

Bios *Rhythms*

Department of Biostatistics

SCHOOL of PUBLIC HEALTH ISSUE NO. 15/JANUARY 2004
The UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

From the Department Chair

Despite the continuing budget problems experienced by the State of North Carolina and the University, the School of Public Health and the Department of Biostatistics continue to flourish. The School of Public Health is recognized as the leading school of public health at a public university, and faculty, students, and staff of the department continue to win awards at the local and national levels.

If you have visited Chapel Hill recently, you are probably aware of the new School of Public Health laboratory building that is under construction adjacent to Rosenau Hall. Completion is expected in late 2004. Immediately after the new building is finished, major renovation of Rosenau Hall will begin. This will likely take another 18 months, so it will be early 2006 before all of the construction is complete. While Biostatistics will not have any space in the new building, we will get additional space in McGavran-Greenberg Hall for faculty and student offices once all of the construction is complete.

Students in our training program continue to receive awards. I am very pleased that for the third consecutive year the Greenberg award for the best dissertation in the School of Public Health was won by a biostatistics student. Doug Schaubel, whose dissertation was directed by Dr. Jianwen Cai, was this year's winner.



William Pan received the Mindel Sheps Dissertation Award in Demography for his work that is jointly directed by Dr. Chirayath Suchindran and Dr. Dick Bilsborrow. Emma Huang, a second year doctoral student, won a Gertrude Cox Scholarship from the American Statistical Association. I am particularly pleased that all three of these prestigious awards are named for persons who were related to UNC Biostatistics. Gertrude Cox was instrumental in getting the University to establish the Department and hired Bernard Greenberg to be the first Chair. Mindel Sheps was an outstanding professor in the Department in the 1960s and 70s. Our students are continuing the tradition of excellence established by these three outstanding individuals. Another measure of the quality of the training in our Department is the fact that two of our former post-doctoral fellows, Glen Satten and George Chi, were named Fellows of the American Statistical Association this year.

Two of our faculty members also have been recognized for excellence.

Dr. Danyu Lin is listed as one of the most cited researchers in the mathematical sciences. Dr. Larry Kupper received the School of Public Health's John. E. Larsh Award for mentorship. Elsewhere in the newsletter you will find descriptions of new research grants awarded to the faculty. Carolina Biostatistics continues to be among the top Departments in applied research and is moving up in methodological research. All of which is due to the hard work of our faculty, staff and students.

Two new faculty members have joined the Department. Dr. Mayetri Gupta is an Assistant Professor and Dr. Surajit Ray is a visiting Assistant Professor. Mayetri received her PhD in statistics from Harvard and specializes in computational biology. Surajit received his PhD in statistics from Penn State and works in the area of mixture models and bioinformatics. We are sure that they will add greatly to our teaching and research programs.

Your continued support of Carolina Biostatistics is greatly appreciated. We would welcome a visit, if you are in Chapel Hill, and look forward to seeing you at the Department's receptions at ENAR and JSM.

With warmest regards,
Ed

Alumni News

From the Section President

Well hello again! If you will recall, I wrote this letter as section president last year too. Yikes! That means I am serving as the president of the Bios Alumni section for a second year. The Bios Alumni section needs new blood. I need someone to come forward now to volunteer to be president of the Bios Alumni Section for 2004-2005. Please contact me ASAP. There is very little you have to do as president. If no one volunteers, there may be no Bios Alumni section next year. This means we will not receive any funds and the Bios department will not be involved in several new alumni activities. One new activity is the brown bag lunch series for the entire School of Public Health, where three or four alumni come together to discuss a major, current health issue. The other is the Alumni Regional Meetings scattered across the state. The first one was held on Wednesday, December 3rd from 7-8:30p.m. at Central Library in downtown Greensboro. This is a way to reach a lot of alumni quickly, and to hear from them regarding the types of activities in which they are interested, and how the School can continue to meet their professional needs. Third is the annual Bios brown bag lunch that brings in local

companies to speak to our students about their companies, what statisticians do in their companies, what they look for in a future employees and advice on resume construction and interviewing. Without a Bios Alumni president this last activity will not take place and the other activities will occur without the presence of a Bios Alumna. So please think about serving one year as president of the Bios Alumni. In closing, I want to thank the alumni who have helped me over the last five and a half years in which I have been active in the Bios Alumni Society. And to those of you who have yet to volunteer, here is your chance! Email me today!

Gail

BIOS ALUMNI ASSOCIATION

Gail Tudor (PhD '91) President
(gtudor@bios.unc.edu)

Karen Kesler (PhD'00) Treasurer
(kkesler@rhoworld.com)

Alumni Gather in Chile for Conference

The 1st National Statistics Colloquium of Chile, sponsored by the Chilean Statistical Society (SOCHE), was held at the University of Chile School of Public Health in Santiago, January 9-10, 2003. The SOCHE was celebrating its 25th anniversary, and annually holds a conference, the "National Statistics Days." These are scientific conferences with research results presentations by Chilean and international participants. The Colloquium brought together statisticians for discussions on specific experiences in consulting

and teaching. This special occasion also brought together six doctoral alumni from the Department of Biostatistics at UNC: **Claudio Silva** (PhD '77), **Carlos Henriquez-Roldan** (PhD '02), **Francisco Cumsille** (DrPH '98), **Shrikant Bangdiwala** (PhD '80), **Antonio Sanhueza** (PhD '00), and **Sergio Muñoz** (PhD '95). All except Bangdiwala are Chileans, and these five Carolina alumni represent 50 percent of all the doctorate-level biostatisticians in the country of Chile.

