

Department of Statistics

Newsletter Summer 2018



Greetings from the Department Head

Thank you so much for taking time to read our newsletter. I'm happy to report that the Department is doing well and we've had a successful year. Inside you'll find more information, but here are some highlights that I would like to draw your attention to.

We've hired a new assistant professor, Dr. Pratyay Rudra, who has recently completed post-doctoral study at the University of Colorado-Denver in biostatistics. He will be an outstanding addition to our group as we further engage external constituents and broaden our collaborations.

We are now in the second year of our online masters in applied statistics program. It has been a very good start for this new degree, and it is our hope that we can broaden our footprint nationally by offering this degree. Many of our courses are now offered online as a result, which has given us a lot of flexibility academically. Please alert people you know who might be interested in working on an online statistics degree to check out our program on our website.

Please see our article on Dr. Gaute Vik, who was named our Outstanding Alumni and was also inducted into the OSU Arts & Sciences Hall of Fame. Gaute has also blessed us with a donation which has allowed us to recruit and recognize our outstanding students.

And finally, we've had plenty of good news to report from our faculty, staff, and students, so please read the personal information presented in the newsletter. Also know that we are always interested in hearing from our alumni and friends. If you have interesting information, either personal or professional, please let us know. As always, we love to be visited by former students, staff, or faculty. Just let us know in advance if you plan to visit.

One last note: I would like to express my deepest gratitude to Dr. Carla Goad, who is gracious enough to put this newsletter together. Getting information from us must feel like herding cats. Thanks, Carla!

Best,

Mark

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Remembering Ron McNew— Friend and Faculty Member

The Department is saddened by the recent death of former faculty member, Dr. Ronald W. McNew, 77. Ron died on May 25, 2018, in Bozeman, MT. Ron was on the faculty in the Statistics Department from the mid-1970's to 1988. He left OSU in 1988 to take a faculty position at the University of Arkansas until his retirement in 2006. After retirement he called Perkins, OK, home again until matters of health moved him closer to family in Bozeman. Faculty member Brenda Masters remembers Ron as an excellent teacher and close friend. Having taken graduate classes from Ron at OSU and later working with him at U of A,

Andy Mauromoustakos (PhD 1988) regards Ron as a father-figure. Andy writes, "If you were to poll OSU STAT graduates, . . . from which professor they learned the most and whose graduate classes challenged them the most during their studies, I have no doubt that Dr. McNew's name will be on the top of that list."

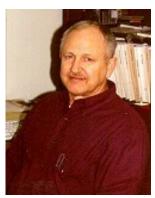


Photo provided by A. Mauromoustakos

Vik Inducted into CAS Hall of Fame and New Vik Family Awards



In the 2017 newsletter we reported that in September 2017, the OSU College of Arts and Sciences inducted Dr. Gaute Vik (Ph.D., 1984) into CAS Hall of Fame. This was done in conjunction with the Department of Statistics honoring Vik with their Distinguished Alumni Award. Vik's induction into the CAS Hall of Fame marks the first Statistics alum to be so honored.

Gaute Vik graduated as candidatus realium in applied mathematics from University of Bergen, Norway, in 1978. He was initially employed by the Norwegian Defense Research Establishment, and then the Norwegian Government awarded him a fellowship to study at OSU in 1982. Dr. Vik graduated in 1984 with a Ph.D in Statistics.

In 1986, he was employed by Teleplan, a Norwegian Telecom Consultant Company and was the head of business in Riyadh, Saudi Arabia, where he had a small staff. By 1994 he had closed a record breaking telecom contract after expanding the business to the surrounding countries. Growth and expansion of the business continued over the years.

In 2008 the company was reorganized, and Dr. Vik was named CEO. In his personal life Dr. Vik is an avid hunter and angler. He also enjoys traveling. He enjoys piloting his boat and has traveled the Scandinavian waters extensively.

Last fall Gaute and his family made a generous donation to the Statistics Department. The Department has established two awards and a fellowship with these funds. The Vik Family Awards recognize the top graduate student and the top graduate teaching assistant in the department. These awards will be given annually and will carry cash prizes. The Vik Family Fellowship will be awarded to an outstanding new recruit to the Statistics graduate program. The Department is extremely grateful to the Vik Family for their generous support.

This is Us...



During the last year the College of Arts and Sciences (CAS) went through a rebranding process. Each department in the College is now represented by both text and icon in the media circulated by the College. To the left is the statistics icon.

