Dear alumni and friends:

As the old joke goes, “Prediction is hard – especially about the future!” Indeed, if someone had told me a year ago that I would be writing this Letter from the Department Head for our newsletter, I would have laughed. Yet, here it is, March 2015, and I’m writing this Letter from the Department Head for the newsletter.

The last academic year ended with a bit of a bang, with the departures of former Head, John Stuf, for Arizona State; Xiangrong Yin for the University of Kentucky; and Lily Wang for Iowa State. Temporary Lecturer Paul Holmes also decided to resume teaching at the Terry College of Business. With challenges, though, come new opportunities. I took on the job of Interim Department Head, with Paul Schleckerman replacing Dan Hall as Associate Head. We are all grateful to Dan for his many years of dedicated service to the department.

To help fill our teaching needs, we were fortunate to have Jin-Hong Park, a former student who is now a faculty member at the College of Charleston, as a visitor for this school year. He taught classes for us and carried out research with T.N. Sriam. Steve Morris, who received his MS degree from our program, came on as a temporary instructor. In addition, we are also very happy to welcome Megan Lutz as a new full-time Lecturer in the department. Megan received her PhD in Psychology from Georgia Tech in 2014. She also has an MS in Statistics from Virginia Tech and an MS in Applied Statistics from Rochester Institute of Technology.

This year of transition also saw a complete change in staff. Megan Weatherford returned to the Vet School; long-time staff member Daphney Smith moved to the School of Social Work; and Tim Cheek, the department’s business manager for seven years, accepted a position in the Department of Computer Science. We welcomed Ashten Goecel, Melissa Pettigrew, and Mollie Hicks to the front office in their stead. Ashten is our new Administrative Associate; Melissa is the new Student Affairs Professional, working closely with Chris Franklin and Lynne Seymour in their roles as Undergraduate and Graduate Coordinators, respectively; and Mollie Hicks is our new business manager joining us just as the semester comes to a close.

Both Chris and Lynne have had wonderful and unique professional opportunities this year. At the 2014 Joint Statistical Meetings, Chris was one of three people presented with the Founders Award of the American Statistical Association. Chris is also spending the Spring term in New Zealand as a Fulbright Fellow. The purpose of her Fulbright project is to study K-12 statistics education in New Zealand and to work with statistics educators in that country, to exchange ideas about best practices. Lynne, meanwhile, has been spending the year doing Study in a Second Discipline in the Geography department. She is taking classes, working with graduate students, and forging research ties with faculty, with a focus on statistical models for climate.

I’m happy to report on successful promotions and tenure for several of our faculty this year. Kim Gilbert was promoted from Lecturer to Senior Lecturer. Kim Love-Myers was promoted to Senior Academic Professional; Jennifer Kaplan was promoted to Associate Professor with tenure; Ping Ma was granted early promotion to Full Professor; and Wenxuan Zhong received tenure.

As you can see, the year has been a busy one, with departures and new arrivals! We also carried out a national search for a new, permanent Department Head. Several prominent statisticians visited the department in early Spring semester to interview for the position. We hope that we will soon have a new senior colleague and Department Head. Everyone – faculty, students, and staff – have been working together as a team to make this year successful, and I’m confident that a new Head will find us ready to move forward in new and exciting directions.

Our faculty members continue to be active in publishing papers and writing (and obtaining) grants. Congratulations particularly go out to Ping Ma, Wenxuan 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.

(continued on page 2)
LETTER FROM THE DEPARTMENT HEAD (continued)

Nicole Lazar | Interim Department Head

as well as taking roles in organizing invited and other sessions at major statistics conferences around the world.

Kim Love-Myers has been a participant this academic year in the Writing Fellows program through UGA’s Center for Teaching and Learning. The goal of the program is to enhance faculty efforts to incorporate writing more fully into the curriculum. Fellowships meet about once a month and are awarded to faculty whose writing receives a small stipend. Kim plans to use her experience to enhance the writing aspect of students training in the Statistical Consulting Center. Pengsheng Ji, meanwhile, has been participating this year in the Teaching Academy’s Fellows program. This program joins junior faculty members interested in improving their teaching with experienced instructors from the campus community.

A particularly proud moment for the department came in October, when we learned that a team of students from the Statistical Consulting Center, led by SCC Director Jack Reeves, had won first place in the SAS Data Analytics Shootout. More than 60 teams from around the United States participated in the competition, so this was a great accomplishment. Team members, led by Wenbo Wu and Jack Reeves, flew to Las Vegas, where they had the opportunity to interact with other competitors, as well as representatives from SAS and many leading companies.

Our alumni also continue to succeed. Two former PhD students – Susmita Datta of the University of Louisville and Sanjay Shete of M.D. Anderson Cancer Center – were elected Fellows of the American Association for the Advancement of Science. Congratulations to them both! And to everyone – let us know of your accomplishments and achievements, so that we can highlight them on our website.

Together with Abhyuday Mandal and colleagues from Georgia Tech and Emory, I have been working to plan the first annual Georgia Statistics Day, to take place in October 2015. The idea of this new initiative is to bring together faculty and students from the three institutions, in order to foster interactions and a more prominent statistics community in the north Georgia region. The first event will be held here at UGA, and will rotate among the three universities from year to year. If you are in the area, keep your eyes open for more news of this one-day workshop – we’d love to see you. 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.

Finally, we had a great event for alumni at the JSM in Boston. Many current and former students and faculty gathered for light refreshments, drinks, and conversation. It was good to see many of you again, and to meet others for the first time. We hope to repeat this success in Seattle.

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

FACULTY AWARDS

Kim Love-Myers

2014-2015 Center for Teaching and Learning Writing Fellow

The CTL Writing Fellows program was established in 2007 by the Office of the Vice President of Instruction; up to twelve faculty selected as CTL Writing Fellows meet regularly to discuss the most effective ways to teach and respond to student writing.

