



Department of Statistics

Statistics News

University of Georgia
Franklin College of
Arts and Sciences

Spring 2012

Departmental Notes and Headlines

John Stufken, Professor
& Department Head

Dear Alumni,

Departments change over time, and ours is no exception. Programs are added or deleted, program requirements change, courses are developed or revised, and, perhaps most importantly, people come and go. If you have not been to Athens recently, then the Department that you remember is almost certainly quite different from the current one.

Newsletters highlight some of the more prominent changes, but can only do so piecemeal. The best way to learn about today's Department of Statistics is to come and visit us. We would love to see you here, but realize that most of you, just like most of us, have very busy lives, in some cases quite far from Athens. The next best way to learn about who we are today is to visit the Department's website at <http://www.stat.uga.edu/>. Designed for easy navigation, it offers a wealth of information about the programs, the courses, and the people. If you are a bit like me, then you will be curious to see how things have changed since your days at UGA.

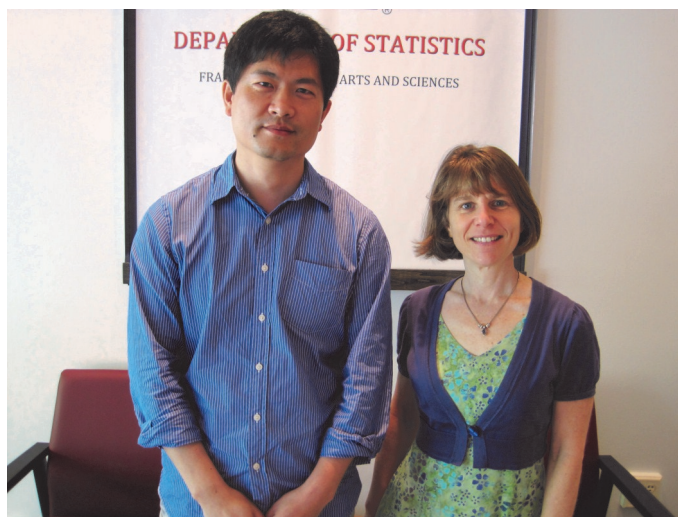
For example, did you know that we now feature a required year-long writing-intensive Capstone sequence (STAT 5010/5020) for our undergraduate majors? Or that we now offer five different tracks, based on area of application, for our Master's degree? Or that we have a new design and analysis of experiments course (STAT 6430) for statistics graduate students? Or that the Department currently houses 24 faculty and 4 staff members?

This information, and much more, is readily available as part of a more comprehensive sketch of the Department that is provided on the website. Under the News tab, you can also find updates from many alumni there, and we would welcome information from you as well. You may use the online form on the website to provide us with updates, or just drop us a note at stat@uga.edu.

I would like to take this opportunity to introduce two new

received his PhD in 2006, in his case in Biostatistics from The Ohio State University. He joined us from Delaware State University, where he had just moved after spending 3 years as a post-doc at Harvard University. We are delighted that they have become part of our faculty.

We also congratulate some faculty with their new ranks. Starting August 2011, Xiangrong Yin earned the well-deserved rank of Professor, while both Abhyuday Mandal and Cheolwoon



Pictured above are Liang Liu and Jennifer Kaplan, the two newest faculty members for the Department of Statistics.

faculty members to you, both of whom joined us in August of 2011. Jennifer Kaplan is an Assistant Professor with an interest in statistics education. Jennifer holds a 2006 PhD degree in Mathematics from the University of Texas, and spent several years on the faculty at Michigan State University before joining us. Liang Liu, also an Assistant Professor, holds a joint appointment between Statistics and the Institute of Bioinformatics. Liang also

Park became Associate Professors with tenure. Congratulations to all! For various awards and accomplishments of the faculty, I refer to the relevant articles in this Newsletter and to the News section of our website.

Across the nation, funds provided by the states to state universities are on the decline. Georgia and UGA are no exception. The

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Departmental Notes and Headlines Continued

John Stufken, Professor
& Department Head

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funds provided by the state to UGA have gone down by more than 25% over the last 3 years, resulting in less than 30% of UGA's total budget coming from the State of Georgia. These cuts have in part been offset by raises in tuition and fees. However, private donations have become essential in supporting the mission of the university and its colleges and departments.

The Department of Statistics has five funds to which donations can be made. I would like to highlight these funds and their purpose.

The Statistics Fund. This is a general purpose fund that can be used for travel support for students, refreshments for seminars, awards for students, equipment and supplies, and other

items deemed appropriate by the Franklin College.

The Bradley Fund. This fund is in the form of an endowed account, meaning that only the interest generated from the principal amount can be spent. The interest of this fund, originally established by former faculty member Dr. Ralph Bradley, is primarily used in partial support of the Bradley Lecture. This annual student focused lecture features very prominent speakers, and is co-sponsored with funds provided by the Statistics Club and the Department.