INSIDE

BiosRhythms 2004

- From the Department Chair
- Alumni News
- Department Happenings
- Grants
- Faculty and Staff News
- Student News
- Gifts

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Rathouz Given the 2003 James E. Grizzle Distinguished Alumnus Award

Dr. Paul J. Rathouz has been awarded the James E. Grizzle Distinguished Alumnus Award for 2003. Dr. Rathouz, currently an assistant professor in the Department of Health Studies at the University of Chicago, received an MS degree from the UNC Chapel Hill Biostatistics program in 1993. Since starting his faculty position at the University of Chicago in 1997, Dr. Rathouz has published extensively in the best statistical journals. His methodological work encompasses several areas, including the use of estimating equations as tools for

statistical inference in the presence of nuisance parameters, measurement error in regression covariates, and methods for missing data in models for highly stratified or longitudinal data. Dr. Rathouz also has several subject-matter publications, attesting to his skills as a collaborative scientist. The Grizzle Distinguished Alumnus Award is named in honor of Dr. James E. Grizzle, former Chair of the UNC Department of Biostatistics, and recognizes a rising star in the field of biostatistics, especially in the areas of statistical research and consulting.



Paul Rathouz presented a seminar in conjunction with receiving this award. His talk, titled "Missing Covariate Data in Matched Case-Control Studies," was part of the Foard Day events in March, 2003.

Leonard Oppenheimer (MS '68 PhD '71) was named Chair-Elect of the American Statistical Association biopharmaceutical section.

Robert Lyles (PhD '96 MS '91) was named Program Chair-Elect for the ASA section on statistics in epidemiology.

Brent Shelton (MS '92 PhD '98), his wife Joy, and his three children (Lauren, Haley, and Ethan) have relocated to the University of Kentucky where he holds a tenured Associate Professorship in Biostatistics and Internal Medicine and is Director of Biostatistics for the Markey Cancer Center at the UK College of Medicine. He can be reached at bshelton@kcp.uky.edu.

Anirban Basu (MS '99) is currently a doctoral student at the University of Chicago where he received the Best Student Paper Award in Health Policy Statistics from the American Statistical Association. The paper is coauthored by another alumnus, **Paul Rathouz**, assistant professor in the Department of Health Studies at the University of Chicago.

Carolyn Boyle (MS '78) was awarded the Research Award of Merit by the Mississippi State University chapter of Gamma Sigma Delta, the Honor Society of Agriculture, for her 24-year career at MSU. She is an associate professor and biostatistician in the College of Veterinary Medicine.

Russ Helms (MS '97 PhD '01) and **Wendy Helms** (MS '96 PhD '00) grew by two feet this year. Arwen Elise Helms, little sister to their son Ryan, was born this fall.

Yvonne Hebert Sparling (MS '96) had her second daughter, Anna Clare, born Sept 10. Yvonne also received her PhD in Biostatistics from George Washington University.

Nguyen Dat (PhD '82) has joined American Bioscience Inc. as Vice President of Clinical Research. Joining Dr. Dat at ABI are two other BIOS alumni: **Brian Mabe** (BSPH '95) and **Clifford Reinhardt** (BSPH '97), both as Senior Statistical Programmers.

Two former UNC biostatistics postdocs have been elected as 2003 ASA fellows: **George Chi** and **Glen Satten**.

Steve Wisseh (DrPH '00) presented a seminar at Fairleigh Dickinson University in New Jersey to create awareness of the field of pharmaceutical biostatistics, particularly among U.S. ethnic minority students. He also launched a training institute to increase the participation of Caribbean and African physicians as investigators in multinational clinical trials.

Alumnus Named Chair at Vanderbilt

Frank Harrell Jr (PhD '79) was named founding chair of a new Department of Biostatistics in the School of Medicine at Vanderbilt University on September 1. The new position represents a wonderful opportunity to build a department that emphasizes collaboration rather than consulting, and that utilizes modern statistical analysis, experimental design, and computing methodology, with excellent resources provided by an exceptionally strong School of Medicine.

Department Happenings

Biostatistics Golf Tournament 2003:



The 12th Annual Biostatistics Superball Tournament was held on October 19. Statistician weather luck continued for another year. If the weather had been any nicer, people would have been fainting from joy (check out the smiles in the photograph for some data to support the hypothesis). Hillandale in Durham again provided a golfer friendly venue. The starter, a former Navy officer, sent everyone off to the very appropriate tune of "Skankers Away!" Matt Gribbin, Jerry Hosking, Karthi Natarajan, and Keith Muller were first off the tee and last on the scorecard (4th position) with an even par 71. Rich Budrevich, Anita Chen, Brad Hamill, and Larry Kupper carded a 68 for third. Bill Barry, Brent Johnson, Michael Hosking and Bill Pan captured second with a 67. Brian Armstrong, John Karilla, Bill McGee and Sean Rosanbalm won the tournament with a 64. Least far from the pin awards were captured by Bill McGee and Larry Kupper. Many thanks to postdoc Brent Johnson who "chipped in" with a lot of help behind the scenes to help run the tournament. Hope to see you all next year.

