

BiosRhythms

SCHOOL OF PUBLIC HEALTH

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Department of Biostatistics

Kosorok Appointed Chair of Biostatistics



Michael R. Kosorok, MS, PhD, has been named Chair of the Biostatistics Department at the University of North Carolina's

School of Public Health, effective May 1, 2006.

Dr. Kosorok currently serves as Professor in the Department of Statistics and the Department of Biostatistics and Medical Informatics as well as Affiliate Professor in the Department of Pediatrics, all at the University of Wisconsin, Madison. He has been on the University of Wisconsin faculty and a member of the University of Wisconsin's Comprehensive Cancer Center since 1992.

Dean Barbara K. Rimer said Kosorok is a multi-faceted biostatistician who represents a superb blend of both methodological and collaborative research. "He is one of the leading biostatisticians in the world in both the development of innovative statistical methods that are used worldwide and in the application of these methods to important public health issues, such as the treatment of cystic fibrosis and cancer," she said. "There is no question that Dr. Kosorok will greatly enhance the already strong collaborations

between the Department of Biostatistics and other departments within the School of Public Health and within other UNC Health Affairs schools."

Kosorok received a BM in Music Composition and an MS in Statistics, both in 1988 from Brigham Young University. He received both an MS and a PhD in Biostatistics in 1991 from the University of Washington at Seattle and a third master's in Music Composition from the University of Wisconsin in 1999.

With a notable track record of teaching, service and publication, Kosorok has received several highly competitive NIH grant awards and has published numerous papers in the best biostatistics and statistics journals in the world. Of particular national and international importance are his contributions to the efficient design of clinical trials and to the analysis of data from clinical studies. In addition, Kosorok initiated a program to recruit and develop minority students at the University of Wisconsin.

"Dr. Kosorok is a true biostatistician in every sense of the word," said Dr. Lawrence L. Kupper, Alumni Distinguished Professor and Associate Chair for the Department of Biostatistics. "He will serve as a great role model for both faculty and students in the UNC Department of Biostatistics." Kosorok will replace Interim Chair Jianwen Cai, PhD, in May 2006. In January, 2006, Dr. Cai succeeded

former Chair Ed Davis, PhD, who stepped down following an important period of growth and enhanced stature of the department.

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Special thanks to Chris Perry!

MESSAGE FROM THE CHAIR

We are nearing the end of another very successful year for Carolina Biostatistics. In the past few years, I have written of state budget problems, but the economy of North Carolina is recovering to the extent that we are not faced with major cuts from our State budget this year. We are, of course, thankful for this.

We welcomed 31 new graduate students and seven new BSPH students to our program in August. As usual, we are pleased that many bright, young scholars are interested in biostatistics in general and our department in particular. As I write, they are preparing for their first set of final exams in biostatistics.

We have also added several new faculty members in the past year. Dr. Lisa LaVange joined us in September as the new Director of the Collaborative Studies Coordinating Center (CSCC) and as Professor of the Practice of Biostatistics. Lisa is a graduate of our department and has had a distinguished career with leadership positions at the Research Triangle Institute, Rho, Inc., and Quintiles Transnational Corp. The position she left to join us was as Vice President of Biostatistics and Data Management at Inspire Pharmaceuticals. She is the President Elect of the Eastern North American Region (ENAR) and is Program Chair for the 2006 Joint Statistical Meetings in Seattle.

Dr. Petra Buzkova joined us as a Research Assistant Professor in January. Petra, a native of the Czech Republic, received her PhD in Biostatistics from the University of Washington in December 2004.

Her major duties are with the Lineberger Comprehensive Cancer Center.

Dr. Mark Weaver, also a graduate of our department, was given a joint appointment as Research Assistant Professor of Biostatistics and Nursing. Mark will provide statistical expertise to the growing research program in the School of Nursing.

Two faculty members were promoted this year. Dr. David Couper was promoted to Research Associate Professor and Dr. Todd Schwartz was promoted to Research Assistant Professor. David was recognized for his outstanding contributions to collaborative clinical and epidemiological research at the CSCC. Todd was promoted in recognition of his outstanding work with the School of Nursing and with the Biometric Consulting Laboratory. Todd's appointment has also been made a joint appointment with the School of Nursing.

Regrettably, Dr. Michael Schell, Research Professor and Director of the Biostatistics Core at the Lineberger Comprehensive Cancer Center, has resigned his position. Michael will head the Biostatistics Division at the Moffit Cancer Center & Research Institute in Tampa, Florida. Michael has been on our faculty for 10 years and will be greatly missed.

The research program at Carolina Biostatistics continues to flourish. This year the faculty brought in over \$8 million in externally funded research grants. I am particularly pleased that we currently have 10 federally funded grants for the development of new



biostatistical methods. The publication record of the faculty has been very good over the last few years. In the three year period from 1998 to 2000, there were only seven publications by Carolina Biostatistics faculty and students in the three leading biostatistical journals (*Biometrics*, the *Journal of the American Statistical Association* and *Biometrika*). In the last three years (2003-2005), that number has increased to 45 publications authored by 15 different faculty members. Over the same time period, the number of collaborative papers published by our faculty has more than doubled. These numbers illustrate the hard work of our faculty both in the methods and applications of biostatistics. This is a remarkable record and one of which we can all be proud.

This is my last letter to you as the Chair of the Department, as I have resigned effective December 31, 2005. It has been a pleasure and an honor to serve as the Chair of this fine department. I greatly appreciate all of the support of the alumni over the past eight years and look forward to watching as the department continues to excel in training and research.

With warmest regards,
Ed

Davis Retires as Chair

On October 8, 1998, Dean William L. Roper made the following announcement:

“I am very pleased to announce that I will propose to the Chancellor that Dr. Ed Davis be appointed Chair of the Department of Biostatistics for a five year term. You have all known Dr. Davis as a colleague, mentor, and, most recently, as Interim Chair. In all these capacities, he has shown exemplary skill. I am delighted that he has agreed to continue to serve the School and University in this important role.

We are all very grateful for the leadership he has displayed in the past and look forward to his leadership as we move into the future.”

Davis’ appointment to the Department of Biostatistics as Chair became official on January 1, 1999. Six years later, Davis announced that his time as Chair is over and that he would be retiring as of December 31, 2005.

During his tenure as chair, Davis was able to advance the department on a number of fronts, helping to mold it into a most competitive force in the field of biostatistics. Total faculty has grown from twenty-nine in 1998 to forty-one in 2005. This growth was split between tenured faculty (an increase of seven) and research faculty (an increase of four). An important measure of any degree-granting department is the number of publications in the field’s most prestigious peer-reviewed journals. Counting publications in three of the top statistical journals, *Journal of the American Statistical Association*, *Biometrics*, and *Biometrika*, Biostatistics faculty members authored forty-five articles during the three-year period of 2003-2005, compared to only seven articles during the three-year period of 1998-2000. Furthermore, this incredible publication record over the past three years is attributed to fifteen different faculty members. At the same time that research in statistical methodology was on the rise, a comparable increase occurred in collaborative research, the hallmark of UNC Biostatistics since its inception. Based on the department’s annual reports for the years 1998 and 2004, a total of one-hundred-eight collaborative publications were authored by Biostatistics faculty members, compared to fifty-eight in 1998. These are records for which the entire department can be proud!

Other highlights of the past eight years with Davis at the helm of the department include:

- Hiring the first faculty member to be granted an endowed chair (Associate Professor Danyu Lin, Dennis Gillings Distinguished Professor);
- Establishing a strong genomics program in the department (Associate Professor Fred Wright, Assistant Professor Fei Zou, and Assistant Professor Mayetri Gupta);
- Introducing Bayesian statistics courses for the first time (Professor Joe Ibrahim);
- Hiring the first Professor of the Practice in the School of Public Health and new Director of the Collaborative Studies Coordinating Center (Professor Lisa LaVange);
- Establishing three new scholarships for graduate students (Mohberg , GlaxoSmithKline, and Hardison scholarships) and the first industry-funded scholarship for a doctoral dissertation (Amgen scholarship).