The Hutcheson Award Fund. This fund, established by emeritus faculty member Dr. Kermit Hutcheson, is meant to provide an annual award to a student selected by a faculty committee appointed by the Head. The criteria for the award include academic standing, enthusiasm for the field of statistics, and character of the recipient. Starting in academic year 2012-2013,

the award recipient will be a student chosen based on these criteria from our Capstone course, and will receive a \$500 award. (More about the Capstone course can be found in this Newsletter under news about the Undergraduate Program.)

The Bargmann Fund. This fund, named after former faculty member Dr. Rolf Bargmann, can be used to support the renovation and maintenance of the Bargmann Laboratory, which is the computer laboratory for our graduate students, and to provide travel support for graduate students.

The Cohen Fund. Named after former faculty member Dr. A. Clifford Cohen, the purpose of this fund is renovation and maintenance of the Cohen Room, which is used as a reading room, for refreshments after seminars, and for special gatherings.

With repeated cuts over the last

years in the Department's operating budget, these funds have become more and more critical to support scholarly activities and to reward students who excel in the pursuit of these activities. If you are in a position to contribute to one of these funds, or to help establish a new fund, then I encourage you to give this your utmost consideration. I would be happy to discuss this with you. If you work for a company with a matching gifts program, you may even be able to multiply the impact of your gift. Departments can benefit greatly from the generosity of their alumni, and any gifts, small or large, are put to excellent use and are very much appreciated.

If you work for a company that offers internship positions for undergraduate or graduate students, this might be another way in which you can help us. Internships can be a very valuable experience for students, and we have many students who are interested in competing for internships. We would love to hear from you if you know of any such positions.

The Department plans to organize an event for alumni and friends at the 2012 Joint Statistical Meetings (JSM) in San Diego. The format will be different from the receptions that we held at the JSM in 2009, 2010 and 2011, but the details are not known at the time of writing. As soon as we have more information, we will post it on our website and Facebook page. So please stay tuned!

Hopefully you will enjoy the pages of this Newsletter, and please do stay in touch.

John Stufken
Professor and Head

Staff Profile

Daphney is the department's Student Affairs Professional and front desk person. She is likely the first person to greet new students, visitors and lost souls. Her smile and demeanor create a great first impression of the department. Daphney has been with the department since 2002, and will have her 20th anniversary at UGA in December! She works very closely with students, being in touch with them from the time they submit their application for admission until the time they receive their degree. Once students arrive at UGA, they invariably realize how beneficial and important Daphney's support is to their ultimate success. Daphney has three children – Ivy, Whitley, and Brittney. Ivy attended Savannah State University; Whitley is a sophomore at Fort



Valley State University; and Brittney is a freshman at Albany State University. Daphney also has a one-year old grandson named Keion, and, in her spare time, she enjoys his company and traveling. Her favorite destinations are Jacksonville, FL and San Diego, CA.

Undergraduate Program Update

Christine Franklin, Undergraduate Coordinator and Senior Lecturer

Since the last newsletter where we listed our graduates through May 2011, we proudly graduated the following students with a BS degree in Statistics: Summer 2011 – William Grimes and Rina Patel; Fall 2011 – Jeff Anderson, Daniel Kreisler, and Alexander Lyford. We anticipate up to 12 graduates in Spring 2012 and Summer 2012.

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 will continue with graduate school and others are planning on joining the workforce using the skill set they gained as a statistics

major. Our students are sought out future employees in this data centric world. Congratulations to all our graduates!

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 minors. Our capstone course also continues to thrive. This past fall, an article appeared in the *The American Statistician* entitled, “A Capstone Course for Undergraduate Statistics Majors” detailing the success of the capstone course at the undergraduate level. We also have several students taking advantage of internship opportunities. We welcome any leads on internship possibilities for our students.



Pictured above are the students from the Spring 2012 Capstone course taught by Nicole Lazar and Cheolwoo Park, with TA, Adam Jaeger.

Graduate Program Update

Lynne Seymour, Graduate Coordinator and Associate Professor

After incorporating some hefty changes in the structure of our Qualifying and Comprehensive exams, and upon the introduction of our new sequence of professional development courses (STAT 8910-20-30), our current students are getting into their research earlier than previous students have – MS students who opt to write a thesis are starting at least one semester earlier, and PhD students are starting a year earlier.

Several of our alumni this year have passed along job openings for statisticians within the companies they work for. This has been an excellent source of opportunities for our graduating students, as well as a good opportunity for the department to explore in more detail what companies are looking for when they hire new graduates. If you happen to have an opening that one of our MS or PhD graduates might be interested in, please let me know! And if you have any suggestions for how we might better prepare our students for the workplace, I will welcome those enthusiastically!

