Dear alumni and friends:

It’s springtime again in Athens, which means that the flowers are blooming, the days are getting longer, and it’s time for the departmental newsletter! We have had another eventful year here at UGA, filled with faculty and student achievements, special events, and the ever-constant change.

We have another new face in the front office, Kirsten Jackson, who replaced Ashten Goeckel as our Administrative Associate. Kirsten joined us from the McPhaul Center, College of Family and Consumer Sciences. Faculty are also on the move, with Jack Morse accepting a position at the Terry College of Business, Kim Love opening her own statistical consulting service here in town, and long-time Undergraduate Coordinator and Senior Lecturer Christine Franklin announcing her retirement at the end of this academic year. Steve Morris, who has been teaching in the department for the last two years on a limited-term appointment, will be exploring new opportunities in the Atlanta area. We wish Jack, Kim, Chris, and Steve the best of luck in all of their future endeavors. Finally, we were fortunate to have another former student, Chenhua Zhang, return to the department as a limited-term Assistant Professor for the year.

This year has also, not coincidentally, seen us undertake a rather intensive period of recruiting of faculty. We continue our search for an external Department Head, interviewing some very strong candidates. I hope that there will be updates on that search in the next newsletter! We have successfully recruited a new Lecturer and a new Assistant Professor, both of whom will join our ranks in Fall 2016. The search for a new Associate Director of the Statistical Consulting Center is still ongoing as I write these words. In all, we will have interviewed 13 candidates for four different positions during the Spring term! Faculty, graduate students, and staff pulled together to show all of our job candidates a good time, and the best of Southern hospitality.

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In Fall semester, the department hosted the first ever GA Statistics Day. Abhyuday Mandal and I worked hard over the spring and summer to line up speakers and a range of internal (UGA) and external (corporate) sponsors for this event, which brought together faculty and students from UGA, GA Tech, and Emory, as well as from several other universities around the state, the Centers for Disease Control and Prevention (CDC), and local industries. We mingled through the day, starting with an interesting keynote talk by Rob Tibshirani of Stanford University, followed by technical talks given by representatives from each of the three sponsoring institutions, roundtables, and student posters. By all accounts the day was a great success, and I am already looking forward to the next GA Statistics Day, to be hosted by GA Tech next fall. Please join us if you can.

Also of note from the Fall term is that the department sent two teams to the SAS Data Analytics Shootout this year, one supervised by TN Sriman, and one by Jaxk Reeves. Several of the students from last year’s winning team participated again. Both UGA teams placed in the top three, with the team supervised by TN taking first place overall, and the team supervised by Jaxk coming in third. Congratulations to both teams for raising the bar on this data analysis competition. I’ve heard graduate students talking about finding other such competitions to participate in, bringing to bear their data analysis and communication skills. This is definitely an exciting time to be a statistician, and it’s fantastic to see our students jumping in to tackle these large, competition-style data sets.

Departmental faculty have also seen some recognition this year. Lynne Billard was recognized as an Honorary Member by the Statistical Society of Slovenia. Lynne was honored at a special ceremony of the Society held at the Institute for Biostatistics and Medical Informatics, University of Ljubljana. In recognition of this rare honor, Lynne gave a lecture entitled “Sir Ronald A. Fisher and the International Biometric Society.” Pengsheng Ji was awarded the M.G. Michael Research Award from the Franklin College of Arts and Sciences, and Kim Gilbert received the Sandy Beaver Excellence in Teaching Award.

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LETTER FROM THE DEPARTMENT HEAD (continued)  
Nico Lazar | Interim Department Head

Award, also from the Franklin College of Arts and Sciences.

I’m also happy to announce some successful promotions for our faculty this year. Liang Liu has been promoted to Associate Professor with tenure, and Mark Werner has been promoted to Senior Lecturer. Congratulations to all of these accomplished members of our faculty.

Our faculty members continue to be active in publishing papers and writing (and obtaining) grants. Congratulations particularly go out to Ping Ma, Wenyuan Zhong, and Jennifer Kaplan, who are building up vibrant research labs in bioinformatics/Big Data (Ma and Zhong) and statistics education (Kaplan). All are attracting strong graduate students to our program and allowing us to flourish in new directions. Many faculty members continue to serve on the editorial boards of leading journals in statistics and subject matter areas, as well as taking roles in organizing invited and other sessions at major statistics conferences around the world.

Later this Spring semester we will have a few more noteworthy events. First, on April 7, David Ruppert will be the speaker in the joint Clemson-UGA seminar, held this year here at UGA. David Ruppert is Andrew Schultz, Jr., Professor of Engineering, School of Operations Research and Information Engineering, and Professor of Statistical Science at Cornell University. He is an internationally known scholar whose current research is on calibration and uncertainty analysis, semiparametric regression, splines in statistics, functional data analysis, astrostatistics, biostatistics, and more. We look forward to welcoming Professor Ruppert to campus.

In mid-April, the FMI research group will host the fifth NOOGINS workshop, with keynote speaker Daniel Rowe of Marquette University. For the past ten years, NOOGINS has been a leading venue in Northern GA for faculty and students interested in functional neuroimaging data to share ideas, start collaborations, and learn about cutting-edge methods.

