SAMPLER

JOSEPH B. LANG

Warmest greetings from the UI Statistics and Actuarial Science Department. This past year has seen a flurry of activity in the department: With nearly 70 graduate students, the offices, halls, and classrooms are abuzz with cutting edge research and excellent teaching. The number of undergraduate majors in Statistics and Actuarial Science, which stands at over 200, continues to grow along with the regional and national demand for well-trained data scientists. We are in the proposal phase for a new undergraduate degree in Data Science, which is a joint venture between our department and the Computer Science department. A new BS/MS five-year degree program is up and running. On the faculty front… Aixin Tan has just been promoted to associate professor with tenure; Kung-Sik Chan has been named the next Hogg Professor; and Elias Shiu was awarded an honorary doctorate from the Université de Lausanne—congratulations to all! To top it off, we look forward to hiring a new tenure track faculty member in computational statistics this year.

This has once again been a successful year for our students. Two PhD students, Congrui Yi and Zhenhao Zhou, graduated from our program. Congrui received his PhD in December 2016 and has taken a position as Data Scientist with Expedia in Bellevue, Washington. Zhenhao successfully defended his PhD thesis in the spring and graduated in May 2017. He is interning with Global Atlantic Financial Group and working toward his Associate with the Society of Actuaries. We also awarded 15 MS degrees and 58 BS degrees in Statistics last year (18 of these undergraduate students had a combined degree with Actuarial Science).

Our Actuarial Science program, which has been recognized as one of very few Centers of Actuarial Excellence since 2009, had another very good year. In Calendar year 2016, twenty-five former students of the University of Iowa became Associates of the Society of Actuaries, ten became Fellows of the Society of Actuaries, four became Associates of the Casualty Actuarial Society, and three became Fellows of the Casualty Actuarial Society. This past September, the department hosted the 5th Annual Actuarial Science Midwest Conference and 32 companies came to our Annual Actuarial Science, Insurance and Risk Management Job and Internship Fair. The Actuarial Science program awarded 14 MS degrees and 22 BS degrees.

I hope you will enjoy reading the news about our department, students, faculty, and alumni on the following pages. As my colleagues and I look toward the future, one of our top priorities is to build closer relationships with alumni and to enhance our community of donors, volunteers, and ambassadors. Having observed our students blossom at Iowa, we know that relationships with our external networks can help them to realize and even exceed their highest ambitions.

Joseph B Lang

Joseph B. Lang
Professor and Chair
Department of Statistics and Actuarial Science
University of Iowa
joseph-lang@uiowa.edu

Joyee Ghosh gave a talk titled "Bayesian Variable Selection for Linear Regression Models with Non-Normal Error Distributions" at the Joint Statistical Meetings, Baltimore, Maryland, in August 2017. She is serving a three-year term on the International Society for Bayesian Analysis (ISBA) Prize Committee starting from 2017.

Sharif Mahmood was appointed as a Visiting Assistant Professor this fall. He received his PhD from Kansas State University in August 2017. His PhD thesis: "Finding Common Support and Predicting Counterfactuals for Casual Inferences with Massive Data". He received his MS and BSc from the University of Dhaka in Bangladesh. Welcome to the department, Professor Mahmood!

Ambrose Lo was an invited speaker for the organized session "Insurance models with dependence" at the 1st International Conference on Econometrics and Statistics in Hong Kong in June 2017. He also presented at the 21st International Congress on Insurance: Mathematics and Economics in Vienna, Austria, in July 2017. The title of his talk was "Pareto-optimal reinsurance policies in the presence of individual risk constraints," which is a joint work with doctoral student Zhaofeng Tang in our department. In September 2017, Professor Lo was an invited panel member for the session "The Best Ways to Study for Exams" at the 5th Annual Midwest Actuarial Student Conference.

Elias Shiu
The 2017 Dies academicism ceremony took place at the University of Lausanne, on the shore of Lake Geneva in Lausanne, Switzerland, on June 2. The eminent actuarial science Professor Elias Shiu was awarded the title of Doctor honoris causa of the University of Lausanne, on the proposal of the Faculty of Business and Economics.
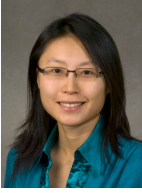
Professor Shiu is a researcher with an outstanding reputation among the actuarial scientific community. After studying mathematics at the University of Manitoba and the California Institute of Technology, he moved into the actuarial and financial sciences. He was one of the very first researchers to introduce modern finance methods into actuarial techniques.

Although his research has focused primarily on optimizing investments and managing the risks of modern insurance products, he has also made a significant contribution to Risk Theory. In particular, he developed a unifying approach to the multiple problems in Ruin Theory, in collaboration with Hans-Ulrich Gerber, a professor (now honorary) at the Faculty of Business and Economics of the University of Lausanne. This approach has been so successful that six international workshops have already been organized on Gerber-Shiu functions in five different countries, to discuss the scientific research that uses these concepts and associated techniques.

Professor Shiu has been awarded several prizes for his research, including the David Garrick Halmstad Prize and the Edward A. Lew Award. He has also held editorial positions with the main academic actuarial journals, including *Insurance: Mathematics and Economics* and the *North American Actuarial Journal.* As a member of numerous committees and working groups of international influence, he has worked on defining training needs for future actuaries and transferring recent knowledge into practice. He is also recognized for his immense contribution to the teaching of actuarial science and modernizing the financial and mathematical techniques used in the insurance field.

Professor Shiu has a longstanding relationship with UNIL, including lecturing and teaching in two international summer schools, both organized by the Institute of Actuarial Science (now a department in the Faculty of Business and Economics) in conjunction with the Swiss Association of Actuaries (ASA).