Additionally, a circular logo for the College was adopted with a specialization for each department in the College. On the right is our new "Circle Pete" logo.

#CAScowboys is the hashtag for the College. You may see these items on our webpage and Facebook page as well as all CAS media.



OSU Homecoming 2018

For complete Homecoming information, see http://www.orangeconnection.org/ homecoming



If you are planning to visit Stillwater for Homecoming (or any time), please let us know. We'd love to see you!

Faculty & Staff Notes



Adam Molnar continues to serve as course coordinator for Stat 2013, nonbusiness introductory statistics, and teach various undergraduate and graduate courses. The innovative honors course (described elsewhere in this newsletter) continues to be discussed. with a presentation at the 10th International Conference on Teaching Statistics in Kyoto, Japan. In personal news, on January 6, 2018, Adam married Ji Hong, an associate professor of educational psychology at the University of Oklahoma. The OU-OSU rivalry is less important in their lives than the qualitative-quantitative gap.



Josh Habiger traveled to Vancouver in August 2017 to present research at the International Chinese Statistical Association's "Frontiers of Big Data and Statistical Sciences" conference. He and his wife, Kate

Allred, celebrated 10 years of marriage in May 2018 and traveled to Hawaii. He enjoyed teaching two new classes last academic year, Computational Statistics and Advanced Probability. He is looking forward to developing a new SAS and R Programming course with Dr. Goad next fall.

lowa State University recently congratulated **Leroy Folks** (faculty 1961—1998) on the 60th anniversary of his PhD.



Ye Liang was recently promoted to Associate Professor with tenure.

Congratulations!

Carla Goad resumed usual teaching duties in Fall 2017 after her Spring sabbatical. In addition to academic and ag research duties she edits the Department's web page and newsletter. Catching up with alumni is the best part of these tasks. She was very touched when Chip Litchfield stopped by the office to see her, and when Marta Aramburu-Zabala (see Alumni Update) traveled to Stillwater to visit her during a trip to the US. A three hour visit over dinner at Eskimo Joe's just wasn't long enough!





Mark Payton recently married Dr. Amy Williamson in a private ceremony along the Rio Grande River in southern Colorado. Amy is an associate professor in Human Development and Family Sciences at OSU. They've moved into a house on the north side of Stillwater with Amy's two kids, two dogs, and a cat. They honeymooned in Rome and London. Mark's son, Riley, is studying music at Metropolitan State University in Denver. Mark's daughter, Mackenzie, just finished her freshman year at the University of Arkansas where she is studying biochemistry.



Going to JSM? Look for OSU faculty there!



Mindy McCann and Lan Zhu attend the Women in Science Conference in Tulsa for the fourth year, meeting middle school and junior high students, discussing an education and careers in statistics.

A Change in Statistics Honors Course

Through Spring 2016, the Department offered an honors section of Stat 2023, Elementary Statistics for Business and Economics. Most recently led by Josh Habiger, the course included standard content for Stat 2023 plus an additional business-related project. In the summer of 2016, the Department was asked to change to a one-credit honors addon, available to students taking any introductory course. This would allow Stat 2013, 4013, and other students to have a group honors class which meets once a week. Since Fall 2016, Adam Molnar has taught the honors statistics add-on.

The purpose of the honors add-on is to cover a topic related to the introductory curriculum, although not fully part of a standard course. In Fall 2016, the course covered "Politics and Polling", including how polls are conducted and voting power in elections. Content proved extremely relevant, given the uncertainty in presidential polling against the election result.

Since presidential elections occur only every four years, the topic changed beginning in Spring 2017.



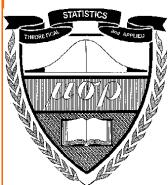
For the last three semesters, the addon has covered "Games of Chance and Skill". Classes include examples of decision theory. counting tecniques, and game theory topics at least partially statistical. but rarely explored in introductory courses. The final project asks student groups to analyze a game on aspects of chance, skill, and player interaction, presenting a poster to the class. See an example poster pictured on the left.

The course takes an active-learning approach; students frequently think about the lesson through a simple illustrative game, such as Share or Keep (like the TV show Friend or Foe), Liar's Dice (like Pirates of the Caribbean 2), or one-card poker.

Because active learning in introductory statistics is rare, especially for extension topics, Dr. Molnar was invited to speak about the use of probability games at the 10th International Conference on Teaching Statistics in July 2018.