And, finally, our Bradley speaker this year, coming at the end of April, is Professor Jun Liu of Harvard University. The Bradley event is always a highlight of the year, giving especially our graduate students an opportunity to meet and interact with a leading scholar of statistics. The lecture is co-sponsored by the graduate student organization, STAT Club, which has been revitalized this year under the dynamic presidency of Kristen Roland.

While we have many reasons to be proud, there are also many ways in which we can become better. A good strategic plan can help with this, and we are working on improving and fine tuning our current plan. Attracting the best faculty and graduate students will also help, but competition is stiff. Endowed professorships and graduate fellowships can help, and if you are in a position to consider helping us with this, I encourage you to explore this possibility with the Office of Development & Alumni Relations in the Franklin College of Arts and Sciences. Donations, large or small, have increasingly become critical to maintain programs of high quality, and we are very appreciative for your continued support.

I hope that you enjoy the articles in this Newsletter, and look forward to meeting many of you during the next year, either here in Athens or anywhere else on the planet.

Nicole Lazar

UNDERGRADUATE PROGRAM UPDATE  
Christine Franklin | Undergraduate Coordinator

Since the last newsletter where we listed our graduates from 2014, we proudly graduated in 2015 the following students with a BS degree in Statistics: Spring 2015 – Vaibhav Ashok, Cody Baetz, Daniel Bailey, Haley Bird, Samantha Cao, Isabelle Dooley, Allison Griffin, Samuel Hempel, Colton Holder, Kristan Jackson, Tara Kelly, Zhuoxi Li, Joshua Lukemire, Alfred Meadows, Joseph Powell, Alyssa Sanders, April Thompson, Brogan Williams, Peter Yang; Summer 2015 – Stephanie Hamon, Jonathan Smith, and Katherine Vauz; Fall 2015 – Robyn Braid, Emily Burr, Alexis Cassotta, Zixuan Jiang, Yan Li, Elliot Outland, Stephen Terry, Michael Tseng.

Several of our students continue to be inducted into honor societies such as the National Statistical Honor Society Mu Sigma Rho, Phi Kappa Phi, and Phi Beta Kappa. Some of the students have continued with graduate school and others have joined the workforce using the skillset they gained as a statistics major. Our students are sought out as future employees in this data-centric world. Congratulations to all our graduates!

If you haven’t already, browse our undergraduate website. Here is the link: http://www.stat.uga.edu/undergraduatenew/.

Our undergraduate program continues to thrive with UGA students recognizing the importance of a background in statistics – this is seen in the increasing number of both majors and minors. The demand for the seats in our classes is greater than seats we have available. We continue to find ways to improve our undergraduate program, which is now larger than our graduate program. We continue to work diligently to examine the desired program goals and learning outcomes for both our undergraduate and graduate students and how to assess the learning outcomes. We are also examining possible new introductory course sequences are our majors and other STEM related fields.

Our year-long Capstone course (STAT 5010-5020) continues to provide our undergraduates the opportunity to apply the knowledge they’ve gained to real-life research problems. This current academic year we have another large class, with 32 students. We continue to have several students taking advantage of internship opportunities. We welcome any leads on opportunities. We leads on summer and academic year internship possibilities for our students.

FACULTY AWARDS

Kim Gilbert  
Sandy Beaver Excellence in Teaching Award  
This award for excellence in teaching is given annually to honor outstanding faculty in the Franklin College who have shown a sustained commitment to high-quality instruction.

Pengsheng Ji  
M.G. Michael Award for Research  
The M. G. Michael Award was established in 1944 to stimulate new initiatives in scholarship in all areas of the Arts and Sciences. Its primary purpose is to encourage the development of a new idea or project during the coming year.

Jennifer Kaplan  
Jackie Dietz Best Journal of Statistics Education Paper Award  
The Jackie Dietz Best Journal of Statistics Education Paper Award, established in 2011, is given annually to the best paper in the Journal of Statistics Education in the previous year. It is named in honor of Jackie Dietz, the founding editor of the journal.

Abhyuday Mandal  
Honorary Member of the Statistical Society of Slovenia  
Lynne was honored at a special ceremony of the Society held at the Institute for Biostatistics and Medical Informatics, University of Ljubljana. In recognition of this rare honor, Lynne gave a lecture entitled “Sir Ronald A. Fisher and the International Biométric Society.”

T.N. Sriram  
2015 Abraham Wald Prize in Sequential Analysis  
This award is given each year to the best published paper among all papers published in the premier international journal Sequential Analysis.

GRADUATE PROGRAM UPDATE  
Lynne Seymour | Graduate Coordinator

Our graduate students have always been successful in the job market, but now more than ever, they are in extremely high demand! All of our PhD graduates have accepted offers before they graduate. In fact, last year, three of our nine PhD graduates joined the Quantitative Associates program at Wells-Fargo in both Charlotte, NC, and San Francisco, CA. Another four took very nice positions in academia.

The same is true of nearly all of our MS graduates though many go on to PhD programs in another discipline and/or elsewhere.

In spite of the incredible job opportunities in Statistics these days, we are still seeing a dearth of domestic applicants to the program. In recent years, we have been very successful in attracting domestic students, but for Fall 2016 we have noted a significant drop in applicants. Overall applications are down by 100, and applications from domestic students have dropped from 44 for Fall 2015 to 18 for Fall 2016. If you have any ideas for helping us to increase our domestic applicant pool, we would love to hear them!
The Fall 2015 Colloquium series featured a stimulating and diverse array of speakers. A total of 17 presentations were given, on both theoretical and applied topics ranging from forensic science, text mining and paleoclimatology to Bayesian neural networks and probabilistic models for gene evolution. Two of these talks were jointly held with the UGA Biostatistics department. The department chair, Dr. Nicole Lazar, initiated a program to provide support for up to three graduate students to have lunch with the seminar speaker in order to allow UGA students to ask questions and receive advice from established statisticians from all over the country. Feedback from the students was very positive as they took full opportunity to interact with the various guests.