Student Awards

The Department's annual student awards went to:

Best Senior PhD Student: Cong Feng
Best MS Student: Jacob Martin

Best Beginning PhD Student: Yuhang Xu

The Department also wishes to congratulate the following award winners and honorees:

Outstanding Teaching Award: Andrew Anderson
Haileab Hilafu
Minsoo Kim
Phi Beta Kappa inductee: Julia Orr
Innovative and Interdisciplinary Research Grant Award: Jung Ae Lee



Dr. Lily Wang helps students in the Statistical Software Programming class (4/6360) located in the Statistics computer lab.

Statistics Club Update

Chris O'Neal, Graduate Teaching Assistant & Statistics Club President

This year the Statistics Club hosted several fun social activities including a bowling tournament, mini golf contests, potluck dinners, and trivia games. Once or twice a semester the graduate students and professors took part in a bowling tournament and a trophy was awarded to the person with the highest mean score. In November, the club hosted the Department's traditional International Potluck Dinner, in which students and faculty showed off their cooking

skills. Also during dinner, the students and faculty played an international-themed trivia game. Finally, this spring the club played its own version of the TV game show Deal Or No Deal, which is based entirely on probability and expected values.

Another important event hosted annually by the Department of Statistics and the Statistics Club is the Bradley Lecture. This year, the 20th annual Bradley Lecture is scheduled to be held on Friday, April 13, 2012 at a new location, the Hotel Indigo in Downtown Athens. By the time you read this newsletter, this



Andy Bartlett and Ashley Askew are the big winners at the Stat Club Bowling Tournament.



The graduate students having fun at the bowling tournament. Pictured above (l-r): Xijue Tan, Yuan Zhuang, Lina Liao, Nan Zhang, Chris O'Neal, Jung Ae Lee, Yuhang Xu, Ashley Askew



Haileab Hilafu going for a hole-in-one at mini golf!

year's event will have already taken place, but we encourage you to mark the calendar for next year's event and plan on visiting us here in Athens. The guest speaker for this year's event is Professor Dennis Cook of the University of Minnesota. His talk will focus on "Envelope Models and Methods". The faculty and graduate students will have dinner with Dr. Cook at

Hotel Indigo's Rialto Room, during which time he will present his after dinner talk on "Dimensions of Statistics". The following afternoon, the Department will host its annual picnic at Memorial Park. This is a fun gathering in which the graduate students are given an opportunity to interact with the guest speaker in an informal setting.

Design and Analysis of Experiments Conference 2012

October 17-20, 2012
Georgia Center for Continuing Education
Athens, Georgia

Hosted by the
UGA Department of Statistics,
organized by
John Stufken and Abhyuday Mandal

For more information, please see
<http://www.stat.uga.edu/dae2012>

Exciting Developments in our Course Offerings

Daniel Hall, Associate Head and Associate Professor

In the Department of Statistics we are always asking how we can improve statistics instruction at UGA and, in particular, our undergraduate and graduate courses for statistics majors, Master's and PhD students. Lately we have taken several steps in this direction that we are excited about. In collaboration with the Department of Epidemiology and Biostatistics, we are introducing two new courses: BIOS (STAT) 8140, Multilevel and Hierarchical Models, and BIOS (STAT) 8050, Intermediate Mathematical Statistics. Both of

these will be cross-listed courses taught by faculty from both Statistics and Biostatistics, and are intended primarily as advanced service courses for quantitatively oriented students in other disciplines. The former course will give a broad introduction to multilevel models (a.k.a. hierarchical models and mixed-effect models), focusing on their conception, interpretation, and application in the social and biological sciences, where they are rapidly gaining in popularity and importance. The latter course, BIOS (STAT) 8050, will provide a compact (i.e., one semester) introduction to mathematical statistics focusing on those as-

pects of the theory of estimation and inference that are most crucial to students in disciplines such as epidemiology, educational research, and economics. We hope to offer both of these courses for the first time in academic year 2012-13.

In addition to these new service courses, the Department of Statistics regularly offers classes on new topics of interest to our own graduate students through STAT 8900, Special Topics in Statistics. Over the last several years this course has covered such cutting edge topics as Symbolic Data Analysis (taught by Dr. Billard), Statistical Learning

and Data Mining (co-taught by Drs. Ahn and Park), Sufficient Dimension Reduction (taught by Dr. Yin), and Statistical Analysis of Neuroimaging Data (taught by Dr. Lazar). These classes cover some of the most interesting and novel areas in statistics and provide our students with a sense of the dynamic nature of our field as well as exciting topics for research and further study.

At a less advanced level, another recent change to our courses that we think will benefit undergraduate majors and Master's level students involves the split-level (that is, undergraduate/graduate) course, STAT 4/6360. For many years this course provided extensive training in how to use SAS, a dominant and powerful statistical package. Although SAS remains a very important piece of software, no one statistical package can provide the entire toolbox for the modern statistician. Therefore we have recently broadened the scope of STAT 4/6360, which is now entitled, "Statistical Software Programming". This course now covers statistical software in general, with particular emphasis on SAS as well as R, which has enjoyed an explosion of popularity in recent years and has become nearly essential to the practice of statistics.