Mu Sigma Rho Chapter Reactivated

The Statistics Department at Oklahoma State is reactivating its Mu Sigma Rho (a statistics honor society) chapter after several inactive years. Requirements for graduate students to be nominated are: 12 hours of graduate level STAT courses completed, 3.50 GPA in Statistics courses. Requirements for undergraduates students to be nominated are: being a Statistics major, completing at least 60 hours total and 9 hours of Statistics, and maintaining a minimum statistics 3.40 GPA and overall GPA of 3.20.



2018 new student members are listed here.

Graduate Students:

Biting Zhou, Qingqing Dai, Shangyuan Ye, Ru Wang, Daniel Scott, Xijia Han, Josephine Akosa, Xiaowe Hu

Undergraduates: Nicole Judkins, Alexis Carr, Carson Cole, Alithea Charlson

Statistics Capstone Course

Recently, university leadership has tried to ensure that undergraduates have integrated projects in their major. One approach to provide a summative experience is a capstone, a senior-level course where students undertake new projects using their past knowledge. Though the new courses have been added to the degree requirements since 2014, students in the program at that time were grandfathered in the older degree requirements which did not require the capstone course. For the past two academic years, the Seniors had this requirement and could choose between STAT 4981 (Graduate School Focus) in the fall or STAT 4991 (Career Focus) in the spring.

Both 1-credit courses require an individual project with an oral and written report. Students can either read 2-4 academic papers about a statistical topic, or conduct an analysis of a data set using tools from earlier classes like Statistical Methods and Applied Linear Regression. Research projects have included learning about Poisson count regression, the dark (unreported) figure of sex crimes, and models of who spends money on online games. Data set response variables included loan defaults and basketball player's Twitter follower counts.

As the Department also wants to encourage students' communication, each course includes an additional spoken presentation. STAT 4981 students speak to their classmates about a graduate school program of interest; STAT 4991 students talk about a potential job. Finally, each student takes an open-book comprehensive exam on topics in the curriculum. Although students don't enjoy the test, they understand its purpose - to provide evidence of their knowledge for accreditation and other onlookers. Through the research, oral, and written parts of the capstone, our seniors demonstrate their knowledge.



Nicole Judkins Named 2018 Outstanding Senior in Statistics

At the College of Arts and Sciences Awards Banquet in April, Nicole Judkins was honored as the Outstanding Senior in Statistics for 2018. In addition to earning a BS in Statistics, she has also earned a second BS degree in Mathematics with an option in Actuarial and Financial Mathematics. Additionally she has completed minors in economics, finance, and general business administration.

Nicole has spent the last year interning with American Fidelity Assurance. After graduation, Nicole plans to explore the field of data analytics. Her initial career goals are to earn enough money to afford the only thing that really matters: a dog.

Two scholarship awards were also presented at the spring banquet. The Driskell Warner Family Scholarship was awarded to Carley Bender, majoring in Statistics and Mathematics. The Ray and Helen Freeman Scholarship was awarded to Carson Cole, majoring in Statistics, Economics, and Mathematics.

Left: Dean Bret Danilowicz congratulates Nicole at the College of Arts and Sciences Award Banquet in April.



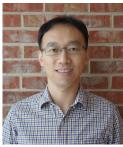
Pictured at the CAS Awards Banquet are from left to right: Carley Bender, Dr. Adam Molnar, Nicole Judkins, and Carson Cole.

Alumni Update

Vrinda Nair (MS 2009) went to work for Nielson for 6 years after her graduation. After briefly working for the Census Bureau she went to work for AbilityOne, a federal agency that champions increasing employment for the blind and the severely disabled, by giving funds to privately owned non-profit agencies, and developing programs to support the cause. Vrinda examines data for fraud and misuse of funds. Her travels have included Bangkok, Montreal, Bulgaria, and Mexico City. In her free time she meditates, does yoga, and is learning to play the violin.

Abby Hebenstreit (BS 2016)

graduated with her Masters in MMR from SIUE. During her studies she was placed in an internship position at Kynetec in St. Louis. After her graduation in May 2018 she has been offered a full time position with Kynetec as a research analyst. She also plans to teach introductory business statistics online for Missouri State University in summer of 2018.



Hung-Chih (Hank) Ku (PhD 2012) worked as a post-doc at the University of Texas Southwestern Medical Center. In 2015 he accepted

the position of assistant professor in the Department of Mathematical Sciences at DePaul University. His daughters, Charlotte and Alexandria are in the 5th and 1st grades, respectively.

Chip Litchfield (BS 2008) and his wife, Desiree', visited the OSU campus in April with their son, Ray. Ray is in high school and is visiting college campuses.