Aixin Tan presented invited talks at universities including: Department of Mathematics, Washington University in St. Louis, Missouri, April 2017; and The Center for Statistical Science, Tsinghua University, Beijing, China, July 2017. The title of both talks was "Assessment of multiple-chain importance sampling estimators." Also, "My random walk in the field of statistics" was presented at the Summer Camp for Outstanding Undergraduates, The Center for Statistical Science, Tsinghua University, in July 2017.

Qihe Tang gave invited talks at universities: Stevens Institute of Technology, United States, March 23, 2017; Université Laval, Canada, March 31, 2017; Columbia University, United States, April 27, 2017; University of Lausanne, Switzerland, June 1-2, 2017; and University of Electronic Science and Technology of China, China, July 14, 2017. Professor Tang attended the following conferences and delivered invited/contributed talks: The 10th International Conference on Extreme Value Analysis (EVA), Delft University of Technology, The Netherlands, June 26-30, 2017; The 21st International Congress on Insurance: Mathematics and Economics (IME), Vienna University of Technology, Austria, July 3-5, 2017; and The 2nd Tianfu Workshop on Financial Mathematics, Southwestern University of Finance and Economics, China, July 14-16, 2017.

N.D. Shyamalkumar gave a talk titled "On Tail Dependence Matrices" at the International Congress on Insurance: Mathematics and Economics (IME) Conference in Vienna, Austria, and at the Actuarial Research Conference (ARC), Atlanta, Georgia.

Luke Tierney presented invited talks in June at the Directions in Statistical Computing meeting in Brussels, Belgium, and in July at the JSM in Baltimore, Maryland. In December, Professor Tierney will be giving a plenary talk at a meeting in New Zealand. This spring he introduced our new course on Data Visualization and Data Technologies.

SELECTED PAPERS

Gabriele Villarini, Beda Luitel, Gabriel A. Vecchi, and **Joyee Ghosh**, "Multi-model ensemble forecasting of North Atlantic tropical cyclone activity", *Climate Dynamics,* 2017, in press.

Lo, A., 2017. A Neyman–Pearson perspective on optimal reinsurance with constraints. *ASTIN Bulletin: The Journal of the International Actuarial Association* 47 (2), 467–499.

Lo, A., 2017. Functional generalizations of Hoeffding's covariance lemma and a formula for Kendall's tau. *Statistics and Probability Letters* 122, 218–226.

Lo, A., 2017. A unifying approach to risk-measure-based optimal reinsurance problems with practical constraints. *Scandinavian Actuarial Journal* 2017 (7), 584–605.

Cheung, K.C., **Lo, A**., 2017. Characterizations of optimal reinsurance treaties: a cost-benefit approach. *Scandinavian Actuarial Journal* 2017 (1), 1–28.

Chang, Shu-Ching and **Zimmerman, Dale L.** (2016). Skew-normal antedependence models for skewed longitudinal data. *Biometrika*, 103, 363-376.

Malanson, George P., **Zimmerman, Dale L.**, Kinney, Mitch, and Fagre, Daniel B. (2016). Relations of alpine plant communities across environmental gradients: multilevel versus multiscale analyses. *Annals of the American Association of Geographers*, 107, 41-53.

Zimmerman, Dale L. and Ver Hoef, Jay M. (2017). The Torgegram for fluvial variography: Characterizing spatial dependence on stream networks. *Journal of Computational and Graphical Statistics*, 26, 253-264.

Malanson, George P., **Zimmerman, Dale L.**, and Fagre, Daniel B. (2017). Distance and environmental difference in alpine plant communities. *Physical Geography*, 38, 489-505.

SELECTED GRANTS

Joyee Ghosh has been continuing work on the NSF grant DMS-1612763 "Scaling Up Bayesian Variable Selection for High Dimensions".

student NEWS

Congratulations to the following undergraduate students who were admitted into Actuarial Science in 2017.

JANUARY 2017

Kevin Cai, Heyu Chen, Clarisse Chia, Abigail Cox, Ashton Cracraft, Nathan Deege, Kiersten Dey, Muhammad Muaz Foong, Sean Godkin, Haonan Guo, Richard J. Hall-Reppen, Drew Hoeger, Qiaohui Li, Tina (Chih Yen) Liu, Xing Liu, Mohammad Hafiz Mohammad Tarmizi, Mohamad Anwar Akmal Mohd Hasli, Nicholis Odegaard, Nathan Promes, Yaodong Shen, Joshua Sieverding, Mitchell Tamashunas, Connor Vandersnick, Ailin Zhang

AUGUST 2017

Hanna Bosco, Edward Helm, Austin Kerska, Rachel Rinehart, Scott Robinson, Megan Svara, Connor Vandersnick, Kaimin Wang, Minyuan Xu, Dongfang Zhao, Xuan Zhao, Yincheng Zhao
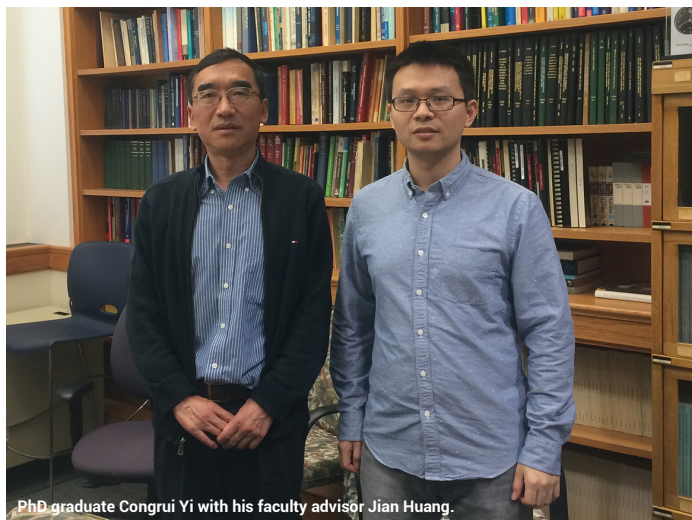

GEEMAP'S 2017 COHORT

(L to R): Juan Cervantes, Eileen Beran (program coordinator), Oronde Drakes, Cristina Munoz, Kate Cowles (director), Rebecca Kauten, Brandon MacDougall, Reid Simmer, Cody Hodson.