Christine Franklin

Center for Teaching and Learning Teacher of the Week

CTL recognizes Teacher of the Week recipients as individuals who are making a difference in their students’ lives as learners and citizens of the University community. This significant honor is meant to highlight the superb teachers who inspire students as well as colleagues at UGA.

ASA Founders Award

The Founders Award is among the highest honors that the ASA bestows upon its members who have rendered distinguished and long-term service to the association.

Nicole Lazar

Selected as a Fellow of the American Statistical Association (ASA)

Each year, the ASA names select individuals as Fellows. According to ASA, “the designation of Fellow has been a superlative honor … for nearly 100 years.”

Pengsheng Ji

2014-2015 Teaching Academy Fellow

The Teaching Academy Fellows Program is an early career mentoring program at the University of Georgia. Only twenty faculty members are selected for the Fellows Program which is coordinated by UGA’s Teaching Academy with funding support from the Office of the Provost and PricewaterhouseCoopers LLP.

UNDERGRADUATE PROGRAM UPDATE

Christine Franklin | Undergraduate Coordinator

Since the last newsletter where we listed our graduates from 2013, we proudly graduated the following students with a BS degree in Statistics: Spring 2014 – Obiamaka Achuwku, Matthew Alexander, Dean Baraso, Audrey Brassuell, Doretha Canion, Reina Chau, Mary Martha Clark, Tyna Dao, Christopher Helman, Kenya Jones, Nathian Karner, Pia Kolmers, Hyejin Park, Melissa Pitt, and Benjamin Washington; Summer 2014 – Joe Fang, Matt, Chris, Lewis, and Ben are now all enrolled in our graduate program. Lewis is part of a collaborative program with State Farm Insurance.

Our students continue to be inducted into honor societies such as the National Statistical Honor Society Mu Sigma Rho, Phi Kappa Phi, and Phi Kappa Lambda. Some students have continued with graduate school and others have joined the workforce using the skill-set they gained as Statistics majors. 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/undergraduate-students](http://www.stat.uga.edu/undergraduate-students)

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 (approximately 120 students) and minors (approximately 100). We continue to find ways to improve our undergraduate program, which for the first time in the history of the department, is larger than our graduate program.

This past year, a committee worked diligently to examine the desired program goals and learning outcomes for both our undergraduate and graduate students. This committee discussed whether our current courses are meeting the goals and learning outcomes, as well as how to assess these learning outcomes. 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 our largest class ever with 32 students. In May 2014, we awarded the second Kemirt Hutcheson Best Capstone Student Award to Nathian Karner. Congratulations to Nathian!

We continue to have several students taking advantage of internship opportunities. We welcome any leads on summer and academic year internship possibilities for our students.

GRADUATE PROGRAM UPDATE

Lyne Seymour | Graduate Coordinator

In Fall 2014, there were 75 full-time students in our graduate programs, not counting the MS students who are primarily in other programs on campus. Though our numbers of supported students have grown in the last year, our numbers of supported students have also grown to the point that we no longer have enough room in the graduate offices for everyone who is supported.

Job placement opportunities continue to strengthen for our graduates, thanks in part to the efforts of our Statistics Department alumni, Hicham El Hassan (MS, 01) and Yijie Xue (PhD, 09) at LexisNexis in Atlanta, and UGA alumna Misty Ritchie (PhD, 99 in Sociology) of Wells-Fargo in Charlotte, NC. All have been in the department in the past year to recruit, interview, and provide feedback to our students.

We will soon begin a new web page to list job placement information for each year for both our MS and PhD students. Fall 2014 marked the first semester of State Farm’s MAGNET program, which trains our MS students in the data analytics skills which State Farm needs. Three students were hired as interns for the first year, and more are expected to join in the coming year.
UPDATE: Colloquium Series

Gauri Datta, Professor | Pengsheng Ji, Assistant Professor
Abhyuday Mandal, Associate Professor | Mark Werner, Lecturer

The UGA Department of Statistics featured a great series of colloquia in 2014-15. On top of the regular seminar series, the department hosted four Department Head candidates and the Bradley Lecture in the Spring of 2015. Most of the invited speakers were from outside of Georgia; beyond presenting, they interacted with our faculty and graduate students, and learned about our department, university, and the Athens community.

A total of twenty one talks were held during the 2014 Fall semester. Four of them were hosted jointly with the Biostatistics department. The talks covered a wide range of topics and expertise, from the theoretical foundations to applications and statistics education. As members of the Colloquium Committee, we organized the regular colloquium series. This involves coordination of a schedule of weekly speakers; inviting speakers; arranging their travel, itinerary, meals, and reimbursements with the department staff (Megan Weatherford/Ashten Goeckel); arranging the refreshments with TA (Chad Moon); and advertising upcoming colloquia to the Statistics Department, University and broader academic community.

The 2015 Spring colloquium series recently concluded, featuring some outstanding speakers (listed at right). The twelve regular seminar talks and four presentations from Department Head candidates covered a wide variety of topics, from Bayesian modeling to the U.S. stock marker to cancer cells. In late April, the department and the graduate student Stat Club co-sponsored the annual Bradley Lecture in honor of the late Professor Ralph A. Bradley. Our distinguished speaker this year was Dr. Susan Murphy, University of Michigan. Dr. Murphy gave research and after-dinner talks and interacted with our faculty and graduate students. The Stat Club also continued our tradition of hosting a picnic on the Saturday following the Bradley Lecture. The Bradley Lecture and departmental picnic are great events to draw you back to Athens. We hope you will consider attending next year’s Bradley Lecture to be given by Dr. Jun Liu on April 22, 2016.

To keep up with our Colloquium Series, we encourage you to visit our website where you will find full details for all talks in the series including their scheduling, titles, abstracts, and links to the speakers’ webpages at their home institutions.