Due to his perseverance and commitment to his profession, today we have forty-one faculty members, sixty-one staff members, and one-hundred-thirty-five students from various countries.

Ed Davis will not only be known as Chair, but as a mentor as well as friend to those who have served under his leadership. He will continue to work on grants and contracts for which he is currently funded within the University and also will work through the Collaborative Studies Coordinating Center (CSCC). He may teach one course per year, as well.

“Ed has been a terrific chair, leading our Bios department to the top ranks of similar programs anywhere,” Dean Rimer said. “We are grateful for his strong leadership.”

DEPARTMENTAL HAPPENINGS

Cai Named Interim Bios Chair



Jianwen Cai, Ph.D., has been named interim chair of the UNC-CH School of Public Health's Department of Biostatistics. "Jianwen is accomplished in both statistical methodology and various subject matter areas, including obesity," said School of Public Health Dean Barbara K. Rimer. "She is a very productive researcher with two NIH-funded grants. She values students and teaching and received the School's McGavran Award for Excellence in Teaching. I am confident that she will be an extremely effective interim chair." Dr. Cai will lead the department until Dr. Michael Kosorok moves to Chapel Hill.

Dr. Cai, Professor of Biostatistics, has been a member of the School's faculty since 1992. Her research interests include survival analysis, design and analysis of clinical trials, analysis of correlated responses, cardiovascular disease, obesity, and cancer research. She is an elected Fellow of the American Statistical Association and has more than 80 peer-reviewed publications. She currently serves as Associate Editor for two statistical journals, *Biometrics* and *Lifetime Data Analysis*. A native of Qingdao, China, she received her bachelor's degree in mathematics from Shandong University in Jinan, China. She earned a master's degree (1989) and Ph.D. (1992) in Biostatistics from the University of Washington.

Lin Receives Prestigious NIH Merit Award



The National Institutes of Health (NIH) has awarded its prestigious Method to Extend Research in Time (MERIT) Award to Dr. Danyu Lin, Dennis Gillings Distinguished Professor of Biostatistics at the UNC-CH School of Public Health. The award was granted to Dr. Lin by the National Institute of General Medical Sciences, a branch of the NIH, for his work on analyzing "censored data," a form of incomplete information about the development of disease or death.

"This NIH MERIT Award demonstrates the immense value placed on Dr. Lin's work by the research community," said UNC-CH School of Public Health Dean Barbara K. Rimer. "This is one of the highest honors to be accorded a researcher by one's peers." Dr. Lin's research is particularly important, because in any study of diseases, there is almost always some incomplete information. "We are immensely proud of Dr. Lin and his contributions," Dean Rimer said. "His

work is highly regarded and often cited by sources worldwide. In fact, in 2003, Thomson ISI recognized Dr. Lin as one of the most highly cited researchers in the world. He is a great example of the impact and influence our School's faculty members have among our colleagues internationally."

MERIT awards provide long-term, stable support to investigators whose research competence and productivity are distinctly superior and who are likely to continue to perform in an outstanding manner, according to the NIH. The provision of long-term, stable support is expected to foster continued creativity and spare the investigators the administrative burdens associated with preparation and submission of full-length research grant applications. This may allow investigators the opportunity to take greater risks, be more adventurous in their lines of inquiry, or take the time to develop new techniques. After the initial five years of support, the MERIT awardee may request an extension of three to five more years.

Lin's award is the competitive renewal of a grant first awarded to him in 1992. The major goal of this research is to develop new statistical methods for the analysis of censored data. In biomedical studies, investigators are often interested in the times to occurrence of clinical events (e.g., diseases and death) and the repeated measures of biological markers (e.g., blood pressures and CD4 counts). The observations of such outcome measures are censored whenever the subjects are not followed for the full duration of interest. For the last thirteen years, this NIH grant has enabled Dr. Lin to develop highly innovative statistical methods for the analysis of censored data. His methods have been published in leading statistical and genetic journals, and widely used by biomedical researchers.

For more information on Dr. Lin and his research, please visit <http://www.sph.unc.edu/bios/facstaff/>.

Chambless Resigns as Director of the Collaborative Studies Coordinating Center



Dr. Lloyd E. (Woody) Chambless has resigned as Director of the Collaborative Studies Coordinating Center (CSCC) effective September 5, 2005. He remains on the faculty of the Department of Biostatistics and will continue his research in cardiovascular disease epidemiology. During his seven-year tenure as Director of the CSCC, several new projects were added and, and total research funding has averaged five to seven million dollars per year. The CSCC is widely recognized as one of the leading centers for collaborative research in the country, particularly in the area of cardiovascular disease epidemiology. The Department and School have greatly benefited from Woody's outstanding leadership.

Ryan 2005 Bernard G. Greenberg Lecture Series Speaker

The 2005 Bernard G. Greenberg Distinguished Lecture Series was held May 18-20, 2005. The lectures were presented by Dr. Louise Ryan of the Harvard School of Public Health Department of Biostatistics.

Dr. Ryan works on statistical methods related to environmental risk assessment for cancer, developmental and reproductive toxicity, and other non-cancer endpoints such as respiratory disease. She also works on cancer clinical trials and epidemiological methods for the study of birth defects and adverse reproductive outcomes. A special interest is the analysis of multiple outcomes as they occur in these applied settings. Dr. Ryan received her PhD in Statistics from Harvard University in 1983. She is a fellow of the American Statistical Association and the International Statistics Institute, as well as the current co-editor of *Biometrics* and President of the Eastern North American Region of the International Biometric Society.

“Statistical Methods for Environmental Epidemiology” served as the topic of Dr. Ryan's lectures. The series consisted of three talks, linked together under the broad topic of statistical methods for environmental epidemiology.

- 1) An overview to describe some emerging challenges, as well as some more traditional areas where there are still some great opportunities for innovative statistical methods to be developed and applied;
- 2) A lecture built on the latent variable theme developed in Lecture 1, presenting a detailed case study on the health effects of in-utero exposure to methylmercury;
- 3) A final talk on optimal design for environmental studies.

Named in honor of Bernard G. Greenberg, former dean of the School of Public Health and department chair, the Greenberg Lecture Series is held annually.



Pictured (l-r) is Dr. Louise Ryan and Dr. Clarence "Ed" Davis.



LaVange Named New CSCC Director

Lisa LaVange has been appointed the new Director of the Collaborative Studies Coordinating Center as well as Professor of the Practice of Biostatistics, effective September 6, 2005. Dr. LaVange received a B.A. in Mathematics and a Ph.D. in Biostatistics from UNC-Chapel Hill. Prior to her appointment, Dr. LaVange served as Vice President of Biostatistics at Quintiles Transnational, Corp., followed by Vice President of Biostatistics and Data Management at Inspire Pharmaceuticals, Inc. She is a Fellow of the American Statistical Association (ASA) and has been named the ASA Program Chair-Elect of the 2006 Joint Statistical Meetings, to be held in Seattle, Washington.

2005 Biostatistics Golf Tournament



Students, faculty, staff, and alumni participated in the 13th annual Biostatistics Superball Golf Tournament at Hillandale Golf Course in Durham on Sunday, October 9. The day began with damp and somewhat cool weather that was not promising to be comfortable. However, as happens so often in golf, the rain stayed away, the sun peeked through the clouds, and everyone had a marvelous and fun time. Some days, golf can teach us a lot about life.