Citizen Science Workshop Hosted by Graduate Traineeship Program

The University of Iowa's NSF-funded interdisciplinary graduate program (Geoinformatics for Environmental and Energy Modeling and Prediction) hosted a workshop on citizen science on October 21. Juan Cervantes of the Statistics Department is one of the PhD students in the program, which also includes doctoral students from Geography and Civil and Environmental Engineering. Kate Cowles of the Statistics Department directs the program. The attendees at the workshop, held in the Illinois Room at the Iowa Memorial Union, were enthusiastic and focused, and all signed up for follow-up information on volunteering for water quality monitoring, raptor monitoring, or Iowa City environmental clean-up projects.

The workshop began with the keynote address, "Citizen Science, Making a World of Difference," by Kris Stepenuck, PhD, Assistant Professor of Watershed Science Policy and Education at the University of Vermont. Professor Stepenuck explained that the term "citizen science" refers to contributions by the general public to data collection, study design, or other scientific investigations. She also talked about how data collected by volunteers have brought about policy and enforcement change, such as protecting against overfishing and reducing bacterial pollution and invasive species.
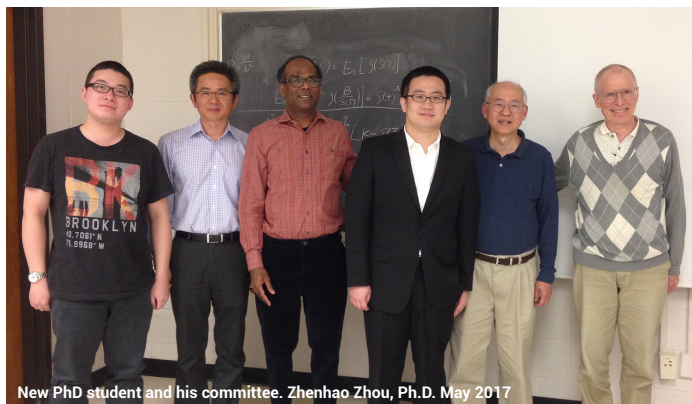
Local leaders from the Iowa Raptor Center, Iowa City Public Works Department, Iowa Lakeside Laboratory, and Johnson and Iowa County Watershed Coalition Project gave short talks on citizen roles in environmental science in Iowa. The four participated in a question-and-answer session about ways people could become involved where they're most concerned and interested. One of the panelists described how young people looking for ways to contribute can ask themselves, not necessarily "What is my passion?" but simply "What am I interested in?" After the discussion, attendees stayed to talk over their individual questions with presenters.

PhD graduate Congrui Yi with his faculty advisor Jian Huang.

CONGRUI YI

Congrui Yi received his PhD in December 2016. His thesis is titled "Penalized Methods and Algorithms for High-Dimensional Regression in the Presence of Heterogeneity" and his advisor was Jian Huang. Congrui has taken a position as a Data Scientist with Expedia, Inc.

New PhD student and his committee. Zhenhao Zhou, Ph.D. May 2017

ZHENHAO ZHOU

Zhenhao Zhou received his PhD in May 2017. His thesis is titled "From Valuing Equity-Linked Death Benefits to Pricing American Options" and his advisor was Elias Shiu. Zhenhao has taken an internship position with Global Atlantic Financial Group in New York City.

MAY 2017 GRADUATES

Nathan Howard Benya
Actuarial Science, Business Administration (Minor), Mathematics (Minor), and Risk Management & Insurance (Certificate)

Kayla Ashley Berkowitz
(H) Actuarial Science, Mathematics, Risk Management & Insurance (Certificate), and Statistics

Sara Chen
***Actuarial Science, Large Data Analysis (Certificate), ***Mathematics, and ***Statistics

John Crowley
*** (H) Actuarial Science, ***Mathematics, and ***Statistics

Anthony Dagner
(H) Actuarial Science and Mathematics

Zhengxuan Ding
Economics (Minor), Mathematics, and Statistics

Asher Guni
Statistics

Haonan Guo
Actuarial Science, Mathematics, and Statistics

Michael Hackbarth
** (H) Actuarial Science, Risk Management & Insurance (Certificate), and **Mathematics

Bo Han
Mathematics and Statistics

Jiaxu He
Statistics

Zhengnan Hong
Mathematics and Statistics

Yuhao Hu
Actuarial Science, Mathematics, and Statistics

Christine Hunt
(H) Actuarial Science, Mathematics (Minor), Risk Management & Insurance (Certificate), and Statistics

Jiayao Ji
Large Data Analysis (Certificate), and Statistics

Yun Lao
Art (Minor), Mathematics, and Statistics

Yu Tung Lee
Actuarial Science, Mathematics, and Risk Management & Insurance (Certificate)

Yubing Li
Computer Science (Minor), Large Data Analysis (Certificate), and Statistics

Yusa Lin
Mathematics and Statistics

Haixing Liu
Statistics

Qianping Liu
Actuarial Science, Mathematics, and Statistics

Xiang Luo
Statistics

Damon Mehrl
** (H) Actuarial Science, **Mathematics, and **Statistics

Stephanie Milefchik
Statistics

Kendall Moore
Mathematics, Risk Management & Insurance (Certificate), and Statistics

Cay Vin Ong
Statistics and Risk Management & Insurance (Certificate)

Boya Peng
Actuarial Science, Mathematics, and Statistics

Xuanyu Shi
Statistics

Trent Stastny-Perez
(H) Actuarial Science, Mathematics, Risk Management & Insurance (Certificate), and Statistics