Our Colloquium Series events enhance the educational experience of our students, provide research opportunities for our faculty, and enrich the academic environment of the department. If you would like to support the University of Georgia Department of Statistics, please take a moment to show your support at the link below.

Colloquium Series Website
www.stat.uga.edu/events/colloquia/upcoming

Support the Department
www.stat.uga.edu/giving

Students enjoying a Mama’s Boy luncheon with William Brenneman from Proctor & Gamble Company

Bradley Event speaker, Dr. Susan Murphy, with students and faculty after her Colloquium talk

COLLOQUIUM SPEAKERS
2014-2015

FALL 2014
Darryl Revenew
JMP

Robert delMas
University of Minnesota

Xiaoming Huo
National Science Foundation and Georgia Institute of Technology

Bruce Craig
Purdue University

Feifang Hu
George Washington University

Nilanjan Chatterjee
National Cancer Institute

Bradley Jones
JMP

Dennis Lin
Penn State University

Hokwon Cho
University of Nevada

Christopher Nachtsheim
University of Minnesota

Sujit Ghosh
North Carolina State University & SAMSI

Jiming Jiang
University of California, Davis

Weng Kee Wong
University of California, Los Angeles

Yichen Qin
University of Cincinnati

Ping-Shou Zhong
Michigan State University

SPRING 2015
Branislav Vidakovic
Georgia Institute of Technology

Hubert Chen
University of Georgia

Ying Xu
University of Georgia

Harry Zhou
Yale University

Jie Yang
University of Illinois at Chicago

Jim Berger
Duke University

Kshitij Khare
University of Florida

William Brenneman
Proctor & Gamble Company

Lisa McShane
National Cancer Institute and the National Institute of Health

Susan Murphy
University of Michigan
CONSULTING CENTER UPDATE

Kim Love-Myers | Associate Director

The SCC has continued to prosper over the past year under Director Dr. Jack Reeves and Associate Director Dr. Kim Love-Myers. During the 2014-2015 Academic Year, the SCC has provided consulting assistantships for eight graduate students from the Department of Statistics: Fangzhi Guo, Hsien-Lin Hsieh, Lina Liao, Fei Liu, Wenhao Pan, Xijue Tan, Zhen Yan, and Yuan Zhuang. These students, along with about 20 volunteers, 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.

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. This past summer, the SCC held its first short course, a two-hour workshop focused on exploratory data analysis in Excel for those who are new to quantitative research. The SCC plans to offer more short courses in the future at a variety of levels; we are excited to have taken this first step.

This year, the Associate Director shared some of the SCC’s success at two conferences, first in August at an invited presentation at the Joint Statistical Meetings in Boston entitled “Measuring the Success of an Academic Consulting Center,” and later through a poster presentation at the Conference on Statistical Practice in New Orleans this past February entitled “Technicians to Collaborators: Changing the Paradigm of Student Consulting at the University of Georgia.” Both presentations were met with interest by their respective audiences. The Director was involved in two projects involving the media – an explanation of statistical analysis done to examine potential cheating on standardized tests in Mobile, AL, and a presentation at the annual meeting of the National Institute of Computer-Assisted Reporting in Atlanta. Additionally, the Director and Associate Director continue to meet on-line on a regular basis with the administrators of statistical laboratories and consulting centers at other US land-grant institutions. This input and feedback has been invaluable to the SCC.

The SCC has continued to emphasize student training, with senior students often playing an important role in mentoring students who are new to the consulting center and the practice of consulting. Senior PhD student and long-time SCC consultant Lina Liao has taken a lead role in this process as the SCC’s current Administrative Consultant.

One special effort this year is the creation of a voluntary Writing Focus Group, which meets once every two weeks to discuss the practice of writing as it applies to consulting and to general statistical research. This has been greatly aided by Dr. Love-Myers’ selection as a participant in the Center for Teaching and Learning’s Writing Fellows program, and co-facilitation by Adam Jaeger, a senior PhD student and former Writing Intensive Program teaching assistant.

The SCC is looking forward to the coming year and continuing 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.

STAT CLUB UPDATE

Lydia Yohannes | STAT Club President

This academic year, Stat Club hosted several social and academic activities. In September, our first event was the Welcome Back Pizza Dinner at the Transmetropolitan in downtown Athens. Graduate and undergraduate students met and discussed the excitement for the upcoming academic year. It was a great opportunity for the new students to get to know each other in a social setting. “Hopefully, we can have some more programs like this. I enjoyed meeting everyone,” stated Victoria Chang, an undergraduate Statistics student, excited for the programs to come after the dinner.

This November, our Stat Club students were given the opportunity to volunteer with the Community Connection of Northeast Georgia, a non-profit organization that seeks to help those in need to seek assistance and support through various types of organizations in Athens. The organization held several events to update their data at Creature Comforts, downtown, and on campus at the Center for Leadership and Service.

Instead of the traditional international potluck, the food at this year’s potluck in January was an assortment of typical American dishes. Faculty and students came and mingled for quite some time. The potluck allowed everyone to celebrate the end of the semester and to talk about current events. It was interesting to discuss the different cultures and religions of the students there.

The Bradley Lecture, the main event held jointly by the Statistics Department and Stat Club every year at the end of April, was at the State Botanical Garden of Georgia. Students were eager for the opportunity to interact with the speaker, Dr. Susan Murphy of the University of Michigan, in an informal setting and to learn from the lecture.

It has been an engaging year for the Stat Club. We look forward to the opportunities awaiting us next Fall!