We think the developments in our course offerings that have occurred recently are great for our students and we are very pleased about them. We will continue to work hard to improve statistics instruction at UGA. For instance, major improvements to our graduate level service courses are currently in the works, although details will have to wait until next year's Newsletter. In the meantime, if you have any thoughts about how we can improve the training we provide our students, be sure to let us know.

Alumni Profile

The Department's featured alumna is Rebecca (Barrett) Phillips. She earned both a Bachelor's (2005) and Master's (2007) from the UGA Statistics Department. She began her career with Synovus Financial Corporation in 2007 as a Research Analyst in the Card Services division. Some examples of projects she worked on include a logistic regression model to identify which customers should receive a promotion mailing, time series analysis for budgeting purposes, and scorecard validation to ensure cutoff scores are properly set when deciding what terms to offer to credit card customers.

After spending several years in the banking industry, she earned an MBA from Kennesaw State, graduating in May 2011. In late 2011, Synovus promoted Rebecca to the position of Model Validation Analyst on the Model Risk Management team. This team is a part of the Audit division, which works closely with other areas of the bank to validate their models. The goal is to ensure the models both effectively model the financial information needed to make business decisions, and also meet requirements when audited by federal regulators. "I thoroughly enjoy taking the knowledge I gained in the UGA Stat Department and applying it to a real-world situation. I keep all my



books and notebooks in my desk and reference them often. The financial industry has so many opportunities to apply statistical models to enhance the company's business plan."

On a personal note, Rebecca and her husband, Matt, got married in January of 2009. They purchased their first home in the summer of 2011, and so home renovation projects consume most of their spare time. They are UGA football season ticket holders, so they are sure to find their way back to Athens at least 6 or 7 times a year!

Colloquium Series

Lily Wang, Assistant Professor
Cheolwoo Park, Associate Professor

The UGA Department of Statistics enjoyed another great series of colloquium seminars in 2011-12. On top of the regular seminar series, the department hosted a joint UGA-Clemson seminar, hosted the Bradley Lecture series, and recruited two faculty positions. Most of the invited speakers were from outside of Georgia and while here, they interacted with our faculty and graduate students, and learned about our department, university, and town of Athens.

A total of thirteen talks were held during the 2011 Fall semester. Eight of the invited speakers were from academia, three of them were from industry, and two of them were from federal government agencies. The talks covered a wide range of topics and expertise, from theoretical foundations to applications, with projects in experimental design, survey sampling, survival data analysis, random networks, varia-

ble selection, semi-parametric regression and several other areas.

The 2012 Spring Colloquium Series was full of events. Fourteen regular seminar talks varied from climate change study to application of data depth to imaging data analysis to statistical education, while featuring outstanding speakers including Xuming He from University of Michigan, Regina Liu from Rutgers University, and Roger Woodard from North Carolina State University. Besides the regular Colloquium Series, the department had eight job talks in the areas of mathematical statistics and teaching introductory statistics to fill a new assistant professor position in mathematical statistics and to replace an academic professional position due to the retirement of Chandler Pike. The department also hosted a joint UGA-Clemson statistics seminar in March at the UGA Botanical Gardens with the distinguished speaker Tailen Hsing from the University of Michigan. In April, the department and the

graduate student Stat Club will co-sponsor the annual event of the Bradley Lecture in honor of the late Professor Ralph A. Bradley. This year Dennis Cook from the University of Minnesota will give research and dinner talks and will meet with our faculty and graduate students. The Stat Club will also continue our tradition of hosting a picnic on the day following the Bradley Lecture with the speaker.

We encourage you to visit <http://www.stat.uga.edu/research>

/colloquia to keep up with our Colloquium Series. There you will find full details for all the talks in the series including their scheduling, talk titles and abstracts, and links to the speakers' webpages at their home institutions. And please support the Department of Statistics at UGA. Your support will help the Colloquium Series continue to enhance the educational experience of our students, provide research opportunities for our faculty, and enrich the academic environment of the department.