2004 Events

Please join us for this year's alumni events:

ENAR: Hilton Pittsburg, PA March 28-31st, 2004.

For details about the meeting you can visit
<http://www.enar.org/meetings.htm>

The UNC- Biostatistics Reception will be held on March 29th, 5:30 to 7:00 pm on the Mezzanine Level of the Brigade Ballroom.

ASA: Toronto, Canada August 8-12, 2004. To be held at the Metro Toronto Convention Centre and Royal York Hotel. Visit <http://www.amstat.org> for meeting details. Reception details are in the planning stages. Keep up with current events by visiting our web site at <http://sph.unc.edu/bios>

Foard Lecture: April 8, 2004. The details of the 2004 Foard lecture are not final, but as always, there will be a biostatistics reception, awards, and lecture by the current year's James E. Grizzle Distinguished Alumni Award winner. Please check our website for published details.

Greenberg Lectures: The 2004 Greenberg lecturer has not yet been announced. The lecture is planned for the end of May. Please see our website for the final date.



2003 American Statistical Association Meeting, San Francisco: Alumni, faculty and students gathered at the department's reception during the 2003 August ASA Meeting in San Francisco.

Department Happenings

Tsiatis Named Speaker for the Bernard G. Greenberg Lecture Series

Anastasios Tsiatis, Professor of Statistics at North Carolina State University, was the speaker for the 2003 Bernard G. Greenberg Distinguished Lecture Series. Tsiatis presented four lectures May 20-22. To view slides of these lectures, visit Professor Tsiatis' home web page www4.stat.ncsu.edu/~tsiatis.



Titles of lectures follow:

- 1) Efficient Estimation of the Mean of a Time-Lagged Variable Subject to Right Censoring
- 2) An Overview of Joint Modeling of Survival and Longitudinal Covariates Measured with Error
- 3) On the Inefficiency of the Adaptive Design for Monitoring Clinical Trials
- 4) Estimating Mean Response as a Function of Treatment Duration,

Where Treatment Duration May be Informatively Censored

Tsiatis' work involves developing statistical methods for the design and analysis of clinical trials, censored survival analysis, group sequential methods, inference on Quality Adjusted Lifetime, surrogate markers, and

semiparametric methods with missing and censored data.

Tsiatis earned his PhD in Statistics from University of California at Berkeley in 1974. Since that time he has earned such honors as the Spiegelman Award in 1986 for outstanding contributions by a young statistician in Public Health; and in 1987, while on the faculty at Harvard, he won the Margaret Drolette Faculty Teaching Award from the Harvard School of Public Health.

The 2004 Greenberg lecturer has not been announced. The lecture is planned for the end of May. Please see our website for the final date.

From the Registrar

Well, we have winded down another year, and boy was 2003 a busy and productive one. According to the alumni news, it sounds like some of you have been pretty active. It's always great to hear the progress that each of you are making. We delight in your career success, much like we did in your academic success when you were students here. Thanks for keeping in touch. A few things that you may want to keep in mind for 2004:

ENAR will be in Pittsburg, PA in 2004. Thanks to Dr. Ed Davis, who has graciously given us yet another opportunity to gather again to socialize and reconnect, as he hosts the Alumni Reception in your honors. Join him and others on March 29th on the Mezzanine Level of the Brigade

Room in the Hilton Pittsburg. The fun begins at 5:30 PM and will conclude at 7:00 PM. We would enjoy your company if you happen to attend the conference.

The 2003 ASA social in San Francisco was a great success. It was a great opportunity to network with others and chat about happenings in the world of Biostatistics. Toronto Canada will play host to ASA in August 2004. It's still a little early to begin preparations for this event, but I assure you that you can get full details via our web site.

Speaking of the Biostatistics web site, you can keep up with what's happening there. April Smyth and others strive to keep the most accurate and up to date information circulating on

the webpage. While I'm at it, and since you are alumni and we don't get to see each other on a daily basis, please visit the Alumni web page (www.sph.unc.edu/bios/alumni) and update your address and professional information. It doesn't require membership dues to update this information, and it lets us know how you are progressing in the career world.

I think that should about do it for me in this issue! I'll bug you more via alumni email closer to ENAR time and periodically through 2004. I hope your holidays were happy and your New Year a prosperous one!

Warmest Regards,

Melissa

Department Grants

CSCC Project on Periodontal Disease, Premature Birth Weight

The MOTOR (Maternal Oral Therapy to Reduce Obstetric Risk) Study is a multi-center, randomized, clinical trial sponsored by the National Institute for Dental and Craniofacial Research (NIDCR).



There is epidemiologic evidence that periodontal disease in pregnancy is associated with a higher risk of premature delivery and lower birth weight. The aim of MOTOR is to test whether treating periodontal disease

reduces the risk of prematurity or tends to increase the birth weight of premature babies.

The study is scheduled to last for 5 years. After a 6-month start-up phase, there will be a 42-month enrollment and treatment phase during which 1800 pregnant women with periodontal disease will be randomized to one of two treatment groups. The final 12 months will allow time for all subjects to be followed until they have given birth, after which data close-out and primary analyses will be undertaken.