MSIT3000E: A Fully Online Business Stat Course

T.N. Sridhar | Professor

Using the competitive Summer 2012 Innovative Instructional Grant, I designed and taught a non-synchronous, fully-online MSIT 3000 (Business Statistics) course at UGA during the summers of 2013 and 2014. Since online education is primarily student-centered and not face-to-face, the choice of a versatile platform for course delivery becomes critical in establishing effective communication with students. I used MyStatLab as my web portal, which offers an e-textbook along with a wealth of self-learning aids and a computational software, StatCrunch. I have also prepared so-called “talking lecture notes,” by embedding many 5-minute videos describing the concepts. To compensate for the lack of face-to-face meetings, I provide short video-answers to questions raised by students and disseminate these to the whole class. Overall, I have tried to provide an experience which is as close as possible to a face-to-face class. The online courses were well received by the students. The following excerpts summarize the overall sentiments expressed in the student evaluations: “The professor did a wonderful job of giving responsive, fast feedback with emails and questions. Furthermore, the online videos he used to walk us through problems were extremely helpful.” In addition to traditional discussion boards, I am now looking for new ways to increase virtual peer-interactions and student-teacher interactions. I will be building on these successful experiences by teaching MSIT 3000E once again during the summer of 2015.
NEW EXTERNALLY FUNDED GRANT PROJECTS IN THE DEPARTMENT OF STATISTICS

Abhyuday Mandal, Associate Professor, Co-PI

The main goal of the project is to foster economic development around the Ocmulgee River Basin, which is located below the Lake Jackson reservoir in middle Georgia. In this project we will analyze how reservoir operation can influence local hydrology and fish communities in order to gain necessary information for a sustainable ecosystem along the Ocmulgee River.

Wenxuan Zhong, Associate Professor, PI
NIH, "Novel Statistical Tools for Cell-Line Specific Epigenetic Analysis of Gene Transcription"

DNA methylation has been newly discovered as a key controller in gene transcription. Aberrant DNA methylation changes can cause a number of human diseases such as developmental diseases (ICF syndrome, Prader-Willi and Angelman syndromes etc), ageing related diseases (i.e. Alzheimer’s disease), heart disease, diabetes, and autoimmune diseases. Moreover, an increasing large amount of evidence indicates that DNA methylation is a key player in cancer development. Dr. Zhong will develop a suite of statistical models to broaden our understanding of how different methylation patterns are established and maintained during normal environmental conditions. Her project is designed to bring about fundamental advances in DNA methylation analysis, help develop and refine technology for rapid identification of gene regulation related to DNA methylation sites and help prototype an epigenetic chip for human intervention in certain diseases. According to Zhong, there’s a large amount of evidence that a process known as DNA methylation is a key player in cancer development. Today’s next-generation sequencing techniques give us the data we need to close the gap in this area of research.

UGA/Clemson Joint Seminar 2015
Gauri Datta | Professor

The joint colloquium series sponsored by the University of Georgia Statistics Department and the Clemson University Mathematical Sciences Department has been running for forty-three years. The first colloquium in the series, delivered by Professor Herbert Solomon, was organized by Clemson University in 1973. For a while, there were two colloquia per year, one in Fall and one in Spring, although in recent years their frequency has declined.

For the Spring 2015 edition of the series, Clemson featured Professor James O. Berger from Duke University. Professor Berger, a world-renowned statistician, is the Arts and Sciences Professor of Statistics at Duke University. Among the many accomplishments in his distinguished career, Professor Berger is a recipient of the prestigious COPSS award, as well as Guggenheim and Sloan Fellowships. He has previously served as the President of the Institute of Mathematical Statistics and the President of the International Society for Bayesian Analysis. He was a co-editor of The Annals of Statistics and the founding director of SAMSI. For his profound scientific contributions, Professor Berger was elected to the USA National Academy of Sciences and as a foreign member of the Spanish Real Academia de Ciencias.

Professor Berger has published many fundamental papers on the topics of Bayesian Robustness, Selection of Objective Priors, Model Selection, and Multiple Testing. The title of his presentation in this year’s joint UGA-Clemson colloquium was “Bayesian sub-group analysis”. The event, held on April 2, was attended by more than fifty faculty and graduate students from the University of Georgia and Clemson University, including four faculty and fifteen graduate students from UGA.

T.N. Sriman, Professor, PI
NSF, “Collaborative research: Renyi divergence-based robust inference in regression, time series, and association studies”

A typical characteristic of many contemporary datasets is that they are relatively high-dimensional in nature. This has prompted a shift in the applied sciences toward a divergent relationship-study genre arising in regression, time series and multivariate association, popularly known as dimension reduction, whose goal is to reduce the dimensionality of the variables as a first phase in the data analysis. However, the presence of outliers in high-dimensional datasets adversely affects the performance of existing dimension reduction methodologies, resulting in conclusions that are not completely reliable. Given that outliers are commonly encountered in high-dimensional datasets and that their presence is hard to detect, there is an urgent need to identify dimension reduction methods that possess some degree of automatic robustness, or non-sensitivity, to outliers. The proposed project provides robust dimension reduction methods, which would pave a new research path in dimension reduction and contribute significantly to the analysis of high-dimensional data arising in fields such as the social sciences, machine learning, sports, economics, environmental studies, morphometrics and cancer studies, among others.

Wenbo Wu and Adam Jaeger to Graduate from Student to Faculty for Summer 2015

The Department of Statistics is excited to announce that two of our 2015 graduating Ph.D. students will be joining our faculty for this summer. Adam Jaeger and Wenbo Wu have had a very busy year, between assisting professors, winning the SAS Analytics Shootout (page 6), and successfully defending their dissertations. They will now transition from two of ninety-one graduate students, sharing offices and assisting our instructors to faculty members with their own offices and syllabi.

After six years with the department, Jaeger plans to use his knowledge acquired over those years of hard work and perseverance at the AP Statistics reading and as a temporary lecturer. In the fall, he will begin his two-year post-doctoral fellowship in the Computational Neuroscience Program at SAMSI, which will include a year at Duke Department of Statistical Sciences in Durham, North Carolina. He also plans to adopt a cat and name him Mr. Pepe as well as a dog named either Slaglathor or Hrothgar. We will miss Adam’s dedication to the field of Statistics and his enthusiastic availability to his students, constantly thinking about how to improve the courses. Jaeger frequently sacrificed his free time to help students, even after he was no longer a TA for a course.