We had a shortened colloquium series of eight talks during the Spring 2016 semester, due to a lengthy interview period over the first half of the semester for four separate faculty openings (Department Head, Assistant Professor, Associate Director for Statistical Consulting Center, and Lecturer). Short-listed candidates for each position gave a presentation (or in the case of Department Head candidates – 2 presentations) which didn’t leave much time for additional colloquium talks! It was indeed a busy time for the entire department but following the end of the interviewing process near the midway point of the semester, the colloquium series returned to the regular weekly schedule.

On April 22 2016, the UGA Statistics department hosted the annual Bradley lecture, in honor of the late Professor Ralph A. Bradley. The guest speaker this year was Jun Liu from Harvard University who spoke about, “Detecting Nonlinear Relationships via Slicing”, and how a Bayesian approach was developed to detecting nonlinear dependencies and interaction effects, with particular applications in bioinformatics.

We encourage you to visit the colloquium website for the most up to date information on upcoming speakers, presentation abstracts and links to guest speakers’ websites. Our Colloquium Series enhances the educational experience of our students, provides research opportunities for our faculty, and enriches the academic environment of the UGA Statistics Department. If you would like to support this endeavor, please click on the link below.
STAT CLUB UPDATE

Kristen Roland | STAT Club President

What a year it has been for the Stat Club! This academic year has been packed with social and academic events. To kick off the beginning of the semester, the Stat Club hosted a river tubing expedition to allow new graduate students to interact with veteran graduate students. Several Happy Hour events downtown enabled students to interact in a social setting and discuss classes, research, and departmental events. UGA’s home football schedule (Go Dawgs!) was filled with amazing opportunities for the Stat Club to get together to tailgate before and view the game as a group. In October, the Stat Club helped with the first Georgia Statistics Day, hosted at the department and held at UGA.

Stat Club was excited to introduce its own Junior Colloquium Series. The purpose of this Junior series was to promote student presentations on research graduate and undergraduate students might benefit from, current dissertation or thesis work, independent research, and skills student require for classwork or to find internships and jobs. This allowed our students to gain experience in presenting, and sharing topics that they have worked on. Our first Junior Colloquium was held in November where Andrew Mullins, a second year Master’s student, discussed R- Markdown, which combines LaTeX and R into a seamless Markdown, which combines LaTeX and R into a seamless Markdown. It was a useful talk that has since inspired many students to incorporate it into their own research, projects, and assignments! We are excited to develop this series in the 2016-2017 academic year!

The Fall semester ended with the International Pot Luck! This year had a great turn out with many different dishes available. Traditional American dishes blended with several Chinese and Korean dishes, which expressed the extreme diversity of our department. Students were able to enjoy the hearty feast while discussing the upcoming finals and Winter Break.

Spring Semester was a blur of departmental events, many of which Stat Club has helped host. There have been many lunches with the visiting speakers where students have been able to interact with such talented and prominent members of the statistical field. The department also hosted Industry Day and the annual UGA/Clemson Joint Seminar. Stat Club helped organize lunches for the students attending to interact with the guest speakers, Vladimir Dragalin and Dr. David Ruppert. It has been quite the semester!

The final academic event of the year was the Bradley Lecture. Students were eager to meet with Dr. Jun Liu at the student lunch before the afternoon talk. The talk and dinner following was held at the State of Georgia Botanical Gardens. At this year’s event, the department recognized the students who received the annual departmental awards during the dinner. The Bradley Lecture Picnic was the final social event of the semester. Students and faculty were able to mingle before students prepared for finals and dispersed all over the world for the summer.

Stat Club is eager to continue these new events and develop many more social and academic opportunities for the graduate and undergraduate students within the department!

CONSULTING CENTER UPDATE

Jaxk Reeves | Director

The SCC started off well in 2015 under the leadership of Director Dr. Jaxk Reeves and Associate Director Dr. Kim Love. However, 2016 has gotten off to a rocky start as Dr. Love resigned as of Dec. 31, 2015 to form her own private consulting practice. Kim’s 5.5-year tenure in the SCC has characterized by tremendous growth in the training of graduate students working in the SCC, as well as implementation of many procedures to increase the efficiency of the SCC operation and to improve client satisfaction. The department has interviewed several candidates for the position during Spring of 2016, and hopes to have a new Associate Director in place by July 1st. It will be very difficult to fill Dr. Love’s shoes, but the SCC is committed to continued development in the directions which she espoused.

During the 2015-2016 Academic Year, the SCC has provided consulting assistantships for eight graduate students from the Department of Statistics: Fei Liu, Wenhao Pan, Zhen Yan, Yaotong Cai, Patrick Kriebel, Xianyan Chen, Hao Tong, and Xiaodong Jiang. These paid consultants, along with about 20 volunteer consultants, have made strong contributions to research efforts at UGA and beyond. Support for the SCC continues to be provided by the Franklin College of Arts and Sciences, the Office of the Vice President for Research, and the UGA Graduate School, in addition to the income earned through SCC projects. This year, the College of Agriculture and Environmental Sciences also agreed to contribute to this effort because of the large number of their students and faculty who benefit from the SCC’s assistance.