Hanfeng Wang
Statistics

Yuqing Wang
Geography and Statistics

Yuru Wang
Mathematics and Statistics

Tom Werner
***Computer Science, ***Mathematics, and ***Statistics

Chen Xie
(H) Actuarial Science, Mathematics, and Psychology (Minor)

Cong Yu
Mathematics and Statistics

Jaewon Yu
Statistics and Psychology (Minor)

Angela Zhang
**Biochemistry and **Statistics

Shuo Zhang
Economics and Statistics

Xinyuan Zhang
Mathematics and Statistics

Ruiyi Zhao
Mathematics and Statistics

Yanyi Zhu
Mathematics and Statistics

DECEMBER 2016 GRADUATES

Cole Becker
Statistics and Economics

Jeanette Deason
Statistics

David Fanciullacci
Statistics

Chao Huang
Actuarial Science, Mathematics, and Statistics

Kesha Hyche
Mathematics and Statistics

Kwanghun Lee
Economics and Statistics

Seung Woo Lee
Large Data Analysis (Certificate), and Statistics

Yifan Luo
Computer Science, Large Data Analysis (Certificate), and Statistics

Hongingnan Ma
Mathematics (Minor), and Statistics

Jeffrey Maxey
Actuarial Science, Mathematics, and Statistics

Myrna Venkataswami
Mathematics, Risk Management & Insurance (Certificate), and Statistics

Jingxian Yuan
Actuarial Science, Mathematics, and Statistics

Weitong Zhai
Actuarial Science and Mathematics

Qingyuan Zhang
Actuarial Science and Mathematics

Wenbo Zhang
Business Administration (Minor), Mathematics, and Statistics

Xueyan Zhou
Statistics

Puhong Zhu
Business Administration (Minor), and Statistics

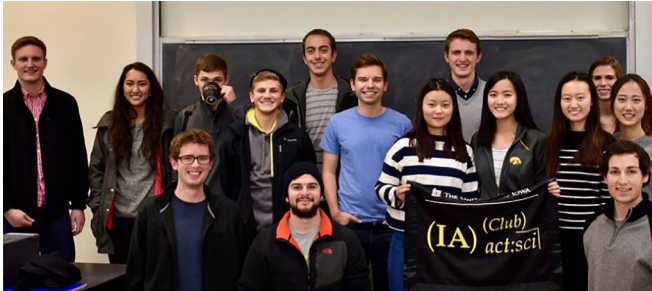** With High Distinction
*** With Highest Distinction
(H) Honors in the Major

GRADUATES

2017 ACTUARIAL SCIENCE CLUB

President: **Elle Qi**
VP of Finance: **Samuel Werner**
VP of Social Programming: **Ailin Zhang**
VP of Media: **Michelle Croghan**
Graduate Ambassador: **Jun Yang** (Spring 2017)
and **Sungjoon Kang** (Fall 2017)
Underclassmen Ambassador: **Mitchell Tamashunas**

IENCE CLUB

new ASSOCIATES *&* FELLOWS

Congratulations to Iowa alumni who became Associates or Fellows in the Society of Actuaries and the Casualty Actuarial Society!

SOCIETY OF ACTUARIES
Fellows (FSA)

August 2017 - Alan Davis Driggs (MS 2013)
August 2017 - Brooke Stadel (BS 2014)
August 2017 - Zhihe Xiao (BS 2013)
March 2017 - Miao Hu (MS 2012)
March 2017 - Cong Liu (MS 2012)
March 2017 - Jung Eun Grace Yoo (MS 2005)
March 2017 - Yuan Zhang (MS 2011)
December 2016 - Johnathon Dean DeGeest (BS 2012)
December 2016 - Kyle Sewright (BS 2012)
December 2016 - Kelley Marie Weiss (BS 2010)
June 2016 - Elizabeth Davis Alexander (née Scott) (BS 2003)
June 2016 - Sean Jackson (2011)
June 2016 - Yaotian Lei (MS 2011)

SOCIETY OF ACTUARIES
Chartered Enterprise Risk Analysts (CERA)

September 2017 - Pei Yang (MS 2014)
July 2017 - Wan Row Ang (BS 2011)
July 2017 - Yichao Ren (MS 2013)
July 2017 - Dylan Schwers (BS 2015)
February 2017 - Ruofei Huang (BS 2012, MS 2013)
February 2017 - Zhihe Xiao (BS 2013)
January 2017 - Cong Liu (MS 2012)

SOCIETY OF ACTUARIES
Associates (ASA)

September 2017 - Will Daniel Claypool (MS 2016)
September 2017 - Kaleigh Lauren Ganske (BS 2013)
September 2017 - Savana Weller (MS 2016)
September 2017 - Mengya Xu (BS 2012, MS 2013)
September 2017 - Lu Yang (MS 2010)
September 2017 - Pei Yang (MS 2014)
September 2017 - Shan Zhou (MS 2014)
August 2017 - Jonathan J. Olson (BS 2010)
July 2017 - Lu Chen (MS 2014)

July 2017 - Xinlyu Gai (MS 2015)
June 2017 - Trevor Lightbody (MS 2015)
May 2017 - Haibo Liu (PhD candidate)
April 2017 - James Dwyer (BS Math 2013)
April 2017 - Alex Michael Roper (BS 2013, BBA 2014)
April 2017 - Yisi Wang (BS 2013)
April 2017 - Daniel Waterbury (2013)
March 2017 - Michael Boehm (BS 2010)
March 2017 - Austin Swanson (BS 2016)
February 2017 - Yifan Guo (MS 2013)
February 2017 - Ashley Mahe (MS 2014)
February 2017 - Weiwei Zheng (MS 2014)
January 2017 - Christopher James Hunter (BS 2013)
December 2016 - Gregory Monson (BS 2014)
November 2016 - Jinbo Qiu (MS 2013)