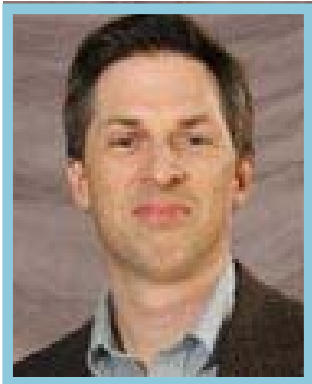
Professors Larry Kupper and Lisa LaVange joined Byron Raines and Jamie Powers for the first tee time of 12:00 noon. Jamie won a sleeve of golf balls for being closest to the pin of any competitor on the long par 3, 17th hole. Carding a 65 on the par 71 course won the group fourth-place in one of the best scoring tournaments ever. The

second tee-time group of Brian Armstrong, Matt Gribbin, Jerry Hosking, and Bill McGee used a card match to capture third-place with another 65. The third tee-time and a second-place score of 64 were the property of Brooke Heubner, Jed Heubner, John Kairalla, and Keith Muller. Brooke also took home a sleeve of balls for being closest to the pin on the par 3, number 4. The fourth and final tee time, as well as a first-place winning 59, went to the team of Anita Chen, Mike Jiroutek, Brent Johnson, and Ryan Mays. The observant data analyst likely noticed the perfect rank-order correlation of -1 between starting time and finishing score. Thanks to John Kairalla for helping with the tournament, including recruiting and team assignment. Thanks also to Larry Kupper for starting this wonderful annual tradition over 10 years ago. We hope to see you all next year for the next installment.

The Regina C. Elandt-Johnson Master's Paper Award in Biostatistics

The department is pleased to announce that, on behalf of friends and colleagues of Dr. Regina Elandt-Johnson, Professor Gary Koch has issued a \$10,000 matching gift challenge to create a new endowed fund in the Department of Biostatistics. The Regina C. Elandt-Johnson Master's Paper Award in Biostatistics will recognize an outstanding master's paper in the department. If you would like to make a contribution to this fund, please make your check out to The Public Health Foundation and write Regina Johnson Award in the memo section. Send checks to the Office of External Affairs at 200 North Greensboro Street, Suite C-2 Campus Box 7407, Chapel Hill, NC 27599-7407.

Farewell to Michael Schell



A farewell reception was held on Monday, November 21, in honor of Michael Schell, Research Professor and Director of the Biostatistics Core at the Lineberger Comprehensive Cancer Center. Dr. Schell moved to Tampa, Florida, to further his career as the acting head of Biostatistics at the H. Lee Moffitt Cancer Center and Research. He will also be a faculty member and chief of the Division of Biostatistics in the Department of Interdisciplinary Oncology, College of Medicine, University of South Florida. Moffitt, like UNC Lineberger, is an NCI-designated Comprehensive Cancer Center.

For the last decade, Michael has led the Cancer Center's Biostatistics Core Facility and has been a faculty member in Biostatistics at the UNC School of Public Health. Under Michael's direction, the Core has expanded and improved significantly. During our most recent competitive Core Grant Renewal, the Core received an "outstanding" rating from peer reviewers. We truly appreciate Michael's work and leadership. Michael is an avid baseball fan and has authored two books on baseball and statistics.

Weinberg Presented Prestigious Awards

Dr. Clarice R. Weinberg, Chief of the Biostatistics Branch of the NIEHS and Adjunct Professor of Biostatistics, has been announced as this year's recipient of the 4th annual Janet L. Norwood Award for Outstanding Achievement by a Woman in the Statistical Sciences. She accepted the award and delivered a lecture at the ceremony in her honor at the University of Alabama.

Dr. Weinberg holds Adjunct Professorships at the University of North Carolina's Departments of Biostatistics and Epidemiology. In 1995, She was elected as a fellow of the American Statistical Association.

In addition to receiving the Norwood Award, Dr. Weinberg was also named by the ASA Section on Statistics in Epidemiology as the 2005 recipient of

the Nathan Mantel Award for Lifetime Contributions to Statistics in Epidemiology. The award is typically given every two years, and the Section on Statistics in Epidemiology of the American Statistical Association recognizes a person reflecting "lifetime achievement" in statistical methods developed to solve problems in epidemiology resulting from involvement in epidemiological analysis.

The Amgen Dissertation Fellowship

With support from Amgen, the Department of Biostatistics, School of Public Health, University of North Carolina at Chapel Hill has established a fellowship to support an outstanding PhD student during the preparation of his/her dissertation.

During their study, most graduate students are supported by either an NIH training grant (the Department currently has four training grants) and/or by working with a faculty member as a Graduate Research Assistant (GRA). During the time that a student is working on his/her dissertation, the obligations of a GRA take substantial time away from the research. The Amgen fellowship will provide funding for one outstanding student to devote his or her's full effort to the dissertation research without the distraction of employment responsibilities.

The Amgen Fellowship program will be jointly directed by Professors Lisa LaVange and Ed Davis. They will be responsible for selecting the fellow and assuring that the fellow is making good progress toward completion of the degree.



Pictured from left to right are Dr. Galina Shestova of Russia and Dr. Ed Davis

Did You Know?

Carolina Biostatistics is taking a lead role in assisting Saint-Petersburg State University (SPSU) to establish the first Master of Public Health Program in Russia. The Association of Schools of Public Health (ASPH) and the Fogarty International Center at NIH are actively assisting faculty members at SPSU in this endeavor.

In the spring of 2003, Dr. Peggy Bentley, Associate Dean for Global Health at UNC and a member of an ASPH delegation, advised SPSU on creating the new program. Subsequently, Carolina Biostatistics was chosen to be the primary advisor concerning the biostatistical aspects of the new degree and hosted Dr. Sergy Malov of SPSU for two months as he began the process of setting up the biostatistics portion of the MPH program.

Dr. Anastasia Ivanova, Assistant Professor and a graduate of SPSU, and Dr. Ed Davis are the Carolina Biostatistics leaders in this project. In May 2005, Davis and Ivanova attended a two-day workshop in St. Petersburg on courses in biostatistics and epidemiology.

In line with other MPH programs in Schools of Public Health in the United States, all MPH students will take five basic courses in Public Health: biostatistics, epidemiology, health behavior, health policy, and environmental sciences. They will also take a Public Health seminar course in which current topics in public health are discussed. The basic biostatistics course will be very similar to UNC's BIOS 110. Students specializing in biostatistics will take courses in the theory of statistics, linear models, stochastic processes, and survival analysis. The program will take two full years to complete.

The first twenty-two students were admitted to the program for the fall 2005 semester. Ed Davis attended the opening ceremony for the program in September and led the discussion in the first class of the public health seminar. The topic of the discussion was cardiovascular disease in Russia. Russia has one of the highest death rates due to heart disease in the world, and this is a huge challenge for public health.



Pictured above are students in new MPH Program.

Coffey Receives Grizzle Award

Chris Coffey, a 1999 doctoral graduate of the department, is this year's James E. Grizzle Distinguished Alumnus Award recipient. Since his graduation, Coffey has a list of impressive accomplishments, including co-authoring 40 peer-reviewed journal articles, an invited book chapter, promotion to Associate Professor at the University of Alabama-Birmingham (UAB), and the UAB School of Public Health teaching award. Coffey has also been very involved in research as co-Private Investigator (PI) of a National Institute of Health (NIH) funded methodology grant and PI for a coordinating center for an NIH funded clinical trial of stroke prevention.

The James E. Grizzle Distinguished Alumnus Award was established to

honor Dr. Grizzle, former Department Chair, for his outstanding contributions to biostatistical research and consulting. The award is presented to a graduate of the University of North Carolina Department of Biostatistics in recognition of an outstanding record in the development of new statistical methodology and in the application of statistical methods to important public health problems. Evidence of an outstanding record is measured by the quality and quantity of peer-reviewed publications in both statistical and subject-matter journals. The intent of the award is to recognize and encourage rising stars in the field of Biostatistics. Previous winners of this award have been employed in academia, government, and private industry.

In honor of this award, Dr. Coffey presented the Biostatistics 2005 Foard Day Lecture titled, "Sample Size Adjustments Using Internal Pilot Designs for Repeated Measures ANOVA." The 2006 Foard Day Lecture details have not been announced in full.