The SCC’s collaborative relationships across the University remain strong. The SCC has continued to maintain a strong client base from the Franklin College of Arts and Sciences, the College of Agricultural and Environmental Sciences, the Warnell School of Forestry and Natural Resources, the Odum School of Ecology, the College of Family and Consumer Sciences, and the College of Veterinary Medicine. The SCC plans to offer more short courses and workshops soon after a new Associate Director is hired. The relationship with our primary corporate client, Unclaimed Property Consulting and Reporting, remains strong, but we hope to develop several more strong corporate relationships so as to be better equipped to handle the financial exigencies which seem to occur fairly regularly with academic budgets.

Both the Director and Associate Director have been active participants in bi-weekly conference calls with similar staff at ten other land-grant institutions (Virginia Tech, Clemson, Penn State, Ohio State, Texas A&M, Purdue, Minnesota, Nebraska, UCLA, and Washington State) which have statistical consulting centers. These conversations have proven quite useful in allowing UGA’s SCC to learn what others are doing and to anticipate potential problems before they occur.

The SCC has continued to emphasize graduate student training, with a new course (STAT 8001 – Advanced Statistical Collaboration) added to the curriculum and taught for the first time in Fall 2015. In addition, senior students continue to mentor students who are new to the SCC and the practice of consulting. Senior PhD student Zhen Yan has taken a lead role in this process as the SCC’s current Administrative Consultant, and both she and Wenhao Pan have been instrumental in keeping the SCC functioning after Dr. Love’s departure.

The SCC is looking forward to returning to full strength in the coming year and hopes to continue to develop ways to meet the three areas of its mission, including making statistical support available to UGA researchers, increasing the quality of quantitative research at the University, and providing valuable educational experience and training to graduate students in the Department of Statistics.

STAFF PROFILE: Nathan Cooper

Nathan is a graduate of the University of Georgia and has been working at the University since 2007. He has worked within Franklin College IT for 6 years. Along with Matt Lemieux, he provides IT support for Statistics, Biochemistry, Artificial Intelligence, Bioexpression & Fermentation, and the Institute of Bioinformatics. Previous to working for Franklin College, he worked at GEICO and UGA’s Undergraduate Admissions Office. He is from Warner Robins, GA and has 6 siblings along with 14 nieces and nephews. He considers himself a health nut and spends a lot of time on nutrition and working out. His hobbies include mountain biking, backpacking, and kayaking. He tries to meditate daily and wants to get into yoga. He would like to live in Colorado one day and his Patronus is a moose.

Faculty and Students enjoying the International Potluck Dinner hosted by the Stat Club
NEW EXTERNALLY FUNDED GRANT PROJECTS IN THE DEPARTMENT OF STATISTICS

"A Young Statistician is Learning Design of Experiments"

Professor Abhyuday Mandal, Professor Ping Ma and daughter, and Statistics Graduate Student, Chul Moon are working on research related to Design of Experiments.

Jennifer Kaplan, Associate Professor, Co-PI
NSF-DUE “The HILT-LAS Project: High Impact, Little Time activities that address Lexical Ambiguity in Statistics”

Education researchers in the STEM disciplines have long noted that language poses a barrier for students studying science. Statistics, as a discipline, has no lack of jargon, so it is no surprise that undergraduate students in introductory statistics courses have difficulty mastering the language of statistics. Through this project the research team will create and study a collection of research-based activities and corresponding materials for first-year undergraduate statistics courses. These activities and materials will be designed to have high impact on student learning, while requiring little time for an instructor to adopt and implement. These High Impact Little Time (HILT) activities and materials also will focus on breaking down language and jargon barriers in statistics in the process.

The goals of this project are to: (1) develop a set of research-based HILT activities for addressing issues in student learning of statistics related to language use; (2) generate evidence-based knowledge of the effects these activities have on student learning in statistics; (3) create an interactive professional development instructional model in statistics education that can be widely disseminated; and (4) produce the basis for a web-repository designed not only to disseminate the HILT activities, but also to contain the functionality necessary to promote and sustain the success of the professional development model. The research team is working with 6 instructors who meet regularly and create and implement HILT activities. The researchers will employ a mixed methods methodology to determine (a) to what extent the implementation of the HILT language activities promote student learning in statistics and (b) the instructional approaches which are effective for developing or improving student learning outcomes in statistics. Quantitative and qualitative data collected from both students who are exposed to the HILT activities and those who are not will be used to determine the extent of differences in student learning related to the activities and professional development of the instructors.

Jennifer Kaplan, Associate Professor, PI
NSF-DUE “Fostering Active Learning in Statistics: Research on Students and Graduate Teaching Assistants”

Recently, much has been learned about the teaching and learning of undergraduate statistics, and one of the recommendations in statistics education is to foster active learning in the classroom. Little is known, however, about the training needs of GTAs, who represent the largest group of instructors of introductory statistics courses, to foster active learning. In connection with this, the investigators will: (a) produce materials to foster active and lasting learning for undergraduate students in introductory statistics courses; (b) train statistics graduate teaching assistants (GTAs) in the content and pedagogical issues needed to implement these materials effectively; and (c) conduct research to understand and generate improvements regarding the effectiveness of the developed materials and the graduate student training.