Dr. Tailen Hsing presents the lecture for the 2012 UGA/Clemson Joint Seminar held at the UGA Botanical Gardens

2011-2012 Colloquium Speakers:

Fall Semester, 2011

Yan Daniel Zhao, University of Oklahoma Health Sciences Center at Tulsa

Jane-Ling Wang, University of California, Davis

Hyonho Chun, Purdue University

Yi Li, University of Michigan

Xiaobo Ding, University of Washington

Warren Kuhfeld, SAS Institute

Haiyan Cai, National Science Foundation

Mi-Ok Kim, Cincinnati Chil-

dren's Hospital Medical Center
Lianming Wang, University of South Carolina

Ana-Maria Staicu, NC State University

MoonJung Cho, Bureau of Labor Statistics

Hanxiang Peng, IUPUI Math

William A. Brenneman, The Procter & Gamble Company

Spring Semester, 2012

Bob McGwier, Virginia Tech

Ji Meng Loh, AT&T Labs Research

M. Reza Meshkani, Shahid Beheshti University

Dennis Cook, University of Minnesota

Ping Ma, University of Illinois at Urbana-Champaign

Yongtao Guan, Yale University

Tailen Hsing, University of Michigan

Chanseok Park, Clemson University

Jian Kang, Emory University

Regina Liu, Rutgers University

Wenxuan Zhong, University of Illinois at Urbana-Champaign

Xuming He, University of Michigan

Roger Woodard, NC State University

Luyan Dai, Boehringer Ingelheim Pharmaceuticals, Inc.

Statistics for Teachers Class

Christine Franklin, Senior Lecturer
and Undergraduate Coordinator

Jennifer Kaplan, Assistant Professor

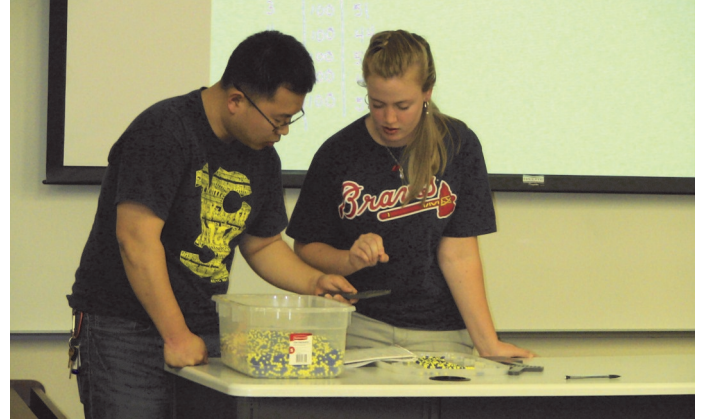
The UGA Statistics Department has been teaching a second course in statistics for mathematics education students since 1998. The course is designed to prepare pre-service and in-service high school mathematics teachers to teach the statistical concepts that appear in the Common Core Mathematics Standards and the Advanced Placement (AP) Statistics curriculum.

Two recent trends have converged to render knowledge of data analysis, statistics, and probability more essential than ever for teachers at the elementary, middle, and secondary levels. First, state standards, such as the Georgia Performance Standards (GPS), and national standard recommendations, such as the Common Core State Standards (CCSS), now include an unprecedented amount of content in data analysis and probability in the curriculum, from grades K-12. Second, the professional practice of teaching has become more data-driven, with standardized tests, both state and national, becoming a much larger part of the professional life of the teacher. STAT 4/6070 (both for senior undergraduates and graduate students) is designed to prepare high school teachers to meet the demands associated with these two trends.

It is important to recognize that the nature of teaching and learning in Data, Statistics, and Probability is quite different from that of subjects like Algebra and Geometry. Mathematics is a foundation, but not a proxy, for statistics and probability. Statistical reasoning differs from mathematical reasoning in that it begins not with premises or definitions but from evidence or da-

ta. Underlying statistical reasoning is a conceptual understanding of important ideas, such as distribution, center, spread, association, uncertainty, randomness, and sampling. One of the goals of STAT 4/6070 is to equip high school mathematics teachers to teach probability and statistics with an understanding of the difference between mathematical and statistical reasoning.

Pedagogically, the course has been taught using an activity-based model in which the students complete activities to master certain learning goals. For example, in one activity the pre-service teachers explore the learning progressions associated with measures of center and variability. The pre-service teachers use stacks of snap cubes to visualize the mean as the fair share value and then to quantify the variability as a measure of fairness. The next level of development for children is to consider the mean as a balance point. The pre-service teachers use this



Students sampling from a population to learn about confidence intervals

measures of fairness and forward to the concept of standard deviation. Not only does participation in this activity deepen the pre-service teachers' understanding of center and variability, it also provides them with activities and a pedagogical model they can incorporate in their own classes.

The assessments used in the course are designed to help pre-

service teachers complete a portfolio that includes summaries of journal articles chosen to reflect best practices in teaching statistics as specified by the Guidelines for Assessment and Instruction in Statistics Education (GAISE). In addition, the pre-service teachers compare and contrast the student learning goals for statistics and probability specified by state (GPS) and national standards (CCSS and GAISE). Finally, the pre-service teachers find tools appropriate for use in their classroom, such as data sets, web sites and lesson plans and explain how they might implement their finds in their future teaching.

This course has been nationally recognized as a model statistics course for teacher preparation programs to use in preparing teachers. The course is unique by integrating both statistical content and pedagogy. This course is also the foundational course for the developing Masters of Science in Statistics Education degree our department will soon offer. This degree program has also received national recognition (for example, the American Statistical Association) for the vision our department has shown in becoming a leader in the growing field of statistics education.