Both treatment groups will receive the same periodontal therapy, with the difference between the groups being in the timing of the therapy. The treatment will consist of localized periodontal therapy of scaling and root planning with subgingival polishing. Women in one treatment group will receive their periodontal therapy prior to 24 weeks gestational age. Women in the other group will receive their therapy after they have given birth. Screening, enrollment, treatment and follow-up will take place at three clinical centers – UNC/Duke, the University of Alabama at Birmingham, and the University of Texas at San Antonio. The coordinating center for the study will be at the Collaborative Studies Coordinating Center in the Department of Biostatistics.

David Couper (pictured above) is the Principal Investigator of the MOTOR project, providing methodologic input on the design of the study and on data analysis. **Dawn Stewart** is the coordinating center's project manager.

New Cancer Institute Grant

Associate Professor **Keith Muller** has been awarded a grant by the National Cancer Institute for the period January 2003 through December 2005 in the amount of \$626,518. This grant includes a subcontract to the University of Alabama at Birmingham; Dr. Chris Coffey is the subcontract Principle Investigator. The project is titled, "Internal Pilots for Repeated Measures ANOVA."



Repeated measures of continuous data often provide the best combination of cost and statistical sensitivity for a wide range of health research in many disciplines. As driving examples, consider comparing methods of displaying digital mammograms, or radiotherapy planning films. The limited number and cost of qualified readers encourage choosing a minimum sample size, while scientific goals demand great sensitivity to differences. An accurate sample size analysis allows the scientist to resolve the conflict.

Unfortunately, accurate sample size choice requires an accurate value for error variance of Gaussian data. Uncertainty surrounding the variance makes an internal pilot design very appealing. Such designs use the first fraction of the data to estimate the variance and then adjust the sample size up or down, as needed, to achieve the target power. However, appropriate analysis methods are not available for repeated measures with internal pilots. The research will meet the need for such new methods.

- (1) Better statistical power approximations for the "univariate approach" to repeated measures (UNIREP ANOVA) will be developed, including exact properties and more accurate approximations.
- (2) Exact and approximate properties of the distribution of final sample size of internal pilot designs used with UNIREP ANOVA will be derived.
- (3) Analytic properties of UNIREP ANOVA in internal pilot designs, including some exact and large sample distributions, as well as practical algorithms will be developed.

Department Grants

Amy Herring, Assistant Professor of Biostatistics, received a grant from the UNC Center for Environmental Health and Susceptibility to develop statistical methods for evaluating complex exposure-response relationships in environmental health and environmental epidemiology.

The statistical methods will be applied to data from the Pregnancy, Infection, and Nutrition Study to help shed light on the association between vaginal bleeding, which is typically episodic and varies in timing, duration, and intensity over the course of pregnancy, and duration of gestation.

Haibo Zhou, Associate Professor of Biostatistics, has been awarded a grant from the National Cancer Institute with a total funding \$650k for a three-year period. This grant is a competing renewal for an original grant awarded to Dr. Zhou from the National Institute of Health to conduct research in the Outcome Dependent Sampling (ODS) area. The main objective of this grant is to develop and evaluate improved statistical methods for the design and analysis of epidemiologic studies conducted with ODS schemes.

Joseph Ibrahim, Professor of Biostatistics, has won a competing renewal grant from the National Institute of General Medical Sciences. This grant is titled "Bayesian Approaches to Model Selection for Survival Data" and will be funded for three years. Total dollar amount for the three years is \$591,290.

A specific objective of the project is to develop and study Bayesian methods of inference for DNA microarray data. Three general classes of models will be examined, log-normal models, hierarchical analysis of variance (ANOVA) models, and a new class of continuous mixture models.

Lawrence Kupper, Alumni Distinguished Professor and Associate Chair of the Department of Biostatistics, and Stephen Rappaport, Professor of Environmental Sciences & Engineering, were awarded a 3-year \$600,000 research grant from the American Chemistry Council to develop new statistical methods for evaluating exposure-biomarker relationships. This research project, which began in May of 2003, combines aspects of toxicokinetic theory, nonlinear mixed models, and measurement error methods. Other members of the research team include Dr. Brent Johnson (a postdoctoral fellow on Dr. Kupper's NIEHS training grant) and Dr. Douglas Taylor (Associate Director of Biostatistics at Family Health International and Adjunct Assistant Professor in the Department of Biostatistics).

The demography-training program in the Department of Biostatistics has received continuous financial support through a training grant from the National Institute of Child Health and Human Development (NICHD) since 1972. The training grant was renewed for an additional five years in May 2003. **Chirayath Suchindran**, Professor of Biostatistics, serves as the training director of the program.

The Department of Biostatistics Population Statistics (Demography) training program is designed to provide pre and post doctoral research training in the application of statistical theory and methods in the population field. The goal is to train biostatisticians to conduct state of the art biostatistical research relevant to important population problems, including health of human population, and to provide high level consulting for others in the population field.

The Collaborative Studies Coordinating Center has been awarded a two-year \$1,567,954 extension of the Combined Behavioral/Pharma Treatment of Alcoholism (COMBINE) project. COMBINE is a multi-center, randomized, controlled clinical trial sponsored by the National Institute of Alcohol Abuse and Alcoholism. The primary objective is to evaluate whether combinations of pharmacologic and behavioral therapies are superior to monotherapy in the treatment of alcohol dependence. **Jim Hosking** is the Principal Investigator of the COMBINE project.