"I'm grateful for my time at OSU and you and all of the Statistics department staff for preparing me so well for grad school and a career in research!"

- Abby Hebenstreit

Zhesi Chen (BS 2008, MS 2012) works for Tigunia, LLC, a company owned and managed by her husband, Bret Weber. Zhesi manages the finances for the company of about 30 employees and contractors. Last year we told you about her son, Harrison, who has an extremely rare genetic disorder, Hurler Syndrome. He is improving as of this writing since a stem cell transplant. Harrison was recently featured on OKC KFOR News: http:// kfor.com/2018/04/10/it-wasdevastating-edmond-boy-diagnosedwith-rare-condition/. Please continue your prayers for Harrison's recovery.

Sarah Mattson (MS 2010) started a new job at Optum as a healthcare analytics consultant in January 2018 after working for Community Care since her graduation. She loves her new job!



Jordan Crabbe (PhD 2013) is an assistant professor of statistics at University of Cincinnati—Blue Ash. Jordan and his wife now have four daughters. Girl #4 just arrived May 29th and her big sisters are all quite proud.

Derek Wietelman (BS 2016) completed his Master's degree in Environmental Policy and Natural Resource Management at the University of Indiana. In August he will go to Washington DC to start a full-time position as a research assistant at Resources for the Future (RFF).



Tracy Morris (PhD 2007) has been at University of Central Oklahoma in Edmond, OK for 11 years now. She is a professor in the Department of Mathematics and Statistics. She has two

children, Campbell (11) and Ella (7).

Xianzhang (Shan) Huang (MS 2002) is an associate professor and graduate director for the Department of Statistics at the University of South Carolina.





Gary Hatfield (MS 1978, PhD 2011) has been promoted to Associate Professor of Statistics with tenure at South Dakota State University.

His wife, Melita, works for the school system in Brookings, SD. She works with special needs students. Gary and Melita now have three grand-daughters.

Marta Aramburu-Zambala (exchange student AY 2012-2013) visited Stillwater in February 2018. Marta finished her Master's Degree in Statistics at University of Paris-Sud (South). She worked for a banking institution in Florence, Italy and was later transferred to an office in Paris. She visited the US in early 2018 prior to moving to Madrid, Spain to be nearer to her family.

Nicholas Kaukis (PhD 2016) has accepted a teaching position at Indiana University (previously held by Sayed Mostafa) beginning in August 2018. Nick has been a visiting assistant professor for our department since his graduation.

Sayed Mostafa (MS 2013, PhD 2016) has accepted a Tenure-Track Assistant Professor position in the Mathematics Department at the North Carolina A&T State University in Greensboro, NC starting in Fall 2018. I and my family are excited about moving to NC and starting this new position.

Andy Mauromoustakos (PhD 1988) has been at the University of Arkansas for 30 years as an agricultural statistician. Daughter Anna will start a nursing program this fall, and older daughter Eleni graduated from the Business School in 2016 and now works as a floral designer in KC.

Donate to the Department

The Department is able to make student awards annually based on the generosity of our alumni and other donors. We appreciate your support. When OSU Foundation calls, you can specify where your donation dollars go.

Friends and Alumni who wish to make a financial gift to the Department of Statistics at OSU should go online to http://statistics.okstate.edu/donate. Donors can choose from several funds. Among them are following fund accounts:

Statistics Department Fund # 22-43500

The Statistics Department Fund supports guest speaker activities.

P. Larry Claypool Undergraduate Statistics Scholarship # 22-52900

The P. Larry Claypool Undergraduate Statistics Scholarship is awarded to an outstanding undergraduate student.

Carl Marshall Award #22-41100

The Carl Marshall Award is presented to the outstanding Ph.D. graduate.

Robert D. Morrison Award # 22-80500

The Robert D. Morrison Award is presented to the outstanding M.S. graduate.

David L. Weeks Award # 22-32100

The David L. Weeks Award supports an outstanding statistics graduate student in Experimental Design.

J. Leroy Folks Award # 22-56800

The J. Leroy Folks Award honors distinguished alumni of OSU Department of Statistics.

Contact Us

Department of Statistics Oklahoma State University 301 MSCS Stillwater, OK 74078-1056

(405) 744-5684 Office

(405) 744-3533 FAX

statistics@okstate.edu

Visit us on the web at www.statistics.okstate.edu

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Oklahoma State University 301 MSCS Stillwater, OK 74078-1056