Students using online statistics applets to develop conceptual understanding of the material

model to create dotplots of data sets that meet certain criteria and then quantify the variability in the distributions they create. This leads to a discussion of the Mean Absolute Deviation (MAD) which is extended back to the

service teachers connect their statistical learning to teaching practice and include opportunities for the pre-service teachers to read the research literature on the teaching and learning of statistics. The pre-service teach-

Externally Funded Grant Projects in the Department of Statistics

Below is a listing of all new externally funded grant projects since May, 2011

**Yehua Li,
Associate Professor, PI**

Agency/Project: NSF, “Dimension Reduction, Model Selection and Classification in Functional Data Analysis”

Functional data analysis aims to model and analyze data sets where a datum is a random function, e.g. a curve or a high dimensional image. Due to the fast growth of modern data collection methods, such data sets become rapidly available in many biological, medical and industrial applications. Functional data are viewed as infinite dimensional vectors in a functional space, and are usually observed on discrete points and measured with error. Due to the infinite dimensional nature of functional data, dimension reduction is essential for

visualizing, modeling and making inference on these data. In the proposed project, the investigator will study new, computationally efficient dimension reduction methods for functional data based on spline approximations, and use asymptotic theory to develop new statistical devices for model selection and inference. The investigator will also study classification problems in functional data, by combining the proposed dimension reduction techniques with modern machine learning methods.

**Lynne Seymour,
Associate Professor, PI**
Agency/Project: USDA/FOREST SERVICE (Continuation of Joint Venture Proposal), “Assessing Climate Impact on Outdoor Recreation Participation and Consumption at National and RPA Regional Level”

The national assessment report is one of several USDA Forest Service reports completed for the 2010 Renewable Resources Planning Act Assessment. The objectives of the assessment are to statistically describe and project outdoor recreation participants and days of participation nationally across 17 popular natural resource-based activities out to the year 2060. Changes

in demographics, land use, economic conditions, climate change and population growth are explicitly incorporated.

**Yehua Li,
Associate Professor, PI**

Agency/Project: NSF, “CAREER: New Topics in Functional Data Analysis”

Functional data are deeply connected to other types of correlated data, such as spatial data, since they can both be modeled as stochastic processes. In the proposed research, the investigator will broaden the applications of functional data analysis by proposing a new functional data approach to model spatio-temporal point pattern data from disease surveillance applications, where the spatio-temporal random effects are modeled as latent functional processes. The proposed latent functional data approach for disease surveillance

data will help to model the relationship between disease occurrence and some environmental variables (such as pollution level), estimate the time trend in the disease rate, and predict the unknown risk factors represented by latent random effects. The results will help disease control agencies and local officials to gain better understanding of the disease risk and develop better public health policies, such as emission or water quality control policies.

**John Stufken,
Department Head and Professor, PI**
**Abhyuday Mandal,
Associate Professor, Co-PI**
Agency/Project: NSF, “Design and Analysis of Experiments Conference 2012”

This award provides participant support costs for the conference Design and Analysis of Experiments 2012 (DAE 2012) at the University of Georgia from October 17, 2012 to October 20, 2012. The conference features leading researchers of international repute, promising new researchers, and graduate students actively pursuing research in the area of design and analysis of experiments. Participants represent academia, industry and government, and the conference offers a forum for interaction, discussion, and exchange of ideas on novel research in this area.

Special sessions and activities to facilitate mentoring of junior researchers are an important focus of the conference. Themes of DAE 2012 include computer experiments, designs in marketing and business, designs in the pharmaceutical industry, algorithms for finding efficient designs, fractional factorial designs, designs for generalized linear models, designs for nonlinear models, designs for correlated data, and design robustness. The award provides partial support for approximately 40 participants.

Statistical Consulting Center

Kim Love-Myers, Associate Director
of the Statistical Consulting Center

The 2011-2012 academic year has been another year of growth for the Statistical Consulting Center (SCC). Under the direction of Dr. Jaxk Reeves and Dr. Kim Love-Myers, the SCC has continued to work with clients from various units within the university, as well as outside academic clients and corporate clients. The SCC has maintained collaborative relationships with the Franklin College of Arts and Sciences, the College of Agricultural and Environmental Sciences, the Warnell School of Forestry and Natural Resources, the College of Family and Consumer Sciences, the Odum School of Ecology, and the College of Veterinary Medicine. Additionally, the SCC has branched out through involvement in planning

for the Quantitative Biology Consulting Group, which brings together existing research support groups such as the SCC, the Georgia Center for Research Computing (GACRC), the Georgia Genomics Facility (GGF), the Biostatistics Consulting Service (BCS) and the Institute of Bioinformatics (IOB) in order to collaborate effectively with university researchers in biological areas. The SCC has also seen an increase in funding through ongoing relationships with several corporate clients.