Wayne Rosamond, Associate Professor of Epidemiology, has received a grant to be housed at the Biostatistics Collaborative Studies Coordinating Center. The grant is entitled "The Epidemiology of Venous Thrombosis and Pulmonary Embolism" and is funded by the National Heart, Lung and Blood Institute to build on previous work on venous thrombosis. The purpose is to identify additional risk factors for deep vein thrombosis and pulmonary embolism (VTE), in order to better understand the etiology and possible prevention of these conditions. The associations of factor IX antigen, plasminogen, tissue factor pathway inhibitor (TAFI), and factor VII polymorphisms with VTE will be determined. The effects of hemostatic factors and obesity will also be investigated.

This grant is subcontracted to UNC-Chapel Hill through the University of Minnesota through 2006 in the amount of \$157,112.

Faculty and Staff News

New Faculty

The Department of Biostatistics is pleased to announce the recent addition of a new faculty member, Assistant Professor **Mayetri Gupta**. She comes to the department from Harvard University where she has just completed her dissertation in Statistics titled, "Stochastic Models for Sequence Pattern Discovery." Before Harvard, Dr. Gupta studied at the Indian Statistical Institute and at Presidency College in Calcutta, India. Her research interests include: biological sequence

analysis, development of statistical methodology in genomics and molecular biology, stochastic computation and Monte Carlo methods, missing data problems, and Bayesian modeling and inference for multidimensional categorical data. She will also be involved in collaborative research in Statistical Genomics with the Carolina Center for Genome Sciences at UNC.



Visiting Faculty

Surajit Ray joined the Department of Biostatistics in September 2003 as a Visiting Assistant Professor. Ray received his PhD from Pennsylvania State University Department of Statistics in 2003. He received a Master's degree in 1999 from the Indian Statistical Institute with a specialization in Applied Statistics and Data Analysis, and a Bachelor's degree in 1997 from Presidency College in Calcutta, India. Dr. Ray's research

interests include analysis of mixture models, distance based model selection, analysis of high dimensional data, and bioinformatics. He is a member of the American Statistical Association and the Institute of Mathematical Statistics. Ray will work with Fred Wright in the area of statistical genetics research, Lawrence Kupper in nutrition studies, and will teach BIOS 145 in spring 2004.



New Staff

Nancy Anderson, Applications Analyst Programmer I, August 4
Daniel Barmmer, Processing Unit Supervisor IV, September 10
Sia Gilbert, Social Research Assistant I, July 14
Kwanhye Jung, Applications Programmer II, December 19
Leslie Southerland, Statistician II, July 14

Faculty & Staff Promotions

Brad Black, Computing Consultant I, November 3
Terri Lewis, Research Investigator, October 21
Jesse Metzger, Applications Programmer II, August 11
Michael Schell, Research Professor, December 1
Haibo Zhou, Associate Professor, April 1

Faculty and Staff News

Kupper Recognized for Student Mentoring

Lawrence Kupper, Alumni Distinguished Professor and Associate Chair in the Department of Biostatistics, was the recipient of the 2003 John E. Larsh, Jr. Award for Mentorship. This award is given by the School of Public Health to an individual who has a sustained record of high academic and moral standards, who has a strong mentoring record characterized by a long-term commitment to the overall growth of students, who has been consistently available to students for both professional and personal advice, who has provided a stimulating environment for student learning, and who possesses personal traits leading to excellence in student mentoring. During his three decades plus as a School of Public Health faculty member, Dr. Kupper has served as academic advisor to several hundred students, and has personally supervised the research efforts of close to 80 masters, doctoral, and postdoctoral students in the Department. He has also served on the doctoral committees of well over 100 students in other departments in the School of Public Health. Since 1972, he has served continuously as the Program Director of a large training program funded by the National Institute of Environmental Health Sciences (NIEHS). This training program currently provides yearly support for 31 predoctoral and three postdoctoral trainees in three School of Public Health departments (biostatistics, epidemiology, and environmental sciences and engineering), and is currently the largest training program funded by NIEHS.



Lin Among the World's Most Cited Researchers

Congratulations to Professor **Danyu Lin**, who has been recognized by ISI as one of the world's most cited scientific authors. ISI has indexed scholarly literature in science and social science for over 40 years and recognizes that citation is a key measure of influence in science and technology. The ISI Web of Knowledge has now created a website to feature the most cited researchers in 20 scientific fields and to showcase their publications. Lin was identified as one of the most highly cited researchers in the field of mathematics. The researchers named by ISI make up less than one-half of one percent of publishing researchers worldwide. Six other UNC Chapel Hill faculty members (two in biology & biochemistry, one in chemistry, one in pharmacology, and two in mathematics) were also recognized. Further information is available at the website: <http://isihighlycited.com>.



Impacting Minority Biostatisticians

Each summer from 1993 to 1997, Associate Professor **Lloyd Edwards** and Research Professor **Michael Schell** exposed a total of six minority students to the field of biostatistics through an intense training program in conjunction with the UNC Summer Pre-Graduate Research Experience (SPGRE) Program. The objective of the SPGRE Program is to expose qualified minority undergraduate students to the graduate research experience. The SPGRE Program is headed by Dr. Henry Frierson, UNC Professor of Education. The six students were rising juniors or seniors who majored in mathematics attending historically black colleges or universities. As of July 2003, five of the six students contacted have all received a doctoral degree in the statistical sciences or are well on their way. By July 2002, three students had received a PhD from the Department of Biostatistics in the Harvard University School of Public Health. A fourth student will receive a PhD in January 2004, from the Department of Biostatistics, School of Medicine, Virginia Commonwealth University. A fifth student, who has successfully passed the PhD qualifying exams, is writing a dissertation in Operations Research at North Carolina State University, and is expected to receive a PhD by 2005-2006.