The goals of this project are to produce and disseminate a research-based student manual and instructor's guide along with the associated materials necessary to train GTAs to facilitate active learning experiences using the department’s STAT 2000 course as context. Another outcome of the project will be an addition to the body of research on the professional development needs of GTAs to implement successfully active-learning experiences in undergraduate classrooms. The following research questions will be investigated. (1) To what extent do the active learning labs result in higher levels cognitive learning outcomes, attitudes toward statistics, and successful completion of introductory statistics course? (2) What is the content and pedagogical knowledge needed by GTAs in statistics to facilitate active learning labs and how does their knowledge change as a result of facilitating active learning? The questions will be addressed using mixed methods, repeated measures, and hierarchal models. Materials generated from the project will be portable to other institutions, and the accompanying research will inform these institutions; whereas, information generated from the research on professional development not only will apply to institutions with GTAs, but will also be pertinent to any higher education institution where introductory undergraduate statistics is taught.

Abhyuday Mandal, Associate Professor, Co-PI
Comparison of Oconee and Ocmulgee river basins for sustainable ecosystem and economic development of Middle Georgia

Water management and economic development of Middle Georgia are the main focus areas of this project. Our study compares the Oconee and Ocmulgee river basins and examines how reservoir operation can influence local hydrology and fish habitat. Since water flow in both river basins is affected by the dams, we examine trade-offs between ecological impacts and economic development under different environmental flow scenarios. We also use geo-spatial analysis in order to incorporate archaeological information about Indian artifacts along the Ocmulgee River. The historical aspect of the region is an important component of our work which supports the UGA-Archway Partnership for the Ocmulgee River Water Trail National Park Initiative.
Franklin Retires & Named ASA K-12 Statistical Ambassador

Christine Franklin will be retiring from the University of Georgia at the end of Spring 2016. The ASA has announced Christine as the inaugural ASA K-12 Statistical Ambassador beginning in September. Franklin will provide leadership in the creation and presentation of professional development materials for teacher educators and teachers. She will present at national conferences, conduct workshops, collaborate with ASA chapters to enhance their education initiatives, and assist in outreach to the STEM education community.

Franklin is a recognized leader in K-12 statistics education. She is the lead author of the GAISE Pre-K-12 and SET reports, a proponent of the inclusion of increased statistics content in the Georgia K-12 standards, a proponent of the inclusion of increased statistics education in New Zealand, an ASA Founders graders K-9.

Finally, she was a key member of the National Science Foundation–funded LOCUS project, chairing the committee that developed statistical assessment items for K-16 statistics education.

Franklin is a true statistics education ambassador and after 27 years of service with the Department of Statistics at the University of Georgia, she will be greatly missed. We wish Christine Franklin all the best in her retirement!

SAS Analytics Shootout Winners

Two teams of students from the Department of Statistics placed in the top three teams in the SAS Analytics Shootout, a contest sponsored annually by the SAS Institute. It was announced Tuesday, October 27, 2015, at the SAS Analytics 2015 Conference in Las Vegas that the UGA Department of Statistic’s two teams placed first and third. First place went to Fei Liu (Captain), Lina Liao, and Wenbo Wu who were advised by TN Sriram. Third place went to Hao Tong (Captain), Anzhi Li, Richard Ross, Yan Wang, and Guohui Zhao who were advised by Jack Reeves. Congratulations to both teams on their accomplishments! The University of Georgia’s Department of Statistics is lucky to have each of them on our team.

2016 UGA/Clemson Joint Seminar

Since the 1970’s, statisticians from the University of Georgia Department of Statistics and the Clemson University Mathematical Sciences Department have organized the annual UGA/Clemson Joint Seminar. Each year, the venue alternates between Athens and Clemson with an outstanding speaker invited to present on a topic of his/her choice. The speaker for the UGA/Clemson Joint Seminar held at the Georgia State Botanical Gardens Callaway Building on April 7th, 2016 was Dr. David Ruppert.

Dr. Ruppert is the Andrew Schultz Jr. Professor of Engineering, School of Operations Research and Information Engineering, and Professor of Statistical Science, at Cornell University. He received his BA in Mathematics from Cornell, MA in Mathematics from the University of Vermont, and his PhD in Statistics from Michigan State. After receiving his PhD he joined the Department of Statistics at UNC Chapel Hill, where he was a faculty member for 10 years. In 1987 he moved to Cornell and he has been there ever since. Among his many accolades, Dr. Ruppert is a Fellow of ASA and of IMS, a winner of the Wilcoxon Prize for best practical applications paper in Technometrics, and the recipient of the Cornell University Department of Statistical Science Distinguished Alumni Award. He has authored or co-authored 8 books, and over 150 papers, letters, comments, and reviews. He has served on the editorial boards of many leading statistics journals and is currently co-editor of JASA Theory and Methods.

Dr. Ruppert has worked in many areas of statistics, including stochastic approximation, transformations and weighting in regression, and smoothing. More recently, he has been focusing on astrostatistics, splines, semiparametric regression, functional data analysis, and environmental statistics.