Wu is also excited for his future prospects, having already accepted an Assistant Professor position with the University of Oregon, which will start this August. Over the past few years, Wenbo has been working on developing new methods in sufficient dimension reduction (SDR) and sufficient variable selection (SVS), especially for robustness, correlated data, and more recently for large p, small n problems. His research topics have even appeared in the Journal of Computational and Graphical Statistics. Through his work in the Statistical Consulting Center, he has worked with a broad variety of people and areas, ranging from agro-science to finance to the entertainment industry. Best of luck to both of these graduates!
State Farm MAG-Net Grand Opening

In her speech, Laurette Stiles discussed the many benefits the MAGNet program will bring for both State Farm and the Department of Statistics. She also thanked UGA faculty and staff for making this joint venture a success thus far. The grand opening was held in the new MAGNet facility in Athens. This was the first time faculty, students and executives were able to see the new space. It was attended by top State Farm executives, Nicole Lazar (Interim Head), Dan Hall, Lynne Seymour, and Cheolwoo Park.

This is the second MAGNet program to begin in the United States and the only one in the Southeast. State Farm also has a presence at the University of Illinois (http://www.stat.illinois.edu/students/masters.shtml) which has been so successful, that they have expanded the program. The MAGNet program in Athens has started small with only three Master’s Students from the Department of Statistics (Bradley Holloway, Lewis Jones, and Sandra Park). We hope with time, that the program will flourish.

“We see the MAGNet program as a good opportunity to invest in the development of some of the brightest students in the field of advanced analytics and statistics, and hopefully engage them as full-time employees once they graduate,” Stiles said. “We’ve wanted to expand the program to the Southeast for some time, and we are pleased to be able to form a partnership with a quality institution such as the University of Georgia.”

For more information on the State Farm MAGNet program, see Jonathan Saul’s article on page 7.

Visit the MAGNet page on the Statistics Website here: https://stat.uga.edu/MAGNet

Summer 2014 Research at Carnegie Mellon University

Abhyuday Mandal | Associate Professor

In Summer 2014, Drs. Abhyuday Mandal and T.N. Sirram directed the research of Mr. Brian Lee, who is currently finishing his undergraduate degree in Economics and Statistics at Carnegie Mellon University. Mr. Lee was part of an ongoing collaborative project with Dr. Suraj Sharma of the Department of Textiles at UGA. The focus of the project is to develop an innovative approach to dyeing fabrics using nanocellulose polymer extracted from wood pulp, which turns into a gel after processing. Mr. Lee’s research investigated whether the gel can enhance the adhesive property of color dye, eliminating water usage and reducing cost of production.

The study showed that presence of the gel improves the color fastness level of dyed fabric and made recommendations for gel to dye ratio to improve color retention. A research article is under preparation for publication. Recently, Mr. Lee received two offers – a position in the Federal Reserve Bank of Minneapolis, and admission to the MS program in Economics at the University of Cambridge, UK. He has chosen to join the Federal Reserve Bank to gain real life experience before pursuing a higher degree in Economics.

SAS Data Analytics Contest Winners

Jaxx Reeves | Director

Seven PhD students from the Statistical Consulting Center won first place (and a $5,000 prize) in the 2014 Data Analytics Shootout, a contest sponsored annually by the SAS Institute.

The team members are: Wenbo Wu (Captain), Hsiao Hsiao, LinWei Hu, LiNa Liao, Fei Liu, Xia Ju Tan, and GuanNan Wang, with faculty advisor Jaxx Reeves. This is the first time that a team from UGA has ever won an award in this national contest. The team worked from March-May 2014 on analyzing a complex data-set containing crime-rate data from five large US cities for the period from 2005-2012.

In August 2014, the team was notified that it was one of the top three finalists (from among 69 team entries), and was invited to make a final presentation at the annual SAS Data Analytics Conference held in Las Vegas in October 2014. There, it was announced that the UGA team were the grand prize winners. More recently, in a March 2015 departmental colloquium, the team members gave a presentation about their analyses and their arduous path to the championship.

The SCC and the department in general will have a very hard time replacing these students, as six have now or will soon graduate, with four (Hsiao, LW Hu, Liao, and Tan) finding high-paying jobs in industry and two (Wang and Wu) having accepted Assistant Professor job offers. Liu, who won the 2015 Best Student Consultant Award, plans to finish his Ph.D. later this year. A new team of five students has entered this year’s SAS Data Analytics contest, but they’ll be hard pressed to match the levels of success achieved by the 2014 team.
STATISTICS UNDERGRADUATE STUDENTS AT CURO
2015 SYMPOSIUM

Several of our undergraduate Statistics majors participated in the 15th annual CURO Symposium held at the Classic Center in Athens on March 30 and 31, 2015. The purpose of the CURO Symposium is to showcase research and scholarship in all disciplines of academia. Since its inception, the Symposium has grown larger every year, and this year’s Symposium was the largest to date, with 386 undergraduate researchers presenting their considerable accomplishments to their peers, mentors, and the public at large. The 2015 Symposium featured presentations from students representing 79 different majors from 13 schools and colleges who conducted their research with 258 UGA faculty members from 72 departments.

Samantha Cao and Andrew Kane made a poster presentation of their research supervised by Dr. Abhyuday Mandal, titled “A New Analysis Strategy for Designs with Complex Aliasing.” In their project, they proposed a new data analysis strategy for designs with complex aliasing.

“...In many non-regular designs, factorial effects are often partially aliased with each other. Identifying the correct underlying model from the experimental data is a challenge. Both frequentist and Bayesian solutions to this problem are subjective in nature. Here [they] propose the Lasso (least absolute shrinkage and selection operator) variable selection method to identify the correct model in the presence of complex aliasing.”