Faculty and Staff News

Greer and Seagroves, Staff Awards for Excellence

The 2003 Annual Staff Award for Excellence was awarded to **Susan Greer**, Social Research Associate I at the Collaborative Studies Coordinating Center, and **Betsy Seagroves**, Administrative Assistant in the BIOS department. Winners received a plaque and a check for \$150.00.



deal with problems, in a quiet knowledgeable eager way that offers very helpful collaboration and guidance, and is thoughtful of her team members. She is positive and cheerful in her outlook and professional in her oversight of VISP issues; her thoughtfulness and attention to detail and promptness are much appreciated.

Susan Greer was nominated for her outstanding performance in project coordination for the Vitamin Intervention in Stroke Prevention (VISP) project. Susan joined the VISP Study in August 2000 and has been responsible for supervising the VISP endpoints staff for stroke and coronary endpoints, for coordinating data checks by working closely with clinical centers and data management staff, and for managing tracking and notification systems, supporting central lab and clinical centers. She has done an excellent job with these responsibilities, working on updating and improving procedures, responding effectively to project needs. She has led efforts to

Betsy Seagroves, a 29-year State Employee and BIOS employee since 1998, was nominated in her capacity as Assistant to the Chair and Associate Chair. In all respects she is incredibly conscientious. Everything she does is done with efficiency, accuracy, timeliness, and with an upbeat and energetic attitude. In addition, she is always willing to help with any emergencies that come up, and she adapts readily to any non-standard situation. She genuinely cares about the Department of Biostatistics and wants our department to continue to flourish, and her positive and cheerful attitude carries over to other staff members.

Service Appreciation

5 Years

Kim Ring
Sherry Roberts
Diane Catellier
David Couper

10 Years

Ricky Christian
Linda Hartig
Monica Miles
Climmon Walker

15 Years

Peter Desaix
Malachy Foley
Dawn Stewart
Deborah Rubin-Williams

20 Years

Nancy Anderson

25 Years

Keith Muller
William Kalsbeek

30 Years

Richard Bilborrow

Bios Births!

Danny Alexander Qaqish arrived April 7, weighing just under 10 lbs! Parents are Anastasia Ivanova and Bahjat Qaqish.

Congratulations to Joe Ibrahim and his wife Mona M. Soliman on the birth of their son, Paul Joseph, born April 24.

Alexis Brooke Hobgood was born on May 2 to parents Melissa and Chuck Hobgood.

On May 5, Charis Irene arrived to Michael Schell and his wife Noreen. Charis means "grace" in Greek.

Annika Hailey Jensen was born Friday, July 11 (the due date!!) to Karen and Mike Jensen.

Lindie Choi Lewis was born to Terri and Antony Lewis, July 13.

Joy Caroline Schwartz was born to parents Todd Schwartz and wife Rachel on July 24.

Bridget Isabel Lin was born on September 19 to Danyu Lin and his wife Qing.

Faculty and Staff News

Star Heels Awards

This awards program, sponsored by TIAA-CREF, allows departments to award a \$20 gift certificate to a deserving employee. Winners chose a gift certificate from A Southern Season, UNC Student Stores, Lowes, or University Mall.

Vera Bennett for always having a smiling face, willingness to undertake responsibility, and at the same time acumen to make the best use of resources.

Rick Christian for managing accounts effectively, preparing informative monthly reports, doing superb work in assuming SRU-wide responsibilities and exhibiting creativity, energy, notable competence, diligence, dependability and a positive helping attitude.

Xiang-Fang Li for being hard-working, conscientious and a pleasure to be around. Always willing to help whether it be her fellow team members at the CSCC or the staff and physicians at the many field sites.

Michele Ozgen for consistently performing above and beyond the call of duty to get deadlines met and always producing the highest quality work.

Sherry Roberts for being a great asset to the Coordinating Center and the TAAG study in particular, for meeting tight deadlines while keeping a smile on her face, keeping the team organized and being a pleasure to work with.

Kelly Tobin for all she does to keep the COMBINE study on the straight and narrow, and because she is invaluable to the local COMBINE team, the Chair of the Steering Committee and the other investigators for all participating sites for COMBINE.

Bland Retires from CSCC

Ernestine Bland retired May 31, 2003, from the Collaborative Studies Coordinating Center after more than thirty years of employment at the University, mostly at the CSCC. In a celebration of her 30 years work at UNC, Lloyd Chambless, Director of the CSCC, had this to say about her work:

Ernestine has been employed at the Collaborative Studies Coordinating Center, in the Department of Biostatistics, where she has worked with the Lipid Research Clinics project, the Asymptomatic Carotid Artery Study (ACAS, 1987-95), and the Vitamin Intervention for Stroke Prevention Study (VISP, since 1996), all National Institutes of Health sponsored studies about how to prevent heart disease and stroke. She has been the best technical typist here over the entire period, from the days when we had only typewriters to the present day of computer word processing, masterfully turning complex handwritten statistical formulae into beautiful text. Since 1987 she has, in addition, been in charge of communications, word processing, and meeting organization for ACAS and then VISP. As such, she has made a major contribution to the success of these international studies.