Seven students from the Department of Statistics are supported on consulting assistantships: Yi Chen, Wenting Fan, Xinyu Liu, Jin Tang, Emmanuel Tuglo, Guannan Wang, and Wenbo Wu. A similar number of students have volunteered to work with the UGA SCC in varying capacities. As in previous



Kim Love-Myers and Graduate Assistant, Yi Chen, with clients in the Statistical Consulting Center.

years, our graduate consultants have made excellent contributions to the work of the SCC.

The SCC looks forward to continuing our consulting mission and continuing to grow with

support from the Graduate School, the Office of the Vice President for Research (OVPR), and the Franklin College of Arts and Sciences.

Faculty Awards and Honors

The Department wishes to congratulate the following award winners and honorees:

External Awards and
Honors:

NSF Career Award:
Yehua Li

Janet L. Norwood Award:
Lynne Billard

Isaac Newton Institute Rothschild Distinguished Visiting Fellow:
John Stufken

Internal Awards and
Honors:

Franklin College Research and Seed Grant Award:
Cheolwoo Park

Sarah Moss Fellowship:
Abhyuday Mandal

M.G. Michael Award:
Jeongyoun Ahn

Statistics News Spring 2012 Volume 5

Department Head: John Stufken
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Contributors: Timothy Cheek, Julie Davis, Christine Franklin, Daniel Hall, Jennifer Kaplan, Yehua Li, Kim Love-Myers, Chris O'Neal, Cheolwoo Park, Lynne Seymour, John Stufken, Lily Wang

This newsletter is also available online at
www.stat.uga.edu

Alumni Updates

Melissa Callaway Aitken

BS 1998

"I have my 10 year anniversary coming up in June 2012 working as a physical therapist with Georgia Health Sciences Medical Center formerly known as Medical College of Georgia Hospital in Augusta, Georgia. I want to brag on how I used my Statistics major/ Bachelor of Science degree to help with our research paper in achieving my Master's degree in Physical Therapy in December 2001. I was really ahead of my class, due to my statistics background, and therefore my classmates asked me for the majority of input in assimilating the data in our group research projects. We aced our projects with flying colors, might I add.

Thank you for all the wonderful education I received from the Statistics Department. I felt that each of the professors as well as the department head were all eager to listen and counsel us in how to use our degrees in our future.

I have been residing in Augusta, Georgia since June 2002 where I met my husband, Matt Aitken who is now one of the Richmond County Commissioners and we have a five year old daughter, Cecilia who is now in Kindergarten."

Manmohan S. Arora

PhD 1973

"Currently I am retired from active teaching. However I am working as an Advisor to HCLInfosys & Advisor to Eternal University, both institutions in India. I am also freelancing as an Education Consultant, engaged in tie-ups between India & foreign academic and professional institutions. I travel frequently between the US and India."

Susan Anne Baldwin

BS 1979

Susan continues to serve as a Project Manager with Southern Company Services, Inc. (subsidiary of Southern Company -utility). Previously a part of the SCS Information Technology (IT) Program Management Office, the Project Management office department moved out of IT at the end of 2011 to an overall Southern Company Services corporate level under the Business Performance Services organization. Susan is presently managing IT projects in the business functional areas of Distribution (including AMI) and Transmission.

If you would like your update included in our next newsletter, please send your information to stat@uga.edu with "alumni updates" in the subject line.

If you would prefer to not receive a paper copy of this newsletter, or to update your address, email, or phone number in our database, please send that information to: records@uga.edu.

Robert M. Brown

MS 1965

Robert is a Professor of Accounting at Virginia Tech.

Randy Cooper

MS 1996

"I am a systems analyst at Protective Life Insurance Company in Birmingham, AL. Before moving to Birmingham, I was a temporary statistics professor at the University of South Alabama and a software engineer at Huntington Ingalls Industries. I am married to my lovely wife Melissa. It's been 13 years. I am also involved with Toastmasters International, and I achieved the DTM (Distinguished Toastmasters) award, which is the highest award. I also served as Area and Division Governor."

Kimberly Davis

BS 1991

Kimberly received her Doctor of Pharmacy in 1998 from Nova Southeastern University. She is currently working on her Health Information Technology certification, to be completed in December 2012 from George Washington University.

Nicole Ferguson

MS 2004

"I completed my PhD in Biostatistics from the University of Louisville in 2011. I am currently an Assistant Professor of Statistics at Kennesaw State University in Kennesaw, GA. I am also Director of the Minor in Applied Statistics and Data Analysis program at KSU."

Roy Fleischer

AB 1987

"I am a Director, Client Services for Thomson Reuters Healthcare - Federal. I am responsible for delivering industry expertise combining innovative technology solutions delivering critical information to leading decision makers in the healthcare market. Objectives include uncovering timely information from disparate data to evaluate program performance and budgets; investigate fraud and abuse; manage special populations; and support legislative and policy activities."