CASUALTY ACTUARIAL SOCIETY
Associates (ACAS)

2017 - Joel Bruxvoort (BS 2010)
2017 - Nicholas John Schlarmann (BS 2015)
2017 - Dorothy Elizabeth White (née Nixon) (BS 2005)

CASUALTY ACTUARIAL SOCIETY
Fellows (FCAS)

2017 - J. Daniel Stanford Benzshawel (BS 2011)
2017 - Joseph Seung Han Lee (MS 2012)
2017 - Yunqin Li (MS 2008)
2017 - Ming Keen Tran (BS 2012)
2017 - Jieqing Zhu (MS 2009)

invited SPEAKERS

2016 - 2017

Anastasios Bardoutsos. Teaching and Research Assistant, AFI - Research Centre Insurance, Faculty of Economics and Business, KU Leuven. "Coherent mortality forecasts for dependent populations: A Bayesian approach".

Samuel Burer. Professor and Director, Business Analytics Graduate Program, and George Daly Professor of Management Sciences, Tippie College of Business, University of Iowa. "Robust rankings for college football".

Sabyasachi Chatterjee. Assistant Professor, Department of Statistics, University of Illinois at Urbana-Champaign. "On estimation in tournaments and graphs under monotonicity constraints".

Xiaohui Chen. Assistant Professor, Department of Statistics, University of Illinois at Urbana-Champaign. "Gaussian and bootstrap approximations of high-dimensional U-statistics and their applications".

Bertrand Clarke. Chair and Professor, Department of Statistics, University of Nebraska-Lincoln. "Ensemble clustering of categorical data". biomass prediction".

Zhenyu Cui. Assistant Professor, Financial Engineering, Stevens Institute of Technology. "A general valuation framework for SABR and stochastic local volatility models".

Somak Dutta. Assistant Professor, Department of Statistics, Iowa State University. "Inference for spatial linear mixed models on large regular rectangular lattice". and their applications".

Kang Pyo Lee. Associate Research Scientist/Data Scientist, ITS Research Services Team, University of Iowa. "The role of a data scientist in industry and academia".

Shu Li. Assistant Professor, Department of Mathematics, University of Illinois at Urbana-Champaign. "A drawdown-based regime-switching levy insurance model and its optimal design".

Xiao-Li Meng. Dean of the Graduate School of Arts and Sciences, Whipple V.N. Jones Professor of Statistics, Harvard University was the Hogg and Craig Lecturer for 2017. "From Euler to Clinton: An Unexpected Statistical Journey (Or: Size Does Matter, But You Might Be in for a Surprise…)" and "Bayesian, Fiducial, and Frequentist (BFF): Best Friends Forever?"

Vinayak Rao. Assistant Professor, Department of Statistics, Purdue University. "Path and parameter inference for Markov jump processes".

Erin Schliep. Assistant Professor, Department of Statistics, University of Missouri in Columbia. "Process driven density-dependent diameter distribution models for forest biomass prediction".

Jianxi Su. Assistant Professor, Department of Statistics, Purdue University. "Paths and indices of maximal tail dependence: Some new results".

Jennifer Teitle. Assistant Dean of Graduate Student Development and Postdoctoral Affairs, University of Iowa Graduate College. "Finding

student AWARDS & SCHOLARSHIPS

STUDENT AWARDS

Our annual student awards were presented on March 29, 2016. The Allen T. Craig Award for outstanding teaching assistant was presented to Riad Jarjour. Honorable Mention for outstanding teaching assistant(s) was awarded to Samuel Justice, Steven Manning and Rebecca Rachan.

The Allen T. Craig Scholarship was presented to Rebecca Rachan and 25%-time RA appointments to Rui Huang, Jun Tang and Fuli Zhang.

The Henry L. Rietz Award was presented to a PhD student based upon their excellent performance on the Comprehensive Exam. This year's award winner was Wenda Tu.

Lloyd A. Knowler Award for Outstanding Achievement in Actuarial Science.
2016-17 (Undergraduate) John Crowley
2016-17 (Graduate) Xiaoyi Xiong

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

Robert H. Taylor Award in Actuarial Stochastics
2016-17 Xiao Wang

Taylor-Craig Award for outstanding performance in ACTS:4130
2016-17 (Undergraduate) Samuel Werner
2016-17 (Graduate) Liyang Sun

Taylor-Cosby Award for outstanding performance in ACTS:3080
2016-17 (Undergraduate) Samuel Werner
2016-17 (Graduate) Jiacheng Wang

Taylor-Knowler Award for outstanding performance in ACTS:4280
2016-17 (Undergraduate) John Crowley
2016-17 (Graduate) Zhaofeng Tang

STUDENT SCHOLARSHIPS

Scholarships totaling $265,056 were awarded to several students in the 2016-17 academic year. Included among these were several named scholarships:

Lloyd A. Knowler Scholarship
2017-18 Ben Jacobs
2016-17 Matthew Kulczak

Richard D. Pearson Scholarship
2016-17 Samuel Werner and Jason McDowell

Principal Financial Group Scholarship
2017-18 Tina Liu and Morgan Zuidema
2016-17 John Crowley

Harold W. Schloss Scholarship
2017 Carter Burns
2016 Sara Chen

Transamerica (AEGON) Scholarship
2017-18 Max Peterson
2016-17 Andrew Sherer

D.W. Simpson & Company Scholarship
2017-18 Jason McDowell
2016-17 Michael Hackbarth