Other Alumni News

John Bailer (Ph.D., '86) has been elected to serve on the Regional Committee of the International Biometric Society (IBS).

Katherine L. Monti (Ph.D., '75) will serve on the ASA Board of Directors as the Council of Chapters Board Representative.

Stuart A. Gansky (BSPH, '88, MS, '92, DRPH, '96) will serve as the Chair-Elect for the ASA Section on Statistical Consulting.

Jamie Grady (DrPH '92), wife Helen Wu, and daughter Sarah all survived Hurricane Rita without any major inconvenience or home damage. They avoided the traffic by leaving Galveston early and waited out the storm with friends in San Antonio.

Both Jamie and Helen have faculty positions at the University of Texas Medical Branch.

Frank Harrell (Ph.D., '79) is happy to report that three more recent UNC Biostatistics graduates have started working in the Department of Biostatistics in the Vanderbilt University School of Medicine: Cindy Chen (PhD), Cathy Jenkins (MS), and Jennifer Thompson (MPH). Vanderbilt is benefitting greatly from its UNC connection. Lily Wang has been on the faculty for more than a year now and has been a great addition.

Rachael DiSantostefano (MS, '93) and her husband, John Manns, had a son, Ian Jackson Manns, in April. Rachel completed her PhD at UNC in Health Policy in 2005 and works as an

Epidemiologist at GlaxoSmithKline in Research Triangle Park.

Marie Louise "Lou" Harrell (MS, '80, MBA '93) has been appointed Director of the Office of Contracts and Grants at the University of North Carolina-Greensboro effective April 2005. This office is responsible for post-award research administration and compliance for \$30 million of externally sponsored funds per year. Lou finds it challenging to work with research faculty, and her experience in applied research and Business Management are both essential for this position. After living in the Triangle for 25 years, Lou recently moved to Greensboro with her husband, David Franklin, and they are adapting to life in the Triad.

Alumnus and Faculty Member Named President-Elect of ENAR

The Eastern North American Region (ENAR) has named **Lisa LaVange** (PhD '83), currently serving as Director of the Collaborative Studies Coordinating Center (CSCC) and Professor of the Practice of Biostatistics, as the new President-elect of ENAR. She will serve as President-elect for one year, beginning in January 2006, before officially taking office as President in 2007. Dr. LaVange will preside over the annual meeting in March 2007.

LaVange received her B.A. in Mathematics and Ph.D. in Biostatistics from UNC-Chapel Hill and her M.A. in Mathematics from the University of Massachusetts.

ENAR is the largest region of the IBS. The International Biometric Society is an international society for the advancement of biological science through the development of quantitative theories and the application, development, and dissemination of effective mathematical and statistical techniques.

From the Registrar:

Hi you all! I hope this edition of *BiosRhythms* finds you happy and well. Letting you all know the happenings of 2005 here in the department is my favorite task as Registrar. This has been a year of bittersweet change. As many of you may or may not know, Dr. Davis will be leaving us as Department Chair after many years of service. We will miss him and wish him well in his future endeavors. We look forward to the new and exciting challenges that lay ahead of us under new leadership.

We have had a busy year here in the department. We have thirty-one new graduate students and seven new BSPH students that joined us in August, along with the ninety-six returning students. What a great group of students! We changed the title of twenty-five of our students to "Alumni" in the 2004-2005 year. As a reminder, please keep your information updated for the Alumni directory at www.sph.unc.edu/bios/alumni so that we can continue to keep in touch. As I have said in the past, I enjoy hearing about the joys, triumphs, and successes of our alumni and relish in sharing them with members here in the department. Thanks for keeping us informed and in touch.

Here are a few dates for you to put on your calendars:

Tampa is the venue for ENAR in March 2006, originally scheduled to be in New Orleans. The reception will be Monday, March 27, 2006, from 5:30 p.m. to 7:00 p.m. at the Hyatt Regency Tampa. Full details will be forthcoming via email and listed on the bios web page. Please make plans to drop by and pick up your UNC active wear (Tarheel sticker) to proudly display during the meetings. We had a great time in Austin this past year and a wonderful turnout at the reception. I hope we have the same in Tampa!

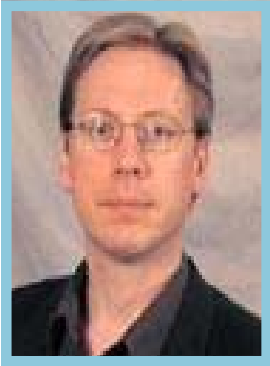
Minneapolis hosted the ASA meetings for the Department of Biostatistics this past August. Yet again we had a fantastic time visiting with those of you who attended. We hope to see you in Seattle, Washington, for the ASA meetings scheduled for August 6-10, 2006. I will be making arrangements for this event a little later in the year! Once again, full details to follow via e-mail and the website.

One last thing and I'll let you go. The department has plans to create an alumni listserv so that everyone can communicate easily with fellow alumni. We are hopeful that this service will be utilized and that you will find it helpful. More details to come on this matter.

I'll bring this edition of "From the Registrar" to a close with best wishes for a happy and prosperous 2006.

Warmest Regards,
Melissa

US Environmental Protection Agency awards \$4.5 million to UNC to create the Carolina Environmental Bioinformatics Research Center



The United States Environmental Protection Agency announced a 5-year award of \$4.5 million to UNC-Chapel Hill to establish the Carolina Environmental Bioinformatics Research Center. This award is a major investment by the EPA and is one of only two such environmental bioinformatics research centers funded by the agency in a recent nationwide competition. The

new UNC Center was initiated through efforts of the Carolina Environmental Program (CEP), and will be led by the university's Carolina Center for Genome Sciences (CCGS).

The new Center will work closely with the EPA's National Center for Computational Toxicology, located nearby in Research Triangle Park, NC, and is a unique organization that includes members from the UNC Schools of Public Health, Medicine, Pharmacy, Library and Information Sciences, and the College of Arts and Sciences. The interdisciplinary approach brings together experts in the fields of biostatistics, computer science, environmental sciences and engineering, genetics, medicinal chemistry, and chem-informatics. The goals of the Center are: to develop innovative methods and tools for improving linkages in the source-to-outcome paradigm, hazard identification, and quantitative risk assessment; to provide an efficient and rapid resource for interaction with environmental scientists and regulators; and to translate and apply the scientific discoveries of the Center into open-access, user-friendly web-based resources for policy makers and the public.

Recent technological advances are providing unprecedented opportunities to bring together interdisciplinary teams of scientists and apply basic environmental sciences research to ecology and public health.

Fred Wright, Ph.D., associate professor in UNC's department of Biostatistics, will direct the Center. "The cross-disciplinary, collegial nature of research at Carolina provides an excellent basis for interactions with EPA's Computational Toxicology Program and among Center members," says

Wright. "Importantly, key Center members already lead active programs in bioinformatics and computational aspects of environmental science, genetics, toxicogenomics, and traditional mechanistic toxicology."

The Center will advance the field of computational toxicology through the development of new user-friendly methods and tools that will be widely disseminated and will be useful to environmental scientists, biomedical researchers, and computational biologists. "We believe that the synthesis of data from a variety of sources will move the field of computational toxicology from a hypothesis-driven science toward a predictive science, with more precise risk assessment, for overall improvements in public health and the health of ecosystems," concludes Wright.

The Carolina Center for Genome Sciences was founded in August 2001 with faculty appointments from seven different academic units representing over fifteen departments and disciplines. CCGS encompasses an impressive array of faculty members, facilities, training programs and outreach efforts. Through the CCGS and other activities, UNC-Chapel Hill is dedicated to making significant advances in basic genomic research, as well as translating these discoveries to improving health care, education, and society.

