prepare for related careers or graduate study in the field. The certificate requires 21 semester hours in computer science, mathematics, and statistics.

The Certificate in Social Science Analytics offers an opportunity for interdisciplinary training on how data can be used to address important questions in the social sciences, preparing students for a first career where these skills are increasingly important. The certificate is part of the larger UI Informatics Initiative and is administered by the department of Political Science with support from related departments, including Geographical and Sustainability Sciences, Sociology, Statistics and Actuarial Science, and Computer Science.

Iowa U2G—undergrad to grad in five years

The Department started accepting applications to its new 3+2 combined BS/MS program in statistics in spring of 2015, and the program formally started in fall of 2015. Eligible students admitted to the program will complete the requirements for both a BS and a MS component in five years. Although a BS in Statistics provides numerous career opportunities, the BS/MS dual degree provides students with an expanded skills set with a savings of approximately one year compared to separate BS and MS degrees. The department is excited to offer this new opportunity to students.

Symposium

50 years
Statistics and Actuarial Science
1965 – 2015
The University of Iowa

Symposium

Find us on Facebook!
Remember you can now find us on Facebook! Friend us at: University of Iowa Department of Statistics and Actuarial Science

Find us on Twitter!
@UIOWAStatActSci is the official Twitter account for the Department of Statistics and Actuarial Science at The University of Iowa. Follow us!

Find us on YouTube!
We have a library of videos from the Semi-Centennial Symposium and linked a few videos from the University of Iowa to our page. Stop by and check out our channel on YouTube!

A Message from Jane Van Voorhis

As fall arrives in Iowa, we are watching the leaves change from green to beautiful hues of reds and oranges, the corn is being harvested and, most importantly, we are welcoming our students back to campus. It is certainly a great time of year to celebrate being a Hawkeye! Therefore, this is a timely opportunity to say thank you for the pride you show and the support you provide to the University of Iowa College of Liberal Arts and Sciences.

As the new Executive Director of the College of Liberal Arts and Sciences Development team, it is my privilege to be leading the team to help gather support for the great work being done in the College of Liberal Arts and Sciences. I know I have met with some of you and, throughout each of my visits, one theme is always consistent – Hawkeye pride. This pride has carried through in your commitment to give back to the College of Liberal Arts and Sciences and supporting our exceptional programs and outstanding students. Through your generosity, 205 undergraduate and graduate students received privately-supported scholarships this academic year. In addition, your support allowed for continuous building enhancements, which included rebuilding of our arts campus, providing equipment maintenance and improvements to buildings, and granting the ability to recruit and retain remarkable professors.

Private support has always been important but it is nothing short of critical in today's funding environment. Hundreds of donors express their loyalty to the College through an annual gift. We appreciate those who have done so and welcome new givers to begin! Other donors make larger contributions by establishing an endowed fund through an outright gift or estate planning. These are the gifts that make new chairs, professorships, scholarships, and research funds available. The Foundation has a number of endowment opportunities available to our donors such as gifts of cash or securities, pledges that are paid over a number of years, inclusion in estate plans, or gifts that provide income to you during your lifetime through a charitable remainder trust. When you work with your estate planner, be sure to include the appropriate language in your will or trust: **"*I give to the State University of Iowa Foundation, an Iowa nonprofit corporation in Iowa City, Iowa…*"** Estate gifts allow us to plan ahead with confidence providing financial light for future generations. This is your opportunity to leave a lasting legacy.

Please contact me if you have questions about giving to the College of Liberal Arts and Sciences. I look forward to the opportunity to meet you and learn more about your experience at The University of Iowa.

Jane Van Voorhis

Executive Director of Development
College of Liberal Arts and Sciences
The University of Iowa Foundation
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THE UNIVERSITY OF IOWA

STATISTICS & ACTUARIAL SCIENCE

sampler

Department of Statistics and Actuarial Science
241 Schaeffer Hall
Iowa City, IA 52242-1409

HOW YOU CAN HELP...

Many of you have been very generous in the past by supporting our students with your charitable donations. We are very appreciative of your support as it allows us to help many gifted and talented students to achieve their academic goals. Your gift to the Department of Statistics and Actuarial Science benefits education and research!

To make a contribution, unse the envelope provided,
or go to the Department's online gift website at:

www.givetoiowa.org/2016AS99

Thank you. Your gifts to the Department of Statistics and Actuarial Science are greatly appreciated!

Reminders:

Gifts to the **UI Foundation**, the channel preferred by The University of Iowa for private support, qualify as charitable contributions to an IRC, Sec.50 J (c) (3) organization for federal income, estate, and gift tax purposes.

You can become a member of the College of Liberal Arts and Sciences Dean's Club with gift support of $1, 000 or more during the fiscal year July I -June 20 to the Department of Statistics and Actuarial Science Development fund or any other are of the College. Gift support totaling $2,500 or more will qualify you for membership in the **Patrons Circle of Dean's Club**, designated to recognize the College's most generous benefactors.

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