Charles E. and Eleanore G. Wilson Scholarship
2017-18: Collin Abeln, Natalie Avercamp, Cody Borst, Carter Burns, Alec Ciaccio, Bridget Carroll, Michelle Croghan, Austin Enderson-Ohrt, Angela Fiore, Lisa Frishcosy, N. Halko, Emily Hay, Leah Klejch, Cody Krause, Quynh Le, Tina Liu, Xavier Loomer, Jason McDowell, Connor Nealon, Mason Newhard, Morgan Novak, Nicholis Odegaard, Nathan Promes, Rachel Rinehart, Kyle Scales, Andrew Sherwin, Joshua Sieverding, Megan Svara, Mitchell Tamashunas, Maxwell Unmacht, Nathaniel Van Kleek, Morgan Zuidema

2016-17: Collin Abeln, Cody Borst, Carter Burns, Bridget Carroll, Sara Chen, Michelle Croghan, John Crowley, Anthony Dagner, Samuel Golden, Michael Hackbarth, Nathan Halko, Emily Hay, Leah Klejch, Connor Kozicki, Quynh Le, Emily Leonhart, Nathan Luna, Jason McDowell, Connor Nealon, Mason Newhard, Nicholis Odegaard, Joshua Sieverding, Trent Stastny-Perez, Megan Svara, Mitchell Tamashunas, Morgan Zuidema

Statistics Departmental Scholarship
2017 (Fall) Bo-Yuan Chen, Yue Gu, Benjamin Jacobs, Yujing Lu, Mohd Airman Zulkifly
2015-16 (Fall) Andrea Harlan, Jingrong Li, Kenong Su, Angela Zhang
2014 (Fall) Andrea Harlan, Zhuozhi Huang, Francis Jo, Xinhe Wang
2014 (Spring) Mary Feng, Andrea Harlan, Mitchell Kinney, Zhanlin Liu, Yunfan Xing

ELLE MENG LI

WHY DID YOU CHOOSE TO COME TO THE UNIVERSITY OF IOWA?

I wanted to go to a school where I would be challenged academically and be a part of a top actuarial science program. I conducted in-depth research before applying to colleges. The factors I considered included a well-known undergraduate actuarial science program, high potential for a future career in actuarial science, and opportunities to get involved in student organizations. I landed at the University of Iowa.

Since then I have discovered that all of those factors hold true at Iowa, and more. Another nice realization upon coming to Iowa was the diversity and helpful nature of the people. Although I am a long ways away from my hometown, Shandong, China, I feel right at home here.

WHERE DID YOU GROW UP?

China. I went to Beijing, the capital of China, for elementary school. Then my family moved back to our hometown, where I finished middle school. In 2012, I came to Athens, Georgia, as a foreign exchange student. I loved the experience, and decided to finish my education in the U.S.

AS THE ACTUARIAL SCIENCE CLUB PRESIDENT, WHAT CAN YOU TELL US ABOUT THIS POSITION THAT ISN'T IN THE DESCRIPTION?

Part of the responsibilities of being the president is to develop new leaders and to learn the talents of the people who are already involved. For the past 10 months I've made lifelong friends, and gained awesome experiences and irreplaceable life lessons. And I now am more willing to take up new challenges. I met great people and I learned so much from them through their stories and

experiences. I had the honor of working with an amazing team and without them, none of the club events would be possible.

WHAT IS THE KEY TO SUCCESS IN THIS POSITION?

Different people would have different ideas, but in my opinion, a president of the club would succeed with the following characteristics:

1. *Be willing to try new things* - We don't ever grow from taking action we've always taken. Growth seems to require we take new action first, whether it's adopting a new attitude or a new way of thinking, or literally taking new action. Even though sometimes it doesn't always work out, but this way you'll know in the future what not to do. That's why this year, we were able to purchase study manuals for students and why we hosted the 5th Annual Midwest Actuarial Student Conference.

2. *Talk to and listen to club members* - Asking and listening to what the board members want to achieve and accomplish, and looking for ways to help them undertake their role, is a key characteristic of a successful president. In alphabetical order, Ailin, Jun, Michelle, Mitch, Sam
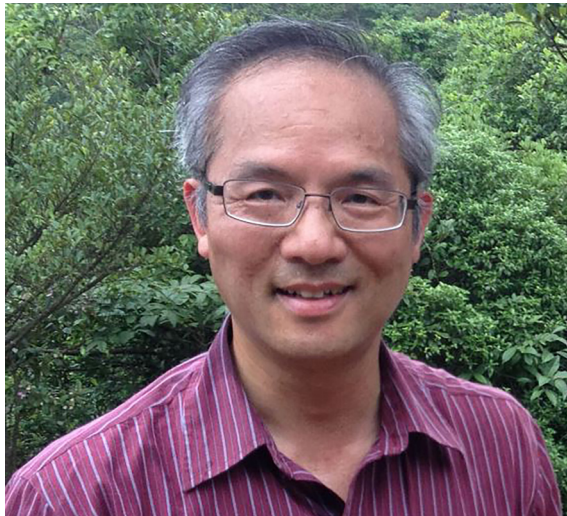
and Sungjoon are always contributing great ideas and implementing these great ideas; without them, the club would not be where we are at. Teamwork can lead to better outcomes because the team can bring more resources to bear against a challenge and there is more oversight to reduce risk of poor individual contributions. When these members apply different skills to the same problem, they come up with a more effective solution than one person working on the same problem.

WHAT DO YOU THINK YOU WILL BE WORKING ON IN FIVE YEARS?

I'm considering a number of different paths right now, but in five years, my dream would be to be making use of my degree. There are several subfields that this degree can apply to, but I just hope to make the most use of my education.

Elle and her committee at the student conference.
(L–R) Clarisse Chia, Elle Li, Angie Fiore, Aixin Zhang and Rachel Rinehart

duate SPOTLIC

KUNG-SIK CHAN

Kung-Sik Chan has been formally appointed as the Robert V. Hogg Professor, from July 1, 2017, through June 30, 2022. Professor Chan's extraordinary research, teaching and service contributions make him a very deserving Hogg Professor, as was his predecessor, Dale Zimmerman, the first Hogg Professor.