Dr. Ruppert’s presentation was titled “A Bayesian Multivariate Functional Dynamic Linear Model”. Following the talk, conference attendees were given the opportunity to interact with Dr. David Ruppert and to network amongst each other as well as enjoy dinner catered by Mama’s Boy.
Industry Day 2016
Alexei Ionan

On Industry Day 2016, we were honored to have Dr. Vladimir Dragalin share his 25-year experience of statistical research in the industry. From his stimulating presentation that evoked a number of interesting questions from the audience, we learned about the current pharmaceutical industry trends from a statistical perspective, and several groups of students had an opportunity to interact with the speaker after the talk.

The talk focused on design challenges in modern clinical trials. A shifting landscape of pharmaceutical drug development presents important implications for statisticians. The era of “blockbuster” drugs that covered for the expense of about ten failed products has almost come to an end. Instead, we are gradually converging on truly personalized medicine, where the market for each drug is much smaller, but medicine is crafted specifically for a specific group of people, not for the entire human population! I-SPY2 (http://ispy2.org/) is an example of a step in such a direction, with a few similar projects in development. However, development of such highly specific drugs poses many statistical challenges, including design of experiments, among many others. Whereas the majority of statisticians employed by the pharmaceutical companies are “project statisticians” who primarily focus on analysis, there are other opportunities as well, including management and research positions. The latter is a particularly interesting prospect.

To accommodate the need for new statistical methods, some pharmaceutical companies are establishing or expanding statistical research divisions. This provides a unique opportunity for statisticians to work on relevant, cutting-edge research in an academic environment. However, to thrive in such an environment a number of diverse skills are needed. The most important skill is the in-depth knowledge of statistics. Another skill is communication of statistical information to non-statisticians. The importance of mastering the subject knowledge is critical for the advancement of science. The importance of communication skills, which are crucial in convincing multiple groups involved in a project to adopt your plan, cannot be understated. As D.R. Cox said, “There are no routine statistical questions, only questionable statistical routines.” Developing innovative relevant methods requires solid theoretical basis, and it is important to be able to disseminate those well, otherwise the suggestions may even be dissected by an entire department of financial analysts! Solid knowledge of the statistical theory, computing, and communication skills, among others, are key to a successful career in statistics. Students who have such skills would do well in an industry environment and may find exciting new research and analysis opportunities!

We are very grateful to Dr. Vladimir Dragalin for visiting us and sharing his experience!

Statistics Undergraduate Students at CURO 2016 Symposium

UGA offers CURO Assistantships to enhance the University of Georgia’s learning environment by fostering student research. Each year, the Symposium has grown larger, and the 2016 Symposium was the largest to date with 408 undergraduate researchers communicating their substantial accomplishments to their peers, mentors, and the public at large. From its inception, the CURO Symposium has showcased research and scholarship in all disciplines. The 2016 Symposium continued that commitment, featuring presenters pursuing 85 different majors from 14 schools and colleges who are conducting research with 248 faculty members from 69 departments. This two-day event displays UGA’s broad and substantial support of research and the invaluable commitment of UGA’s administration and faculty to providing exceptional learning opportunities for our undergraduates.

This year, two students from the Department of Statistics, Andrew Kane and Zachary Stokes, received awards. Both students presented at the 2016 CURO Symposium which was held at the Classic Center in downtown Athens on Monday, April 4th and Tuesday, April 5th, 2016. Andrew’s presentation was titled “Finding Optimal Designs Using Genetic Algorithms”. Zachary’s presentation was titled “In Search of Optimal Designs Using Differential Evolution”. These exceptional students did an excellent job representing our Department at CURO 2016.

For more information about this year’s presentations you can visit: http://curo.uga.edu/symposium/sites/default/files/2016_BOA_Final.pdf
Georgia Statistics Day is a one-day conference on theoretical and applied data science with the goal of promoting interdisciplinary research within the flagship institutions of the state of Georgia. This annual conference aims to enable junior researchers in the Southeast region of the United States, including graduate students, to present their work, to see state of the art developments in research on statistics and related scientific areas, and to interact with some of the key players in the area. Georgia Statistics Day puts emphasis on mentoring of junior researchers and on interaction between senior and junior researchers.

The first GA Statistics Day, held on October 30, 2015 at the GA Center for Continuing Education was a resounding success. There were 164 registered participants, and a handful of unregistered ones. Of those 164, 109 were students. 126 of the participants came from the three sponsoring institutions (UGA, GA Tech, and Emory); 21 from other universities in and around Georgia; 8 from the Centers for Disease Control and Prevention; and 9 from our corporate sponsors.

We had a good selection of student posters from the three institutions. The quality was so high that the poster session judges, TN Sriram, Brani Vidakovic and Minsoo Kim, decided to pick a winner and an honorable mention from each university:
- Best Emory Student Poster: Phebe B. Kemmer; Honorable Mention: Joshua Lukemire
- Best GA Tech Student Poster: Yuchen Richard Zheng; Honorable Mention: Yang Cao
- Best UGA Poster: Yiwen Liu; Honorable Mention: Fei Liu

Informal feedback from the participants was positive. Everyone seemed to have a good time and there was a lot of mingling during the breaks and in the time surrounding the roundtables and student poster presentations.

This event was sponsored by several internal and external agencies. Apart from GaTech and Emory, the Graduate School, Office of Vice President of Research and the Department of Statistics of UGA sponsored it. This was a NISS event. The GA Chapter of ASA also lent their helping hand to us. CRC Press and John Wiley donated books. Finally, Wells Fargo, State Farm, JMP, LexisNexis and Procter and Gamble were our corporate sponsors.