Lawrence (Larry) L. Kupper, Ph.D., Associate Chair and Alumni Distinguished Professor of Biostatistics, will serve as Co-Investigator along with Mayetri Gupta, Ph.D., Assistant Professor of Biostatistics, Fei Zou, Ph.D., Assistant Professor of Biostatistics, Young Truong, Ph.D., Professor of Biostatistics, Danyu Lin, Ph.D., Dennis Gillings Distinguished Professor of Biostatistics, and Joseph Ibrahim, Ph.D., Professor of Biostatistics.

Bahjat Qaqish, Associate Professor in the Department, has been awarded an R01 grant by the National Cancer Institute for a project titled "Estimation of Association for Multivariate Binary Data." The award supports Dr. Qaqish's work through March 2008. Department faculty member Dr. John Preisser is serving as Co-Investigator.

The overall objective of this research is the development of statistical methods for the analysis of repeated measures categorical outcomes. The development involves novel estimation procedures and algorithmic and computational advances. The end result will be statistical tools for application in medical and public health research.

DEPARTMENT GRANTS

Myra A. Carpenter, Assistant Professor of Epidemiology and CSCC Principal Investigator, has won a new grant from the National Institute of Diabetes, Digestive, & Kidney Diseases. This grant is titled “Clinical Study of Vesicoureteral Reflux in Children” and has been funded for five years beginning September 30, 2005. The total award amount is \$3,986,211. Dr. James Hosking, Associate Professor of Biostatistics, will serve as the Co-Principal Investigator.

The objective of this proposal is to establish a Data Coordinating Center (DCC) for the Clinical Study of Vesicoureteral Reflux in Children (VURC) within the Collaborative Studies Coordinating Center (CSCC) at the University of North Carolina. Vesicoureteral reflux (VUR) is characterized by the retrograde flow of urine up the ureter. VUR increases the risk of urinary tract infection, and approximately one-third of the children who have urinary tract infections also have VUR. Little is known about the best treatment for VUR, or whether any treatment is beneficial. The primary goals of this study are to determine the relationship between renal scarring and declining in renal function, the risk factors for decline in renal function, the impact of prophylactic antibiotic use on preservation of renal function, and the role for surgical intervention in the preservation of renal function and prevention of recurrent urinary tract infections.

Joseph Ibrahim, Professor of Biostatistics, has won a competing renewal R01 grant from the National Cancer Institute. This grant is titled “Inference in Regression Models with Missing Covariates” and will be funded for four years. Total dollar amount for three years is \$608,976. This grant includes a subcontract to Ming-Hui Chen at the University of Connecticut and Stuart Lipsitz at Brigham and Women’s Hospital, Harvard Medical School.

The objective of this project is to examine the following research problems: (1) Model Identifiability and Posterior Propriety for Generalized Linear Models (GLMs) with Ignorably and Nonignorably Missing Covariates; (2) Model Assessment and Sensitivity Analyses in Missing Data Problems; (3) Theory and Inference for the Cox Regression Model with Missing Covariates; and (4) Semiparametric and Nonparametric Specification of the Covariate Distribution and Missing Data Mechanism.

Michael Hudgens, Research Assistant Professor of Biostatistics, has been awarded a subcontract under a new grant from the National Institutes of Health titled “Methods for Evaluating Vaccine Efficacy in the Field.” The Principal Investigator of the primary grant is Dr. M. Elizabeth Halloran of Fred Hutchinson Cancer Research Center. It will be funded for a total of four years for \$84,054. The overall objectives of this research study are to develop methods for: (1) estimating vaccine and antiviral efficacy and effectiveness in the field and (2) characterizing complex and long-term properties of vaccination in individuals and populations.

Dr. Hudgens will participate in the further development of causal effects of vaccination. He will work on developing methods for causal inference for the effects of vaccination on post-infection endpoints such as severity of disease and ability to transmit diseases to others. Statistical approaches taken will include likelihood inference, Bayesian methods, semiparametric methods, hierarchical models, and survival methods. The methods will be motivated by the design and analysis of studies of vaccines against influenza, pertussis, pneumococcus, HIV, meningitis, as well as other acute and childhood diseases and influenza antiviral prophylaxis.

Robert Agans, Research Associate in Biostatistics, has been awarded a two-year grant by the Conference Board of Mathematical Sciences (CBMS). Agans will serve as Principal Investigator on the project, while William Kalsbeek, Professor in Biostatistics, will serve as Co-Principal Investigator.

The University of North Carolina-Chapel Hill Survey Research Unit proposes to provide statistical assistance and facilities to the CBMS to conduct the ninth in a series of surveys designated to profile enrollments and other related items of relevance to teaching in departments of mathematics and statistics in the United States.

UNC Statistician Partially Adjusts for Ballpark Effects, Steroids, etc. in Determining Best Batters

There are diehard baseball fans who know -- or think they know -- much about the game and who'll argue themselves blue in the face over who the best players were. And then there are the super fans who spend hundreds or thousands of hours each year studying America's pastime, often far from major league ballparks.

Among the latter are truly knowledgeable folks like the University of North Carolina at Chapel Hill's Dr. Michael J. Schell. He wrote the book on those who ranked at the top of their game. In fact, Schell has written two such books, including *Baseball's All-Time Best Sluggers*, just published by Princeton University Press.

In his "real" life, the life-long Cincinnati Reds fan is a former research professor of biostatistics at UNC's School of Public Health and director of the Lineberger Comprehensive Cancer Center's Biostatistics Core Facility. The bulk of his work involves crunching numbers that result from cancer research to boost understanding of that often-devastating illness and improve treatment.

In his free time, though, Schell figures out how well batters since the 1800s have crunched baseballs — after adjusting for such factors as stadium size and height above sea level, players aging, the talent pool, fences' height and distance from the plate and era of play. His goal has been to level the playing field to the extent possible so that comparing heroes of the sport is fairer and more realistic.

"Many fans believe that Babe Ruth and Ted Williams were the two best offensive players in history, and in *Baseball's All-Time Best Sluggers*, I confirmed that they ranked first and second," Schell said. "The key question then becomes: Who ranks third? After his 2004 season, according to my calculations, Barry Bonds passed Rogers Hornsby to move into third place."

The former UNC scientist adjusted the home run numbers of recent players downward compared to those from earlier eras because the recent jump in home runs did not result from improved hitting ability, he said. Thus, the adjustment accounts in part for steroid use among recent players.

"While 11 players active primarily during the power era from 1993 to 2003 and beyond have raw home runs rates among the all-time top 20, only Barry Bonds ranks in the top 20 after the adjustments I make in the book," Schell said. "Barry Bonds has had incredible batting performances the past several seasons, and his 2001 to 2004 seasons rank as four of the five best for batting in baseball history."

For the new book, the former UNC professor believes he developed the most in-depth methods ever for dealing with the talent pool and ballpark effects. He is the first to provide ballpark effects for doubles, triples, right- and left-handed homers and strikeouts throughout major league history.

Schell also provides top 100 single-season and career lists for 13 offensive categories after four adjustments. He lists adjusted statistics for 1,140 players with at least 4,000 plate appearances, including their overall batter ranking and their ranking after adjusting for playing position.

Stan Musial edged out Honus Wagner as having the best career for adjusted doubles-plus-triples, he said. Yogi Berra, Pie Traynor and Joe DiMaggio were among players more involved in run scoring than their batting record would suggest.

Mike Piazza, Albert Pujols and Alex Rodriguez are on target for finishing among the top 10 sluggers of all time, the statistician's work showed.

"Michael Schell has expanded on his original study of *Baseball's All-Time Best Hitters* to include all aspects of batting," said Peter Palmer, co-editor of *The Baseball Encyclopedia* and co-author of *The Hidden Game of Baseball*. "There is plenty of math, but it is not necessary to understand the intricacies of the equations to appreciate the results."