For those fortunate enough to have known Bob Hogg, you know how much he admired "true scholars," those folks who had a positive impact on so many lives and were in this business for all the right reasons. Bob was a true scholar and now we have another true scholar as the Hogg Professor. We know that Bob would be very proud of Professor Chan. To get an idea of just how well qualified he is to be Hogg Professor, let us paraphrase from his nomination letter…

Just since 2010, Professor Chan has published 70 peer-reviewed articles with over 100 co-authors, many of whom are, or were, his students or post-docs. These co-authors are from a variety of disciplines, including statistics, data science, actuarial science, business, economics, biology, radiology, ecology, environmental science, epidemiology, physics, marine science, genetics and hydrology. That there are over 100 co-authors is especially impressive given that the majority of his papers had relatively few co-authors. This work has appeared in subject-matter journals as well as top statistics journals, including *Statistical Science, Journal of the Royal Statistical Society: Series B, Biometrika, Annals of Applied Statistics, Computational Statistics and Data Analysis, Statistica Sinica and Journal of the American Statistical Association.* Professor Chan's most recent research has also been well supported by several funding agencies, such as NIH, NSF, DNR and NOAA, to name a few. He lists 10 grants and contracts since 2010. He has been invited to present his work at eight research conferences since 2010, and this does not include all of the presentations by his co-authors. This post-2010 research record combined with his impactful earlier work makes it clear that Professor Chan has earned his international reputation as an outstanding statistician and scientist.

In summary, Professor Chan is an excellent and eminently qualified choice for the Hogg Professorship. He is an elected member of the International Statistical Institute, an elected fellow of both the ASA and IMS, and he is a UI Faculty Scholar Award recipient (1996-99). His service to the profession, university and department is admirable, and he is a talented teacher and an outstanding mentor who has positively influenced the lives of his many PhD students and post-docs.

THE 5TH ANNUAL MIDWEST ACTUARIAL STUDENT CONFERENCE

The 5th Annual Midwest Actuarial Student Conference was held by the University of Iowa on September 29-30, 2017. This was the fifth rendition of a conference started by professors at Purdue University, then continued in subsequent years by the University of Illinois, the University of Michigan, and DePaul University. The conference was intended to teach young actuarial students more about the actuarial field and to help them become more prepared to be excellent candidates and actuaries. It was free to attend for all students, made possible by a plethora of sponsors.
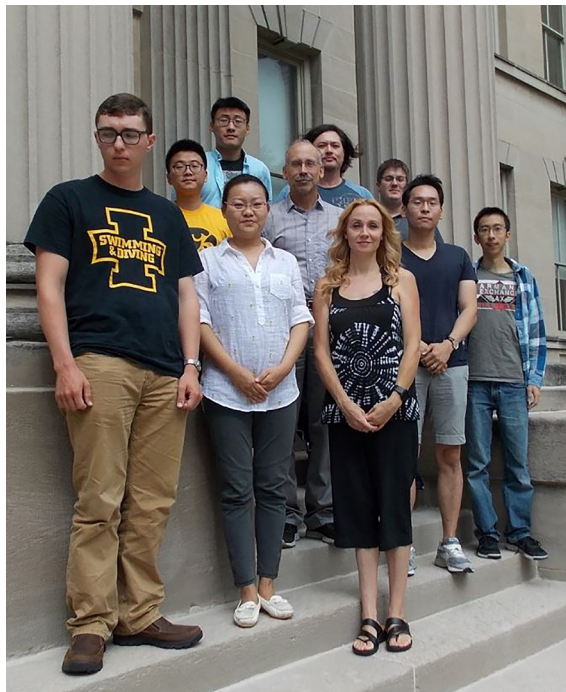
The conference gave college actuarial students an opportunity to hear about updates from the Society of Actuaries and the Casualty Actuarial Society, get advice on future employment, learn about exams, hear about the current evolving nature of the actuarial field, and much more. High school students interested in actuarial science were also invited, in order to educate the next generation of actuaries on our growing, rewarding field. The preceding evening provided an opportunity for students to network and meet representatives from each of our sponsors. Over 200 students from all across the Midwest, as well as a few from the East and West coasts, signed up for the conference. The conference provided valuable information and a great experience to all of its participants, and we would like to thank the Conference Planning Committee for making this conference come to life!

INSURANCE & RISK MANAGEMENT FAIR

The fifth annual Actuarial Science, Insurance & Risk Management Fair was held on October 4, 2017. Over 32 companies came to meet our students! This fair was phenomenal! The employer feedback was that it was a great venue, great number of employers, smooth program, and the volunteers were helpful especially with unloading and cleanup! Thank you student volunteers and thank you to all of the companies that came!

We welcomed 11 new graduate students in Statistics. They are William Chew, Jennifer Hall, Seongwon Park, Christopher Penney, Liyang Sun, Chunlei (Jonah) Wang, Chuyi Wang, Ling Zhang, Xudong Zhang and Xingyu (Jason) Zhou. Additionally, we have one student enrolled in our U2G (Undergraduate to Graduate) candidate program, Benjamin Jacobs, who will complete his Bachelor of Science/Master of Science in Statistics in five years. In addition, the following eight students were admitted into our PhD program in Statistics: Rui Huang, Rui Jin, Samuel Justice, Xun Li, Jun Tang, Siyang Tao, Hongda Zhang and Qiansheng Zhu.

Actuarial Science welcomed seven new graduate students. They are Richard Carstens, Ankita Hasija, Yomi Kang, Puishan Lai, Kyumok Lee, Han Yu and Jizhou Zhou.

ERIC PALMER

Eric Palmer (BS 1998) will become the Chief Financial Officer (CFO) of Cigna. Cigna is number 79 on the Fortune 500 list.