Zachary Stokes also made a poster presentation of his research supervised by Drs. Abhyuday Mandal and T. N. Sriram, titled “Design and Analysis of Reactive Red Dye 120 Absorption by Nanocellulose Gel.” Stokes examined how the reduction or elimination of water usage in industrial-scale dyeing of fabrics could lead scientists to create a more environmentally-friendly process.

All of our students did an excellent job representing our department at CURO 2015.

For more information on these presentations you can visit: https://curo.uga.edu/symposium/sites/default/files/2015_BOA_Final_PDF.pdf

State Farm Insurance Provides Data Science and Advanced Analytics Opportunities

Jonathan Sauls | Local State Farm Manager

State Farm has developed a unique internship opportunity for graduate students at the University of Georgia - the Modeling and Analytics Graduate Network (MAGNet), which went live in September 2014. Mirroring State Farm’s successful flagship program at the University of Illinois, MAGNet interns apply their predictive modeling and data analysis skills to a variety of business problems across many different lines of business such as Marketing, Insurance, IT applications, and Banking. The work is focused primarily around:

- Advanced predictive modeling and data science
- Statistical analysis
- Statistical research - evaluating new statistical methods and tools for potential use by the State Farm analytic community

MAGNet interns work 20 hours per week during the academic year and 40 hours per week during the summer, gaining valuable experience working with real data on real applied challenges as they closely collaborate with business partners and experienced analytics professionals. Interns also receive coaching on key skills necessary to be successful in a business setting such as developing effective presentations, communication, and project management.

While participating in the MAGNet program students receive tuition assistance and competitive pay, and are evaluated and given consideration for full-time employment at State Farm offices in central Illinois or Atlanta, Georgia upon graduation. Historically, MAGNet graduates hit ground running on day 1, due already possessing nearly two-years of real working experience.

For more information about this exciting new opportunity, contact Dr. Park (cpark@stat.uga.edu) or the Athens MAGNet program manager, Jonathan Sauls (jonathan.sauls.djzr@statefarm.com).

The MAGNet program will be a great opportunity for some of our most promising statistics master's students. Being approached by State Farm is a great compliment on our students' potential, and this collaboration will strengthen our program by helping us attract an even stronger pool of master’s students.”

Abin Dasray. Dean of the Franklin College.

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In September 2014, The American Statistical Association presented its Founders Award to Christine Franklin. The honor is presented annually to ASA members who have rendered distinguished and long-term service to the association. As one of three recipients of the Founders Award in 2014, Franklin was recognized for her leadership in curriculum development and teaching statistics, her research, and her professional service in helping grow the field of statistics education. Franklin is an active member of ASA and a longtime leader of national efforts in statistics education, particularly in the area of implementing statistics in K-12 education. Franklin’s time in New Zealand will be a culmination of both these awards. “New Zealand is a few years ahead of us in implementing statistics at the K-12 levels, stemming from efforts begun there in the early 2000s,” Franklin said, “Much like my delight and surprise about this award from ASA, the opportunity to work with the leaders in statistics education through the Fulbright program is really a professional dream come true. I am honored and excited about the opportunity.”

Currently 18 hours ahead of U.S. Eastern time, Franklin can now revel in her new adventure and the massive amount of support she received before and after accepting the Fulbright scholarship. After what began as a chaotic exercise in obtaining a new emergency passport, Franklin and her husband safely arrived in New Zealand on January 29th. Since then, she has taken full opportunity to walk and explore Auckland, Wellington, Bay of Islands, and other local cities, visiting museums, learning about the Maori language and culture, and ordering flat white coffee.

Franklin spent most of her time in February familiarizing herself with the culture and educational system of New Zealand before the regular fall semester started in March. Between a sailboat race to circumnavigate the globe, the Cricket World Cup, and giant painted Easter eggs, Franklin has submerged herself in the culture of this colorful nation whose seasons mirror our own. On her blog, it looks like quite the adventure!

We look forward to welcoming Christine Franklin back to the department this June, eager to hear her many stories and celebrate her successes from her time working in New Zealand.
Undergraduate Workshop Helps Prepare Students for Grad School
Joshua Lukemire | Statistics Undergraduate Student

The 2014 undergraduate workshop organized by Dr. Sujit Ghosh at the Statistical and Applied Mathematical Sciences Institute (SAMSI) was a fascinating survey of some of the interesting areas of research in bioinformatics. The speakers were able to communicate their work in exciting and clear ways, and their passion for their research was evident in their presentations. The hour-long presentations focused on a range of topics from regression to evolutionary genetics and did a great job of explaining both the methods and the purpose of the research. In addition to the presentations, there was also a panel discussion with some of the current graduate students and post-docs at SAMSI on how to prepare for graduate school that was extremely helpful. The workshop also left time after the talks to get to know the speakers, and it was great to get to hear more about how they got involved in their respective areas. It was also nice to get a chance to meet with Dr. Ghosh again when he gave a talk at the University of Georgia shortly after the workshop. Overall, the workshop was a fun and informative experience, and I would highly recommend it to any undergraduate students interested in statistical research.

2015 Best Capstone Student Award Winners:
Joshua Lukemire & Theresa Devasia
Jaxk Reeves | Director

For the first time, the Best Capstone Student Award ended in a tie, with two winners, Theresa Devasia and Joshua Lukemire, sharing the 2015 award (and splitting the $500 cash prize). The Capstone Best Student Award, founded and funded by Professor Emeritus Kermit Hutcheson, is given annually to the undergraduate student who best exemplifies the goals of the Capstone Course: seeing the big picture, embracing the importance of writing in explaining statistics, commitment to the project, research skills, and leadership. With 32 (mostly highly motivated) students enrolled in this year’s Capstone (STAT 5010-5020) Course, it was not easy to select a best student, and even selecting two co-winners was quite difficult, as there were quite a number who were seriously considered. The two winners are certainly outstanding students, as discussed below.