--This article is courtesy of David Williamson of UNC News Services.--

New Faculty

Dr. Mark A. Weaver joins our faculty from Rho, Inc. in Chapel Hill. He received his Ph.D. in Biostatistics in 2001 from UNC-Chapel Hill, MS in Statistics from The University of Georgia in 1995, and BSE in Mathematics from Millersville University in Pennsylvania in 1992. He has been serving as the Assistant Director of Biostatistics at Rho, Inc. since July of 2005. Dr. Weaver is a member of both the American Statistical Association and the International Biometric Society. He is also a reviewer for *The Annals of Occupational Hygiene*. His research interests lie in outcome dependent subsamples.

Dr. Petra Buzkova joined us as Research Assistant Professor in January, 2005. Dr. Buzkova is a native of the Czech Republic. She graduated from Charles University in Prague, Czech Republic, in 1998 with an M.S. in Mathematics (Econometrics) and received her Ph.D. in Biostatistics from the University of Washington in Seattle, Washington, in 2004. Prior to coming to UNC-Chapel Hill, Dr. Buzkova was employed as a Research Assistant Professor in Biostatistics and Microbiology at the University of Washington. She is a member of the American Statistical Association and the International Biometric Society-ENAR. Her research interests lie in longitudinal data, marginal regression, and biased sampling.

New Staff

Tammy Bailey, June 13, Application Specialist
David Hill, October 24, Tech Support Analyst
Cory Hughes, June 13, Information & Communication Specialist
Debbie Quach, June 27, Accounting Technician III
Correnthia B. Hill, July 5, Office Assistant

Faculty Promotions

David J. Couper, February 6, Research Associate Professor
Todd A. Schwartz, April 1, Research Assistant Professor

Biostatistics Welcomes Two New Visiting Faculty and Post-docs

The Department of Biostatistics is pleased to welcome the arrival of two visiting faculty and post-docs.

Surajit Ray, Visiting Assistant Professor, taught BIOS 110 this past fall semester and has been working with Larry Kupper and Keith Muller. This past year, Surajit was a post doctoral fellow at Statistical and Applied Mathematics Science Institute (SAMSI). He has a PhD in Statistics from Pennsylvania State University.

Antonio Sanhueza, Associate Professor in the Department of Mathematics and Statistics at Universidad de La Frontera in Chile, is here as a Visiting Scholar for one year. He will be doing collaborative research with Dr. Pranab Sen and Dr. Gary Koch on the topics of “Robust Procedures for Repeated Measurements Data” and “Methods for Skew-Distributions.” He will also be involved in collaborative research with Dr. Koch on methods for analysis of covariance in the longitudinal data setting for epidemiology studies and with Dr. Lloyd Chambless in the Carotid ARtery MRI project. Dr. Sanhueza, a 2000 PhD graduate from UNC-Chapel Hill Biostatistics, says that he is “really happy to be back in the Department of Biostatistics where I turned blue...Go Tar Heels!”

Dr. Fuxia Cheng has joined our department as a post-doc on Joe Ibrahim’s training grant, “Biostatistics For Research in Genomics and Cancer.” Dr. Cheng graduated from Michigan State University with a PhD in Statistics. She is currently an Assistant Professor of Statistics at Illinois State University. Nonparametric regression and model checking serves as Dr. Cheng’s research interest.

Pingping Qu is also serving as a post-doc on Dr. Ibrahim’s training grant. Dr. Qu received her PhD in Statistics from the University of Kentucky in December 2004, and her dissertation was on “Empirical Bayes Estimation in Linear Regression Models Under Heteroscedasticity.”



Kim Ring displays her certificate presented to her by Chair Ed Davis.

Kim Ring is the 2005 recipient of the Staff Award for Excellence awarded annually. A Statistician III at the Collaborative Studies Coordinating Center, Ring's responsibilities include data analysis and reporting, participating in the Trial of Activity for Teenage Girls (TAAG) meetings and conference calls, preparation of project materials, and supervising GRAs. She has participated in the TAAG project, a large and complex multi-center study

in its fifth year, since its start-up and until recently has also been a part of the Pathways project. Kim works quietly behind the scenes with responsibilities vital to the study. She is known for her reliability, flexibility, a "can do" attitude, and conscientiousness. Whether helping coordinate blood drives or contributing to special events that recognize other employees, Kim is an outstanding member of the CSCC and university community.

Bios Births!

Neal Jin Zeng, nicknamed Iron Boy, was born on Friday, January 20th, 2005, to Donglin Zeng and his wife Wenqin "Wendy" Pan. He weighed 8 lbs. 1 oz. and was 22 inches long.

Peter Albert Dunson arrived April 15 at 4:12 am, born to Amy Herring and David Dunson. He weighed 7 lbs. 14 oz. and was 20.5 inches long.

We welcome Dylan Scott and Braden Chandler Zentz to the world! Dylan weighed in at 5 lbs. 10 oz. and was 18 inches long, while Braden weighed in at 4 lbs. 7 oz. and was 17 inches long. Parents Scott and Stephanie Zentz are doing great.

Fei Zou's baby, Chris H. Zou, was born on May 3 at UNC hospital weighing in at 7 lbs. 9 oz. and measuring 21.5 inches long.

Terri Lewis has announced the arrival of her son Aidan Lee Lewis at 4:30 am on Saturday morning, May 28, 2005. He was 6 lb 11.5 oz. Aidan joins sister Lindee who was born in August 2003. Please join us in congratulating Terri, Anthony, and Lindee Lewis.

Summer and Bob Tian at last have their new baby boy, Alan, born July 31 at 5:02 pm at Duke Hospital. Alan was a healthy 8 lb. 4 oz.

Michael and Melissa Hudgens celebrated the birth of their daughter, Catherine "Cate" Warren Hudgens, on July 3. She weighed 7 lbs. 1 oz.

Charity Moore gave birth to Thomas Jay Patterson on Sunday, December 4. He weighed 7 lbs. 6 oz. Baby, Mom, and Dad are all doing well.

Service Appreciation

5 Years

Robert P. Agans
Amy Herring
Danyu Lin
Correnthia Hill
Varsha Shah
Susan Strohlein
Robert Sumner
Hsiao-Chuan Tien

10 Years

Charles Matherly

15 Years

Bahjat Qaqish
Barbara Brown
Evie McKee

20 Years

Kinh Truong

25 Years

Shrikant Bangdiwala
James Hosking
Vera Bennett

2005 Star Heel Awards

This awards program, sponsored by TIAA-CREF, allows departments to award a \$20 gift certificate to a deserving employee. Congratulations and thanks to the 2004 winners listed below:

Betsy Caretta
Thu-Mai Christian
Mary Everette
Betsy Seagroves
Scott Zentz
Melissa Hobgood
Veronica Stallings
April Smyth

Everette Retires, 30 Years of Service

Mary Everette, Accounting Specialist in the Department of Biostatistics, officially retired May 1, 2005, after 30 years of service. Mary relocated to the area from Murfreesboro, North Carolina, in 1974 at the age of 21 and was offered 3 jobs: UNC Hospital, UNC-Chapel Hill, and the Federal Government. She immediately fell in love with Chapel Hill and decided that this is where she would retire. Her first job was at the Brain Development Research Center under Don Wood and Elsie Floyd, followed by Family Medicine. It was not until 1988 that Mary reached her final destination: Biostatistics.



Mary speaks to an audience of family and friends at her retirement party.

Foley Retires

Mal Foley was sent off with a fond farewell at his retirement from the University on August 31, 2005. Foley served the Collaborative Studies Coordinating Center in several different areas during the past 18 years, most recently as a programmer in the statistical computing group where he helped with SAS programming for studies, including SOLVD, DELTA, DAIS, Pathways, and TAAG. He developed such a fondness for SAS that he became very active in SAS users groups and will be the chairperson for the PharmaSUG (Pharmaceutical SAS Users Group) conference in 2006. Mal has family ties to Ecuador and will be spending much of his time there now that he is retired. Mal will be missed for several reasons, including the engineer's perspective and skill set that he brought to the CSCC.

Edwards Keynote Speaker at 2005 Fall STATFest

Dr. Lloyd Edwards was the keynote speaker for the 2005 Fall STATFest, an ASA sponsored event, held on November 12, 2005.