The event was organized by Abhyuday Mandal and Nicole Lazar. Several student volunteers worked very hard to make it a grand success. Among them, Adel Bedoui, Minsoo Kim, Krisay Knight, Yiwen Liu, Andrew Mullins, Richard Ross, Xiaoxiao Sun, Rui Xie, Xin Xing and Xinlian Zhang deserve special mention. They all wore the special GA Statistics Day T-Shirts which became so popular that we had to order more after the event. After all, we could not deny the request for a T-Shirt from our special guest, Professor Rob Tibshirani!
Undergraduates Seek to Pursue Higher Studies in Statistics
Theresa Devasia and Zachary Stokes | Statistics Undergraduate Students

Zach and I are both senior statistics majors. We would both like to pursue graduate study in statistics, so we applied for Ph.D. programs last fall. Zach primarily applied to Statistics programs, while I applied to Biostatistics programs. We applied to a range of schools all across the country, and this past semester, we have had the opportunity to visit a number of schools. During these visit days, we were able to interact with faculty and meet with current students. Meetings with faculty largely consisted of discussions of their research. Current students gave us more information regarding difficulty of coursework, housing, and life as a graduate student. For me, these visits also provided a better idea of where I could potentially be spending the next 5 years of my life. In short, these events allowed us to get a better feel for each department and what life would be like if we were to accept our offers of admission.

2016 Best Capstone Student Award Winners:
John Chamberlin & Cody Pace
Jaxk Reeves | Director

Each year, the University of Georgia, Department of Statistics awards the Kermit Hutcheson Best Capstone Student Award to an undergraduate student who best exemplifies the standards set by Professor Kermit Hutcheson, an emeritus professor of the department who highly valued undergraduate instruction. The winner of this award is a student in the Capstone Course who consistently demonstrates throughout the year dedication to the Capstone philosophy of seeing the big picture of statistical analysis; embraces the importance of writing, communication, and research skills; displays a strong work ethic; provides leadership while being a team player; and who demonstrates professionalism within the class and while working with the group’s client. The winner of this annual award receives a check for $500 from the department's Alumni account.

For the second consecutive year, the award has resulted in co-winners. The co-winners of the 2016 Best Capstone Student Award, who will split the $500 award, are John Chamberlin and Cody Pace. Both students are very deserving of the award and the Department of Statistics would like to congratulate them on all their hard work this past year.

Statistics Students Win Capital One Contest

Statistics students Xianyan Chen, Xiaodong Jiang, Jerry Shi, and Yang Song, were one of five finalist teams in the Capital One Contest. The team members, along with advisor Jaxk Reeves, were invited to Capital One headquarters from April 20-22, 2016, where they, along with the four other finalist teams, presented their analysis. After team presentations, our UGA team was named first place! Congratulations to these students and Dr. Jaxk Reeves for this great achievement!
Kirsten Jackson, Administrative Associate II  Matthew Lemieux, IT Professional Associate  Sharon Barnhart, IT Professional Associate

Kirsten Jackson is the new Administrative Associate for the Department of Statistics. She has been employed with the University of Georgia for two years. She moved to our department in October from the College of Family and Consumer Sciences where she was an Administrative Assistant for the Child Development Lab. In her spare time she enjoys reading and spending as much time as possible with her husband (Kenny), two fur babies (Kolby & Hank), and her 2 month old son (Liam).

Matthew Lemieux is one of the new faces of Franklin OIT working with the Department of Statistics. While he has a background in healthcare IT, his current specialty is with the Apple ecosystem. He previously worked for local Apple Specialist PeachMac and assisted with running their service departments throughout the Southeast. He attended Clemson University and is an avid fan of his Tigers, especially in football and baseball. In his spare time, Matt enjoys movies and is a practitioner of the martial art of Kyuki-Do.

Sharon Barnhart is the new IT Professional for Franklin College. She grew up in Marietta, GA and came to UGA as a student in 1988. She loved it so much that she never left Athens! She has been employed at UGA for 15 years and with Franklin OIT for the last two. Sharon has a husband of 25 years, and a lovely daughter looking forward to coming to UGA next year! Those two take up most of her time away from work, but she also enjoys reading, driving, and the ongoing effort to teach her dog a trick. Sharon is delighted to be part of the Life Sciences Hub, and hopes to be able to help Statistics with their IT needs!

David Bruggeman
B.S. | 1986

This year David will be celebrating 30 years with Munich Re- US Life, a leading US life and health reinsurer. After graduating from UGA, he accepted a position with Munich Re and began taking actuarial exams in pursuit of obtaining his Fellowship from the Society of Actuaries (FSA). He received his FSA in 2001 and is currently AVP & Actuary in the Force Management area.

Jeff Anderson
B.S. | 2011

Jeff attended GSU after graduating from UGA where he earned his J.D. and M.B.A. Jeff is currently working as an Associate in the Real Estate Department at Schulten Ward Turn and Weiss, LLP in Atlanta, Georgia.

Joseph Hosmer
B.S. | 1976

After graduating from the University of Georgia Joseph worked for the International Appraisal & Research Group, Inc. in Atlanta, Ga, GTS Computer Systems in Birmingham, Al, and Presbyterian Publishing House in Atlanta, Ga. Joseph is currently with Business Software, Inc. and has been with them for 26 years. There they do Regulatory Software. His current job title is Sr. Quality Assurance Analyst. He works with the Payroll Tax Withholding Software. Business Software, Inc. is business partners with IBM, Oracle & SAP.