Theresa Devasia is a 3rd-year BS/MS Statistics major from Lilburn, GA. She has always been interested in the medical field and somewhat stumbled into the field of Statistics from some work in Bioinformatics that she performed in high school while working at Emory University’s Winship Cancer Center. This led her to take AP Statistics and to become a Statistics major at UGA. Theresa has held summer internships at the Summer Institute for Training in Biostatistics at University of Wisconsin and at the National Agricultural Statistics Service in Washington, DC. She has also conducted research, which was recently featured in UGA’s Columns, with Prof. Andreas Handel of UGA’s Biostatistics and Epidemiology Department, on the distribution of the length of time of stomach noroviruses. After she completes her joint BS/MS degrees in 2016, Theresa plans to earn a Ph.D. in Biostatistics.

Joshua Lukemire is a 4th-year BS student from Warner Robbins, GA. Josh started his academic career as a Psychology major at Macon State University. After two years, he transferred to UGA, where he became a dual-degree Psychology/Statistics major. Josh volunteers in two labs on campus and, through that, has participated in UGA’s Center for Undergraduate Opportunity (CURO) program. He was a participant in the Summer 2014 CURO program, working with Prof. Larry Sweet of Psychology on techniques to remove fMRI variability in older adults with cardiovascular disease, and presented his results recently in CURO’s Spring 2015 Conference. Josh is particularly enamored with fMRI work, which has made him very proficient at R programming. This proved to be quite useful for his Capstone group’s project on Cancer Informatics. Upon graduation this Spring, Josh plans to enter the Ph.D. program in Biostatistics at Emory University beginning this Fall, with particular emphasis on fMRI research.

STUDENT AWARDS

Chao (Beatrice) Zhang
Best Master’s Student

Xin Xing
Best Beginning PhD Student

Guannan Wang
Best Senior Student

Fei Liu
Best Student Consultant

Sha Cao, Xianyan Chen, Chun Li, Xinyi Li, Allison Moore, Anna Sheremenko, Minrong Song, Yuanwen Wang, Hui Xian, Yiven Yang, Shiyu Ye
2014 Graduate Mu Sigma Rho Inductees

Daniel Bailey, Dean Baraso, Audrey Brasuell, Allison Griffin, Samuel Hempel, Lewis Jones, Joseph Powell, Benjamin Washington
2014 Undergraduate Mu Sigma Rho Inductees

Yaotong Cai, Qian Kuang, Yupeng Li, Padmanand Madhavan Namibari, Chul Moon, Yu Wang, Xin Xing
2015 Graduate Mu Sigma Rho Inductees

Cody Baetz, Theresa Devasia, Zinxuan Jiang, Andrew Kane, Zhuoxi Li, Joshua Lukemire, Stephen Terry, Brogan Williams
2015 Undergraduate Mu Sigma Rho Inductees

Nathain Karner
2014 Best Capstone Student Award

Joshua Lukemire & Theresa Devasia
2015 Best Capstone Student Award

Best Student Consultant: Fei Liu
Kim Love-Myers | Associate Director

Congratulations to Fei Liu, Ph.D. student in the Department of Statistics, for receiving this year’s Best Student Consultant award. This award, sponsored by Unclaimed Property Consulting and Reporting, is given to a student who has worked in the Statistical Consulting Center for the entire academic year, and who has demonstrated skills in the areas of general understanding of consulting projects, verbal and written communication, motivation, theoretical ability, programming ability, organization, and general contributions to the SCC. Fei in particular has worked with the SCC for three years, and has demonstrated exceptional professionalism; he is client-oriented and always approaches problems from the perspective of his clients’ research questions. He has been a leading participant in numerous SCC efforts over the years and has become an excellent mentor for junior consultants.
WELCOME NEW FACES!

FACULTY:

This year, we welcomed Megan Lutz as the department’s new full-time Lecturer. Megan received her Ph.D. in Psychology from Georgia Tech in 2014. She also has an M.S. in Statistics from Virginia Tech and an M.S. in Applied Statistics from Rochester Institute of Technology. Megan enjoys cycling and is currently training for a double-century ride, the Seattle-to-Portland in July, with Team in Training and fundraising for The Leukemia and Lymphoma Society. She also loves spending time with her two dogs and watching The Muppets or Harry Potter (among other silly things.)

STAFF:

This year, we welcomed three new staff members: Ashten Goeckel, Melissa Pettigrew, and Mollie Hicks. Ashten made the transition from UGA student to UGA staff, coming from the English Department a year after her graduation from the University. Ashten was a member of the UGA Ballroom Performance Group while at the University and still enjoys learning and growing as part of the UGA Wesley Foundation. A typical English-major, Ashten enjoys Shakespeare, reading, and English tea.

Melissa has worked for the University for over 20 years, specializing in distance learning development, starting with student services and progressing to project coordination. She is two courses away from completing her Masters in Continuing Education with an Instructional Technology focus at UGA, and plans to pursue further graduate education. In her spare time, Melissa enjoys music, movies, as well as exploring and hiking, especially in her home area of North Carolina.

Mollie Hicks is the new Business Manager II and comes to us from the College of Family and Consumer Sciences. She has 8 years of accounting experience with the University of Georgia. During her spare time, she enjoys spending time with her husband, Kevin, and two Chiuhuahuas, Tito and Roxie. She is an avid member of her church and loves to sing. In the fall, she spends her time cheering on the Dawgs.

ALUMNI UPDATES

**Angela Fife Malone**

B.S. | 2009

Currently with Deloitte and Touche providing support for federal agency initiative in Identity and Access Management (IAM) as it relates to Personal Identity Verification (PIV) authentication and logistics.