Fall STATFest was sponsored by the Department of Mathematics at Florida A&M University in Tallahassee, Florida. The purpose of Fall STATFest is to engage undergraduate students who plan to pursue graduate study leading to earning a doctoral degree in the statistical sciences, as well as to provide these prospective graduate students an opportunity to interact with current students studying at the graduate level and to provide students with exposure to statisticians who are scientists, professors, researchers, and administrators.

Kalsbeek and Sen, Chair-Elects for ASA Section

The American Statistical Association has announced the results of the ASA 2005 Annual Election of Officers. William D. Kalsbeek and Pranab K. Sen of Biostatistics have been elected to serve. Dr. Kalsbeek, a Professor in Biostatistics, will serve as Chair-elect for the ASA Section on Survey Research Methods, while Dr. Sen, a Cary C. Boshamer Professor in Biostatistics, will serve as the Chair-elect for the ASA Section on Nonparametrics.

Herring Outstanding Alumni

The University of Mississippi Alumni Association presented Dr. Amy H. Herring of Chapel Hill, North Carolina, the Outstanding Young Alumni Award on Friday, October 7. Herring, along with other award recipients, was also honored at Saturday's Ole Miss-The Citadel homecoming football game.

Herring (BA '95, BS '95, Sc.D. '00) is an Assistant Professor of Biostatistics at the University of North Carolina-Chapel Hill, where she combines her expertise with that of physicians and public health professionals to study problems in environmental, child, and reproductive health. She serves on the International Biometric Society's regional advisory board. Herring earned her Doctor of Science degree in biostatistics at Harvard where she received a National Institutes of Health traineeship. She also worked at the Dana-Farber Cancer Institute and was a teaching fellow.

Bangdiwala Fulbright Senior Specialist Award Recipient

Shrikant I. Bangdiwala, PhD, Research Professor in the Department of Biostatistics, School of Public Health, UNC-CH, has received a Fulbright Senior Specialist award in the field of Public/Global Health. The Fulbright Senior Specialists Program is designed to provide short-term academic opportunities for U.S. faculty and professionals and is one of several new Fulbright initiatives administered by the Council for International Exchange of Scholars (CIES). The Program differs from the traditional Fulbright Scholar competition in that CIES builds rosters of specialists in a variety of fields through an open application process. Applicants, recommended by specialist peer review committees and approved by the J. William Fulbright Foreign Scholarship Board and the Bureau of Education and Cultural Affairs of the U.S. Department of State, become candidates for Fulbright Senior Specialists awards. As countries request Fulbright Senior Specialists through their local Fulbright Commission or U.S. Embassy, CIES matches candidates with appropriate projects or programs. As a Fulbright Senior Specialists candidate, Dr. Bangdiwala will remain on the roster for up to five years, until 2010.

The Department of Statistics in the School of Economic Sciences at the National University of Tucuman, Argentina, requested Dr. Bangdiwala for his first Fulbright Senior Specialist grant award, June 25 - Aug 5, 2005. Dr. Bangdiwala was primarily involved in teaching an introductory graduate-level course on "Sampling Methodology" and an advanced doctoral course on "Multilevel Analysis." He was in Argentina for six weeks during the summer, trading the heat and humidity of July in the Piedmont of North Carolina for the cold and dry winter of the Northwest corner of Argentina, in the foothills of the Andes.

Cai Elected ASA Fellow

Professor Jianwen Cai has been elected as a Fellow of the American Statistical Association. She received the award at the Joint Statistical Meeting in Minneapolis in August 2005. Cai was elected for outstanding contributions to statistical methods dealing with multivariate failure time data; for collaborative research in obesity and cardiovascular disease; for outstanding teaching; and for service to the profession. Others related to Carolina Biostatistics who were elected this year are David Kleinbaum, former faculty member, and Frank Harrell, alumnus. A superlative honor for 91 years, fellowship in the ASA recognizes outstanding professional contributions in the field of statistical science.

A Stellar Professor, Lloyd J. Edwards, Ph.D.

An article was recently published in *Spotlight on Minority Research*, focusing on the commitment to research of Dr. Lloyd J. Edwards, Associate Professor of Biostatistics. Below is an excerpt from the article:

Lloyd J. Edwards, Dr. Edwards is a stellar biostatistician and has given so much of his time and energy to support Shaw University's first Minority Elderly Research Center (SUMMER Center) and Shaw University's first Racial Health Disparity Research Program (SUPER Program). Dr. Edwards came to the Institute as a mentor for the data manager and junior level faculty. In addition, he also arranged time to mentor student research assistants and encouraged them to seek out non traditional careers.

....During the research start up phase, Dr. Edwards committed to support the research projects until a data manager could be hired. Having accepted the challenge, he quickly set out to form the first Biostatistics Support Group (currently the Center for Biostatistics and Data Management) and included Shaw University student research assistants in his training seminars. His main goal was to provide a wide range of biostatistics support to investigators.

Dr. Edward's zeal has impacted the careers of many faculty and students at the IHSCR over the past three years. He looks forward to opportunities to talk with students, especially those seeking mathematics degrees. Dr. Edwards considers himself a "biostatistics geek" because of his love of biostatistics. This is something he is proud of and likes to share at the beginning of his seminars and planning sessions to set the stage for interaction and exchange with students. He advises students to continue their study beyond the undergraduate level in order to have greater financial security and for career advancement.

The complete article can be found in *Spotlight on Minority Research*, Issue 2, October 2005. Please e-mail cboyd@shawu.edu or call 919-719-1892 for your copy of the newsletter.

Outstanding Dissertation Award



Dr. Shibing Deng was this year's recipient of the *Barry H. Margolin Award for the Outstanding Doctoral Dissertation* in the UNC Department of Biostatistic. Deng's PhD dissertation research is entitled "Some Aspects on Linear Model Analysis of Microarray Gene Expression Data" and

was under the direction of Dr. Young Truong. In his abstract, Deng writes that DNA Microarray technology provides opportunities to simultaneously study DNA expression profiles of thousands of genes. Due to its high throughput and high variability nature, DNA microarray technology also provides a challenge to data analysis. His dissertation comprises several topics that address some aspects of microarray data analysis under a linear model framework.

Pennell Paper Wins ASA Award

Mike Pennell, Biostatistics PhD student, was one of the selected winners of the inaugural Student Paper Competition conducted by the American Statistical Association Section of Bayesian Statistical Science. Pennell's paper "Bayesian Semiparametric Dynamic Frailty Models for Multiple Event Time Data" was written with Dr. David Dunson of the NIEHS. Pennell presented his paper at the Joint Statistical Meetings this past August 2005.

Best Master's Paper Award

Xiao Yuan Liao was selected to receive the Departmental Award for Best Master's Paper. Liao's master's paper topic was "Bayesian Time Varying Coefficient Models for Epidemiological Research." Her work consisted of a regression model for discrete-time survival data using a continuation ratio logit model with time-varying coefficients. This model is illustrated using analysis of time-to-delivery data in the Pregnancy, Infection, and Nutrition (PIN) study, for which investigators believed that an exposure of interest would have time-dependent effects on the outcome. Liao's work was supervised by Dr. Amy Herring.

Kupper Dissertation Publication Award

Doug Schaubel, a former PhD student, received the Kupper Dissertation Publication Award. Schaubel's dissertation research was supervised by Dr. Jianwen Cai. The award-winning article was published in the June issue of *Biometrika* and is entitled "Regression Methods for Gap Time Hazard Functions for Sequentially Ordered Multivariate Failure Time Data". This research was motivated by the need for advanced statistical methods for analyzing ordered events in organ failure studies. A weighted regression method which adjusts for dependent censoring was proposed and applied to examine disparities in renal transplantation among demographic subgroups. The gap times analyzed were the time from starting renal disease therapy to being placed on the transplant wait list and the time from wait listing to transplantation. The proposed methods are widely applicable to studying times between state transitions in biomedical research.