Paul Hofmann
B.S. | 1995

Paul is a Principal Statistical Programmer/Analyst at Duke Clinical Research Institute in Durham, NC. Within the Center of Predictive Medicine group, he has been focusing on Big Data, as well as ECHO/Duke Databank manuscript work. In addition, he is also managing a great group of individuals who work within both Clinical Trials and CPM programming groups.

Glenn Branscomb
B.S. | 2013

Glenn will be starting Wharton’s MBA program with focus in Actuarial Science starting in the fall of 2017. Otherwise, he expresses that he is getting excited about Kirby Smart’s first season as head coach to the Georgia Bulldogs!
Former Student, Dipankar Bandyopadhyay, Receives Young Researcher Award

Professor Dipankar Bandyopadhyay is an alumnus of the University of Georgia, Department of Statistics where, in 2006, he received his Ph.D. in Statistics. Recently, he accepted an Associate Professor job in the Department of Biostatistics at Virginia Commonwealth University, located in Richmond, Virginia. Dr. Bandyopadhyay’s primary research interests are in Bayesian biostatistics, spatial data analysis, survival analysis, robust regression, clustered/correlated data, longitudinal data, nonparametric methods, and also their applications to problems in epidemiology and behavioral studies. His major clinical interest is in dental epidemiology, in particular, investigating periodontal health status and progression through a number of studies funded by the NIH/NIDCR. Other clinical research interests are in diabetes and kidney diseases, substance abuse and alcohol addiction, medical imaging, and Parkinson’s and other neurological diseases.

Dr. Bandyopadhyay was recently awarded the 2015 Outstanding Young Researcher Award from the International Indian Statistical Association in the Applications Category. The recipients of this award have made a notable impact on real world problems either through significant contributions to statistical methodology or through the novel use of existing statistical methodology. Furthermore, the recipients must either be a life member or an active member of IISA for at least two years.

Dr. Bandyopadhyay was also awarded Best Associate Editor of the Journal of Agricultural, Biological and Environmental Statistics (JABES) for the year 2014 from the International Biometric Society. Dipankar Bandyopadhyay is an avid steward in the Statistical Community and is currently serving as an Associate Editor for JASA-A&CS for a three year term and also as the Program Chair for the Biometrics Section of the American Statistical Association for the 2016 JSM at Chicago.

The Department of Statistics at the University of Georgia would like to congratulate Dr. Dipankar Bandyopadhyay on all his continued success and as well as his advancements in the field of Statistics.

We invite all of our alumni to keep in touch! Let us know how you are doing by submitting an alumni update form on our website at:

http://www.stat.uga.edu/alumni-update-form

MARK YOUR CALENDARS:
We would love to see you soon! Stay tuned for future event information by visiting our website:

www.stat.uga.edu

- DEPARTMENT OF STATISTICS FALL 2016 COLLOQUIUM SERIES
  Begins Thursday, August 18, 2016
  Athens, Georgia

- BRADLEY LECTURE 2017
  Friday, April 21, 2017
  Athens, Georgia

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brought to you by

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Xiaojun Li
M.S. | 2007

Xiaojun Li joined the Political Science Department at the University of British Columbia as an Assistant Professor in 2013. His research falls broadly in the area of international and comparative political economy with a focus on China. He is currently working on a book manuscript that examines the domestic sources of the wide variation in both statutory and administered protection across Chinese manufacturing industries during and after China’s accession to the World Trade Organization (WTO). His research has appeared in Asian Survey, Chinese Journal of International Politics, Foreign Policy Analysis, International Studies Quarterly, Journal of Chinese Political Science and The Journal of Contemporary China. During the 2014-2015 Academic year, he was at Princeton-Harvard, China and the World Fellow at Harvard University’s Fairbank Center for Chinese Research. A native of Shanghai, China, he received his Bachelor’s degree in English and International Studies from China Foreign Affairs University in Beijing, his Master’s degrees in Political Science and Statistics from the University of Georgia, and his Doctorate of Philosophy in political science from Stanford University.

David Nelson
M.S. | 2010

David Nelson graduated from the University of Georgia in 2010 with a M.S. in Statistics and is currently a Professor of Mathematics at Mercer University. Recently, Mercer University’s Student Government Association and members of the student body selected Professor David Nelson as the 2016 Professor of the Year.

Guan Nan Wang
PhD | 2015

Guan Nan Wang graduated from the University of Georgia in Spring of 2015 with a PhD in Statistics. While in the department he had the good fortune to serve as a Graduate Assistant, Research Assistant, Consulting Assistant, and Graduate Teaching Assistant. In September 2015, he began his career as an Asst. Professor in Mathematical Sciences at the College of William & Mary, where another former UGA Statistics department alumni is also on the faculty. He and his family miss Athens and hope to visit soon.
Support the Department

In addition to greatly enhancing students’ educational experience, your support helps to ensure UGA’s Department of Statistics continues to be the leading Statistics program in the nation. A gift from you will play a foundational role in helping to build for our future, and for the future of many students. Make your annual gift today!

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For more information about giving to the Department of Statistics, please contact the Franklin College Office of Development at (706) 542-4658.

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Thank You!

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