JEREMIAH ZHE LIU

Jeremiah Zhe Liu (BS 2013) was recently interviewed in *Harvard Public Health* magazine's "Why Public Health?" series. After coming to America and seeing a blue sky for the first time, Zhe Liu realized just how bad the pollution was in his industrial hometown city of Taiyuan, China. Now, having just earned his SM degree from Harvard last May, Zhe Liu is working toward his PhD in 2020, and is determined to master similar techniques to the Six Cities study while creating new biostatistical methods to reach his goal of undertaking similar studies in his own country.

Getting around missing and broken data is one of the field's toughest methodological problems, and many researchers get around this by starting fresh and laying down their own monitoring campaigns for new studies. But that's expensive and eats up lots of resources. "If we can leverage existing data, it provides a more cost-effective way of getting at larger health questions," says his advisor, Brent Coull. "Jeremiah is on the cutting edge of this technique."

MASTER OF SCIENCE GRADUATES IN 2016-17:

MS in Statistics: Shiyang Chen, Andrea Leigh Harlan, Baosheng He, Elizabeth Lori Held, Rui Huang, Rui Jin, Samuel Justice, Xun Li, Tyler William Olson, Sangjun Park, Jun Tang, Siyang Tao, Alexander Zajichek, Hongda Zhang, Qiansheng Zhu.

MS in Actuarial Science: Jiao Lei, Junyan Liu, Liyun Ma, Xiaocen Meng, Linh Thuy Pham, Xiaoyi Xiong, Jun Yang, Menglei Yu, Xinping Yuan, Ronghui Zhao, Yunlu Zhao, Qin Zhi, Yue Zhou, Xiaofan Zhuang.

Four University of Iowa alumni won awards from the Society of Actuaries in 2017. Among the Presidential Award recipients are Statistics and Actuarial Science grads Andy Ferris (MS 1996), Jennie McGinnis (née Sternemann) (MS 2006), and Ling-Ling Wang (MS 1988). Another alumnus, David Dillon (MIS 1996), was given a 2017 Outstanding Volunteer Award.

The Society of Actuaries is the world's largest actuarial professional organization with more than 28,000 actuaries as members, according to its website.

The organization announced the award recipients during its 2017 SOA Annual Meeting and Exhibit in Boston.

Class of 1937
Mr. Harold L. McCollum
West Des Moines, IA (BA 1937) died in October 2016

Class of 1942
Mrs. Dorothy M. Thomas
Iowa City, IA (BA 1942) died in September 2017

Class of 1944
Mr. Eldert A. Groenendyk
Des Moines, IA (MS 1944) died in April 2017

Class of 1948
Mr. Ralph H. Goebel
Edina, MN (MS 1948) died in October 2017

Mr. Russell L. King
Little Rock, AR (BS 1948, MS 1949) died in November 2016

Class of 1950
Mr. Carlton Harker
Winston Salem, NC (BA 1950, MS 1951) died in May 2017

Class of 1952
Mr. Robert F. Davis
Allen, TX, (BA 1952, MS 1954) died in February 2017

Class of 1960
Mr. David M. Rinderknecht (MS 1960) died in July 2017

Class of 1962
Miss Elizabeth M. Schwegler
Rock Island, IL (MS 1962) died in August 2017

Class of 1967
Dr. William (Bill) R. Clarke
Iowa City, IA (MS 1967, PhD 1975) died in October 2017

DR. WILLIAM (BILL) R. CLARKE

Bill was born in Lava Hot Springs, Idaho, to Marguerite and William R. Clarke. Bill attended the University of Oregon in the mathematics program and was a member of the marching band. In 1964, he moved to Iowa City to attend the graduate program at the University of Iowa.

Bill was a lover of the outdoors. He and his wife Shirley traveled the United States, backpacking in places like the Appalachian Trail, Isle Royale, the Grand Canyon and most special to them, the Tetons.

Bill's professional family played a big part in his life. Performing good science and doing work that made a difference in people's lives were core values for him.

He was recognized for his honesty, integrity, empathy, and genuine concern for doing the right things to help colleagues, friends and collaborators. He often expressed how important working with his students was, and the joy that it brought him.

His contributions to the University of Iowa spanned 1969-2015, conducting research and teaching in Biostatistics, Preventive Medicine and Environmental Health, and the College of Public Health. He authored or co-authored over 125 peer-reviews publications, and received the College of Public Health Faculty Research Award in 2001 and the Faculty Service Award in 2015.

On November 14, 2014, the 25th anniversary of the Clinical Trials Statistical Data Management Center, Bill was honored for his outstanding leadership and service to the University of Iowa. He was associate director for the center from 1989 to 2000 and director from 2000 to 2010.

Bill is survived by his wife, Shirley; son, Bill (Jill) Clarke of San Jose, California, and daughter, Kelley Clarke of Tiffin, Iowa.

Kyle Scales, Mason Newhard, Alec Ciaccio, Peter Piekarski, Donna Piekarski, Morgan Novak, Jason McDowell, and Quynh Le

Mitchell Tamashunas, Nathan Halko, Peter Piekarski, Donna Piekarski, Angie Fiore, Xavier Loomer and Nathaniel Van Kleek

(L-R) Morgan Zuidema, Tina Liu, Peter Piekarski, Donna Piekarski, Maxwell Unmacht, Austin Enderson-Ohrt, Cody Krause

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@UIOWAStatActSci is the official Twitter account for the Department of Statistics and Actuarial Science at the University of Iowa.

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STATISTICS & ACTUARIAL SCIENCE

SAMPLER

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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, go to the Department's online gift website at:
http://www.givetoiowa.org/statistics

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.501(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 1-June 20 to the Department of Statistics and Actuarial Science Development Fund or any other area 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.