Faculty, Staff Run Marathon

Hope Bryan and **Diane Catellier** completed the Kiawah Island Marathon December 13. Approximately 1000 runners finished the race, the first man ran 2:38:35 and the first woman 2:57:43. Hope placed 4th in her age group (4:01:35), and could have done better if Diane had not slowed her down! **David Couper**, who regularly competes in marathon races, most recently ran the Richmond Marathon November 15th, finishing in 2:46:16 and receiving the award for first master (age 40+). David was also first master at the Mistletoe Half Marathon in Winston-Salem December 6, placing 6th overall.

Faculty Service

John Preisser, Research Associate Professor in Biostatistics, has been elected to serve as 2005 Chair for the American Statistical Association Section on Statistics in Epidemiology.

Pranab Sen, Cary C Boshamer Professor of Biostatistics and Professor of Statistics, has been elected to the American Statistical Association Council of Sections Representatives for the Section on Nonparametrics. His ASA term begins in January 2004. Also, Sen was elected President of the Calcutta Statistical Association for the year 2003.

Craig Turnbull, Associate Professor of Biostatistics, was elected to a three-year term on the Governing Council of the Statistics Section of the American Public Health Association (APHA).

Schaubel Wins Both Greenberg and Margolin Awards

Dr. Douglas E. Schaubel has been awarded both the 2002 Bernard G. Greenberg Award for the outstanding doctoral dissertation in the School of Public Health, and the 2002 Barry H. Margolin Award for the Outstanding Doctoral Dissertation in the Department of Biostatistics. Dr. Schaubel's dissertation, entitled "Semiparametric Rate and Hazard Regression Methods for Sequentially Ordered Multivariate Failure Time Data," was directed by Professor Jianwen Cai. This is the third consecutive year that Bios graduates have won the Greenberg Award from the School of Public Health. The previous two years' winners are Dr. Rosalie Dominik (advisors: Drs. Jianwen Cai and Haibo Zhou) and Dr. Douglas Taylor (advisor: Dr. Larry Kupper).

Dr. Schaubel's PhD dissertation research addresses very important and common problems in biomedical research. Recurrent events often occur



Doug Schaubel and Barry Margolin

in studies and the gap times between consecutive events are of interest. However, those gap times, except the first one, are generally subject to induced dependent censoring. For example, the longer the time until the first event, the more likely that the second event will be censored. By cleverly utilizing the information available from the observed data, Doug was able to develop innovative and useful methods for analyzing gap times for recurrent event data. He has applied the proposed methods to examine disparities in renal transplanta-

tion among demographic subgroups, with the time gaps being the time from starting renal disease therapy to being placed on the transplant wait-list and the time from wait-listing to receiving a transplant. The second setting of interest to Doug's dissertation concerns recurrent event data wherein event categories are potentially missing. Relevant data include technique failures among dialysis patients, with cause of failure representing event category. A manuscript based on the first topic has won a 2002 ASA Health Policy Statistics Section student paper prize, while one manuscript based on the second topic won a 2002 International Biometric Society (ENAR) Student Travel Award.

After completing his PhD, Doug accepted an appointment as a tenure track assistant professor with the Department of Biostatistics at the University of Michigan.

Greven Receives Best Master's Paper Award

Sonja Greven was awarded the 2002 Best Masters Paper Award for her work entitled "A Parametric Model for Studying Organism Fitness Using Step-Stress Experiments". This research work was jointly directed by Dr. John Bailer of the Miami of Ohio Department of Mathematics & Statistics and

by Dr. Lawrence Kupper of the Department of Biostatistics at Carolina. Sonja's work was motivated by a problem in environmental toxicology, and she developed the necessary statistical theory and conducted relevant simulation studies as part of her MS paper project. A manuscript

based on Sonja's Masters paper has received a favorable review from the journal *Biometrics*. Sonja was an outstanding Masters student, ranking essentially at or near the top in all of her classes. She is currently in her home country of Germany completing a graduate degree program there.

Pan Wins Mindel C. Sheps Award

William Pan, Biostatistics DrPH student, has been awarded the Mindel Sheps Dissertation Award in Demography. This honor is named for a pioneer in the field of mathematical demography and carries an award of \$4,500. The award is named after Mindel C. Sheps, Professor of Biosta-

tistics from 1968 until her premature death in 1973. She was a world-renowned demographer working in the area of human reproduction models.

Congratulations to William Pan, and his advisors, Dr. Chirayath Suchindran and Dr. Richard Bilborrow.



Student News

Emma Huang has won a Gertrude Cox Scholarship awarded by the American Statistical Association. This scholarship was created in 1989 to encourage more women to pursue careers in statistical professions. The award carries a \$1,000 cash prize and a certificate which was presented at the August Joint Statistical Meeting Presidential Address and Awards in San Francisco. Emma was also awarded the Procter & Gamble Fellowship, an annual award of \$12,000 given to an outstanding doctoral student in the department.

Anita Abraham and **Joshua Grab** were named Scholars for Tomorrow by the Graduate School, a cross-disciplinary fellowship program designed to help Carolina compete for the top graduate students.

Jeanine Matuszewski 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.

Erica Wilmoth 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.