The Kupper Dissertation Publication Award is given annually to recognize an outstanding doctoral student and his or her dissertation advisor for the best doctoral dissertation-based paper appearing in a prestigious biostatistical journal. Drs. Schaubel and Cai are the second recipients of this award.

Bigelow Awarded Demography Fellowship

Jamie Bigelow, PhD student in the Department of Biostatistics, was chosen to receive the Mindel Sheps Dissertation Fellowship Award in Demography. Bigelow was selected for this award based on the quality of her dissertation research and her contribution to the area of spatial techniques in demographic research. Pictured below (l-r) is Dr. Ed Davis awarding Jamie Bigelow a plaque.



Student awards were presented on August 28, 2005, to the following students:

Yijuan Hu received this year's Fryer Award, given by the Department of Biostatistics. The Fryer Award carries a \$2,000 award. This award is made possible by contributions of John and Diane Fryer.

Seunggeun Lee won the Greenberg Scholarship, an award offered to outstanding applicants by the Department of Biostatistics as a supplement to a traineeship or graduate research assistantship. This scholarship includes an award of \$2,500 per year. It is named for B. G. Greenberg, founder and former chair of the Department of Biostatistics, and is made possible by generous contributions by the Greenberg family and friends.

Ritendran Mitra has been awarded the Mohberg Award, a supplemental award of \$1,000 for one year. This award is offered to an outstanding applicant to the Department of Biostatistics. This award is made possible by gifts to the Public Health Foundation by the family of Noel Mohberg.

Vonn Walter received the David and Lucy Hardison Scholarship, offered to an outstanding applicant to encourage studies in bioinformatics in the department. This award provides a supplemental award of \$1,000 and is made possible by the gifts of the Hardison family.

Che Smith received the GlaxoSmithKline Scholarship, which, made possible by a GlaxoSmithKline donation, awards \$1,000 to an applicant chosen by the department. Che also received the Ibrahim Endowment Fellowship Award of \$5,000.



Award winners (left to right) Vonn Walter, Ritendran Mitra, Che Smith, Yijuan Hu, and Seunggeun Lee

Students Make Presentations at ASA Joint Statistical Meetings

The following Bios students made presentations at the Joint Statistical Meetings of the American Statistical Association in Minneapolis in August 2005:

- Jackie Johnson, *Exact Test Size in the General Univariate Linear Model under Violation of Homogeneity of Variance with Cluster Samples of Unequal Size*
Advised by Dr. Keith Muller.
- Chris Slaughter, *Bayesian Multi-State Growth Processes with Unknown Initiation Times*
Advised by Dr. Amy Herring
- Shankar Viswanthan, *Behavior of Agreement Measures in the Presence of Zeros in Cells and Biased Marginal Distributions*
Advised by Dr. Shrikant Bangdiwala
- Sola Park, *Internal Pilots for Repeated Measures and Multivariate Linear Models*
Advised by Dr. Keith Muller
- Qingxia Chen, *Small Sample and Asymptotic Relationships between Multiple Imputation, Maximum Likelihood and Fully Bayesian Methods for Missing Data in Linear Regression Models*
Advised by Dr. Joseph Ibrahim

Delta Omega Awards

Delta Omega is a National Honor Society which exists to encourage research, provide scholarships, and recognize achievements in the field of public health. This year the following persons received honors from the Delta Omega Society:

Undergraduate Award: Joseph Hoyle

Book Award: Megan Clement

Graduate Award: Yeonseung Chung and Brad Hammil

Team Bios Crowned Volleyball Champs



Team Biostatistics defeated UNCTSA 2-0 to earn the title of Champion in the UNC Intramural Volleyball Tournament. The volleyball team consists of the following players: Kant Bangdiwala, Ryan May, Changfu Xiao, Jeanine Matuszewki, Amy Shi, Jane, Feng Bai, Zhengyuan Zhu and wife, John Kairalla, Eugenio Andraca, Jan Smith, Shankar Viswanathan, and David Kessler. Way to go Team Biostatistics.

Third Title for Team Biostatistics



Team Biostatistics has done it again! Retaining their title, they have again won the UNC Intramural Badminton Championship. This “dynasty” team steamrolled over their opponents to win the coveted Blue TarHeel for a third consecutive year. Congrats, Biostatistics!

Coached by Andy Stewart, the team consists of Amy Shi, Jamie Perin, John Kairalla, Yeonseung Chung, and Shankar Viswanathan.

2005 Graduates

May 2005

Chaehyung Ahn	PhD
Amanda A. Allshouse	MS
Munni Begum	DrPH
Michael R. Bradshaw	BSPH
George A. Capuano	PhD
Yeonseung Chung	MS
John Eric Howie, Jr.	BSPH
Joseph D. Hoyle	BSPH
Vicki D. Johnson	BSPH
Thomas R. Lehman	MPH
Laura J. Lovette	BSPH
Bing Lu	DrPH
Celine T. Ma	BSPH
Brian Neelon	PhD
Zhiying Pan	PhD
Lauren Paynter	BSPH
Jennifer L. Thompson	MPH
Bridget L. Welborn	BSPH

August 2005

Qingxia Chen	PhD
Yueh-Yun Chi	PhD
Andrea Fuller	MS
Joshua David Grab	MS
Nora Jane Graber	MS
Bradley Hammill	MS
Emily O. Kistner	PhD
Andrew T. Sterrett	PhD

December 2005

Donna L. Barton	MPH
Marcus E. Berzofsky	MS
Meagan E. Clement	MS
Guoqing Diao	PhD
Jamie Perin	MS
Guochen Song	MS
Erica Wilmoth	MS

Gifts to the Department of Biostatistics may be earmarked for one of our gift funds. If you make a gift with no designation, the gift will go into a general fund for the department.

Biostatistics Alumni Fund - to support the Barry H. Margolin Dissertation Award for the best doctoral dissertation in the department each year.

Bernard Greenberg Scholarship Fund - to provide support for merit-based scholarships for students in the Department of Biostatistics.

John and Diane Fryer Fellowship- to support a fellowship in biostatistics and to recruit outstanding students.

The C. David and Lucy S. Hardison Endowed Scholarship Fund in Bioinformatics - to support a scholarship fund in honor of David and Lucy Hardison.

Kupper Dissertation Publication Award Fund- to honor yearly both the doctoral student and the dissertation advisor of the best doctoral dissertation-based paper published in a prestigious biostatistical journal.

Regina C. Elandt-Johnson Master's Paper Award in Biostatistics - to provide an award in the name of Regina C. Elandt-Johnson to a student in the Department of Biostatistics for the accomplishment of an outstanding Master's paper.

Roy Kuebler Fund - to support junior faculty sabbaticals.

Max Halperin Scholarship Fund - to provide a fellowship to a deserving first or second year doctoral student currently enrolled in the Department of Biostatistics.

Mohberg Scholarship in Biostatistics - to support a scholarship fund in honor of the Mohberg family.

PK Sen Visiting Professorship in Biostatistics- to support visiting faculty from developing countries.

The Biostatistics Student Travel Fund- to support biostatistics student travel.

The Biostatistics Staff Development Fund - to support an annual Staff Award for Excellence in the department.

Checks should be payable to: The UNC Chapel Hill Department of Biostatistics. So that your gift may be properly credited, please indicate that it should be applied to one of the gift funds named above. Mail to:

Debbie Quach
Department of Biostatistics
School of Public Health, CB#7420
Chapel Hill, NC 27599-7420.

All contributions are tax deductible. If your employer matches gifts to educational institutions, please enclose the appropriate forms.

We thank the following individuals and corporations, whose donations provide much needed funds to support BIOS graduate education. We are very grateful for your help. If, for any reason, you know of a name we have omitted, please let us know and we will see that he/she is recognized in the next issue of *BiosRhythms*.

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