**Marlow Lemons**

M.S. | 2003

I have now completed the Ph.D. in Educational Research & Evaluation from Virginia Tech. Thank you for instilling the sound and strong statistics needed to complete this degree.

**Andrew Brown**

Ph.D. | 2013

Andrew Brown is currently a tenure-track Assistant Professor in the Department of Mathematical Sciences at Clemson University.

**Mike McGill**

M.S. | 2003

I became a statistician at Advanc-Ed Home.

**Roderick M. Lowe**

B.S. | 1985

Currently teaching Behavior Disorder Elementary Students...10 boys grades 3rd thru 5th.

**Lee Bennett**

M.S. | 1999

After more than two years as statistical instructor at SAS, I returned to RTI Health Solutions in Research Triangle Park, NC as Director, Biostatistics.

**Renee Lodge**

B.S. | 1986

I am currently working in healthcare.

**Steve VanWieren**

M.S. | 1995

I am now in my 4th year at Ultimate Software, helping to pioneer the usage of predictive analytics in the Human Capital Management domain. I am speaking all over the country at various conferences, some specific to HR, (such as regional and national SHRM, PHR, HR Reinvention) but also conferences related to statistics (Predictive Analytics World, SAS Users Group).

On the personal side, my wife and I just celebrated our 20th anniversary, and our three beautiful daughters are my pride and joy. I am also still a professional musician, and my band, Thunderfizz, is still going strong. We play hard rock cover songs from pretty much every decade.

**John H. (Jack) Schuenemeyer**

Ph.D. | 1975

I have gotten involved in a consulting project using hierarchical Bayesian spatial statistics which is challenging and interesting. I am still serving on the ASA advisory committee to the Energy Information Administration and have been reappointed to the Am Petroleum Geologists Assoc. Committee on Resource Evaluation. I am also on our K-12 school board struggling, as many of us are, with underfunded schools and excessive testing. Hasn't anyone heard of sampling? My most recent major project has been a hierarchical Bayesian spatial analysis of shale oil data. I was also in DC providing advice to the Energy Information Administration on benchmarking models. While there my wife Judy (Law School, 1976) and I got to view the Cherry Blossom festival.

**Nan Zhang**

Ph.D. | 2014

I have been working with Chase Card Services full time since December 2013. My job function is risk analytics/modeling.

Alumni updates continued on page 11…
ALUMNI UPDATES (continued)

Emily Fancher  
M.S. | 2013  
I work and live in Atlanta, Georgia for Assurant Solutions as a Senior Analyst (Data & Analytics).

Carollane Lott  
B.S. | 2011  
I am working at Acuity Brands as a Business Systems Analyst on the website team.

Kellie Sappington  
M.S. | 2015  
I was recruited for and accepted to a PhD program in MIS at UGA with full funding for 4 years. I was the only American accepted and I’ll be starting in August!

Nathan Lekahal  
M.S. | 2009  
I currently work for PricewaterhouseCoopers in the Analytics practice. I also held an adjunct professor position at The George Washington University in Washington, DC.

Two Department of Statistics Alumni Named as AAAS Fellows:  
Dr. Susmita Datta & Dr. Sanjay Shete

Now a professor at the University of Louisville in the Department of Bioinformatics and Biostatistics, Datta was elected as an AAAS Fellow for her contributions to research in bioinformatics, computational biology, and biostatistics. She is also a Fellow of the American Statistical Association and an elected member of the International Statistical Institute. She currently serves as president of the Caucus for Women in Statistics. Datta received both her MS ’90 and her PhD ’95 from UGA Department of Statistics.

Shete, who received his PhD ’98 from the UGA Department of Statistics, is a genetic epidemiologist and the section chief of behavioral and social statistics at the University of Texas, MD Anderson Cancer Center. He is the principal investigator for a number of research projects at MD Anderson Cancer Center as well as the university’s director of the biostatistics, bioinformatics, and systems biology program at the Graduate School of Biomedical Sciences. He is also a Fellow of the American Statistical Association.

Datta and Shete were presented with an official certificate and a gold and blue rosette pin — the colors representing the disciplines of science and engineering — on Saturday, February 14, during the 2015 AAAS Annual Meeting in San Jose, California.

Congratulations to Dr. Susmita Datta and Dr. Sanjay Shete for your continued success and advancement.

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

- Georgia Statistics Day Conference  
  Friday, October 30, 2015  
  Athens, Georgia

- DEPARTMENT OF STATISTICS FALL 2014 COLLOQUIUM SERIES  
  Begins Tuesday, August 27, 2015  
  Athens, Georgia

- BRADLEY LECTURE 2015  
  Friday, April 22, 2016  
  Athens, Georgia

STATISTICS NEWS SPRING 2015 brought to you by  
Interim Department Head  
Nicole Lazar

Department Associate Head  
Paul Schliekelman

Newsletter Editor  
Ashten Goeckel

With special thanks to our contributors:  
Christine Franklin, Joshua Lukemire, Kim Love-Myers, Abhuyadur Mandal, Lynne Seymour, T.N. SiriRam, Lydia Yohannes, Jaxk Reeves, Melissa Pettigrew, Megan Lutz
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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!

We wish to acknowledge gifts from and extend a very special thank you to the following individuals and organizations that made a gift to the Department of Statistics over the last year:

Dr. Yong Zeng, Ms. Zhuoxi Li, Dr. Georgia K. Gilbert, Dr. Yongcheng Qi, Dr. Thomas P. Ryan, Mr. Charles C. Phelps III, The Deloitte Foundation, Dr. Stephen W. Looney and Ms. Teresa McVeigh, Dr. Larry C. Brouillette, Dr. Ye M. Wang, The SAS Institute, Inc., Mr. Wesley D. Love, Mr. Andrew J. Vesper, Mr. Hoh Yoo Baek, Professor Kee H. Kang, Unclaimed Property Consulting & Reporting LLC, and Mr. Reshaun M. Finkley