This academic year's winner of the Max Halperin Scholarship Award was **Yueh-Yun Chi**. The Halperin Award, which provides a \$2,000 stipend, is designed to encourage the development of young biostatisticians. The Halperin award is named in honor of Dr. Max Halperin, who was a graduate of the Carolina Department of Statistics.

Ju-Hyun Park and **Eric Teoh** received this year's Fryer Awards, given by the Department of Biostatistics. The Fryer award carries a \$4,000 supplement to a traineeship or graduate research assistantship. This award is made possible by contributions of John and Diane Fryer.

Nora Jane Graber 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.

Bios student **Kai Wang** received a travel award from the ASA Section on Bayesian Statistical Science for his paper "A New Bayesian Design for Phase I Trials with Two Agents."

Xiaofei Wang and **Guosheng Yin** were selected to receive ENAR Student Travel Awards to the 2003 Spring Meeting in Tampa, Florida. Wang won it for his submitted paper titled, "A Semiparametric Empirical Likelihood Method For Biased Sampling Schemes in Epidemiologic Studies With Auxiliary Covariates." Yin was chosen for his paper, "The Mixed Baseline Additive Hazards Model for Multivariate Failure Time Data."

Andrea Fuller received the GlaxoSmithKline Scholarship, which, made possible by a GlaxoSmithKline donation, awards \$1,000 to an applicant chosen by the Department. Andrea was also awarded a Merit Scholarship from the Graduate School.

The following Bios students presented their work at the ASA Joint Statistical Meeting in San Francisco, August 2003: **Jackie Johnson, Chris Slaughter, Szu-Yun Leu, Kai Wang, Chaehyung Ahn, Ji-Hyun Lee, and Matthew Gurka.**

The following students' abstracts were accepted at ENAR:

Leila Amorim, Jamie Bigelow, Rebekkah Dann, Jianhua Hu, Lan Kong, Ji-Hyun Lee, Todd Schwartz, Anne Von Holle, Kai Wang, Xiaofei Wang, Guosheng Yin, and Richard Zink.

Bios Badminton Champions

Team Biostats captured the Fall 2003 intramural badminton tournament, posting an impressive 14-1 record on their way to the title. The Biostats squad was powered by Shankar Viswanathan (men's singles), Jingjing Wu (women's singles), and Jamie Perin / Andy Sterrett (mixed doubles).



2003 Induction into Delta Omega Honorary Public Health Society

Delta Omega is a national honor society which exists to encourage research, provide scholarships among students enrolled in graduate study, and recognize achievements in the field of public health. The Delta Omega Society accepts only students that meet high academic standards. The candidates must also demonstrate potential for making significant contributions to the field of public health. The 2003 Biostatistics inductees for the Delta Omega, Theta Chapter were: Sonja Greven-MS, Douglas Schaubel- PhD, Jamie Bigelow-MS and Zhiying Pan- MS.

The Theta Chapter of the Delta Omega Society confers annual awards for outstanding academic performance to senior students enrolled in any of the undergraduate programs leading to the BSPH degree. This year's recipient of the Undergraduate Award for Excellence was Angela Blotzer.

Andrew Sterrett received the Delta Omega Book Award for 2003.

The Delta Omega Theta Chapter recognized Dr. Joseph Ibrahim, member of the faculty, for his outstanding scientific contributions.

2003 Graduates

May 2003

Nikita Arya	MS
Stephanie Lopez Cano	PhD
Natalie Wei-May Cheung	MPH
Tejas Arvind Desai	PhD
Mary Jo Earp	MPH
Kelly Forsythe	MPH
Daniel Ignacio Garcia	MS
Lan Kong	PhD
Jane Holland Monaco	DrPH
Beth Suzanne Skalicky	MPH
Guosheng Yin	PhD
Binbin Zhang	MS
Xiaolei Zhou	MS

August 2003

Yu-Ling Chang	MS
Tzy-Mey Kuo	MPH
Ji-Hyun Lee	DrPH
William Kuang Yao Pan	DrPH
Neepra Ray	MS
Ben Lovett Sanford	MS
Anne F. Vonholle	MS
Richard Conrad Zink	PhD

December 2003

Jamie Lynn Bigelow	MS
Walter Rockwell Boyle	MS
Sean Edward Condon	DrPH
Rebekkah S Dann	MS
Jianhua Hu	PhD
Kelly M. S. Hugunin	MPH
Szu-yun Leu	PhD
Kannan Mahadevan	MS
Stacy Anne Patchel	MPH
Susheel C. Reddy	MPH
Vanessa Rommelmann	MPH
Kai Wang	PhD
Xiaofei Wang	PhD
Mary Louise Young	DrPH

Visit Us On-line

Keep up with departmental events on-line at www.sph.unc.edu/bios.

Alumni, we want to hear from you. Update your contact information and find fellow alumni in the online School of Public Health alumni directory by visiting www.sph.unc.edu/alumni.

Opportunities for Giving

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 Master's Paper Award and 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.

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. Dr. Gary Koch, a biostatistics faculty member, will match your gift dollar-for-dollar up to a fund total of \$15,000, if your gift is designated to the BIOS Student Travel Fund.

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:

Vera Bennett
Department of Biostatistics, UNC Chapel Hill
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.

Gifts to the Department (July 1, 2002 through June 30, 2003)

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*.

Corporations

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