Tonya S. Freeman

AB 1986

Tonya has been working at the CDC since 1986.

Cathleen Gillespie

MS 2002

"I have been working at the CDC in Atlanta since 1998, right after I received my BS in Statistics from UGA. I continued working there full time while I completed my Master's degree. Four years ago, I was promoted to Senior Statistician in the Division for Heart Disease and Stroke Prevention, and I now supervise a team of five data analysts and statisticians. I love my job and I miss the UGA Statistics Department!"

Donald E. Henderson

BS 1978

Donald was recently appointed as the Assistant City Attorney and Deputy Solicitor for the City of Johns Creek, Georgia.

Paul Hofmann

BS 1995

"I have been employed at the Duke Clinical Research Institute (Durham, NC) since 2002. As a senior statistical programmer, I work on numerous clinical trials for various pharmaceutical companies. As the statistical programming lead, I create numerous analysis datasets, tables, listings, and graphs that are sent to the FDA for drug approval."

Will Keyes

BS 2009

"I am currently a second year law student at the University of Georgia School of Law. After finishing my degree in statistics I completed the AB/MA requirements in the Terry College of Business and earned a Master's degree in Economics in 2010. I wrote my thesis on the Effect of the Expansion of Privity on Legal Malpractice Claims in the U.S. I worked last summer as a law clerk at the Fulton County Superior Court Business Case Division, clerking under a panel of senior judges, and am currently working with the in-house counsel at Saint Joseph's Hospital of Atlanta."

Young-Won Kim

PhD 1989

Young-Won Kim has been a faculty member in the Department of Statistics at Sookmyung University (Seoul, South Korea) for about 20 years now. "I am interested in research on Survey Sampling. Currently, I am working on sample design for public sector and election poll, etc."

Nikki A. Long

BS 1997

Nikki is the Carrier Relations Manager for Mansfield Oil Company, Inc. in Gainesville, Georgia, where she manages logistics for petroleum hauling.

Michele Gordon Mandel

AB 1980

Michele recently celebrated her 31st year at the Centers for Disease Control and Prevention in Atlanta. Michele is a Health Statistician in the Division of Reproductive Health. Most of her years were spent working on a variety of research studies looking at such topics as oral contraceptive use and the risk of breast cancer, ectopic pregnancy, smoking cessation during pregnancy, and most recently, perinatal transmission of HIV in infants and contraceptive use effectiveness in HIV positive woman. Michele's son graduated from the UGA Terry College of Business in May with a degree in MIS and her daughter is planning to attend UGA in the near future.

Colette Pirie

MS 1983

Colette currently lives in Hawaii. She says that she is "totally retired," but she does still occasionally come to Athens.

Manoj Rema

BS 2011

Manoj is currently enrolled at Georgia State University pursuing a master's degree in Public Health.

JSM Gathering San Diego, California

Please join us for the:

University of Georgia Gathering of Alumni and Friends

Location and time TBD.

Please watch the website, www.stat.uga.edu for updates on this event.

John H (Jack) Schuenemeyer

PhD 1975

John H (Jack) Schuenemeyer, UGS PhD Statistics, 1975, has been named Distinguished Lecturer for 2012 by the International Association for Mathematical Geosciences (IAMG). Anyone interested in having Jack make a presentation should contact the IAMG website (www.iamg.org) for possible topics and details. As distinguished lecturer, Jack has given talks at the University of Geosciences in Beijing, the Sandia National Laboratories, and the University of Ottawa. Jack is professor emeritus, University of Delaware and is currently president of Southwest Statistical Consulting, LLC. He resides in Cortez, CO with his wife Judy (UGA, J.D., 1976).

Stuart Stevens

MS 1977

"I continue to work as an environmental consultant and owner of Coastal Environmental Consulting Services and Principal Ecologist with Environmental Planning Specialist, Inc., Atlanta, Ga. My statistics background comes in handy with every project! I live on my farm near Dublin, Ga., and enjoy days of leisure every chance I get."

Steve VanWieren

MS 1995

"I recently left Equifax after a 15 year career and became the Principal Statistician at Ultimate Software, a Human Capital Management software company (which is ranked as the #25 company to work for in Fortune's Top 100 Places To Work). At Ultimate Software, I am in the process of starting up a predictive analytics function and department."

Michael Walkup

MS 1999

Michael and his wife welcomed a baby girl, Evangeline, on June 26, 2011.

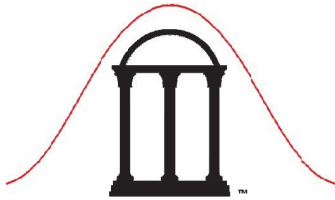
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We wish to acknowledge gifts from and extend a very special thank you to the following individuals and organizations who made a gift to the Department of Statistics during the 2011 calendar year:

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