Message from our Chair

Shumei S. Sun, PhD
W. Hans Carter Professor and Chair

State of the Department: It is a pleasure to report that the state of the Department has never been better. We now have 17 full-time faculty members and are recruiting for a replacement for Bob Johnson who is planning to retire. It will be a tall order to fill Bob’s place in our Department and in our hearts. We are grateful for his many contributions to the success of the Department over many years.

Fiscal Status: The fiscal status of the Department is healthy despite cutbacks at the State and University levels. Because of the high level of support that emanates from the collaborative research efforts of all of our faculty members, we have been able to salt away these funds for a rainy day. Congratulations to all who have contributed to the fiscal health of our Department.

Research Support: Speaking of research support, I am pleased to report that Dr. Chris Gennings attained a fundable priority score from the NIEHS on her T32 training grant renewal application, and she is looking forward to training more predoctoral students in the important specialty of analyzing the effects of mixtures of environmental chemicals. I just heard from the NHLBI that a grant renewal application of mine should be funded beginning on December 1. This project involves predicting the effects of obesity and body composition in childhood on cardiac structure and function decades later in adulthood.

New Grant Applications: I am working with Dr. Linda Corey at VCU and with Dr. Becky Simmons at the U of Pa on an unusual data set that includes detailed pathological records of the chorionic and amniotic structures of hundreds of pairs of monozygotic and dizygotic twins. We plan to track down as many of the twins as possible in order to ascertain the persistence of epigenetic marks of uterine stress three or four decades after birth. At the request of Dean Strauss, Chris Gennings, Kellie Archer, Roy Sabo, Guimin Gao, David Wheeler, and I are working with other investigators across VCU to develop a P30 grant application for a Nutrition and Obesity Research Center. Using a REDCap survey we were able to identify 23 investigators within VCU-VCUHS who are working on various aspects of obesity, especially childhood obesity.

New Courses for the Masters of Public Health Program: As most of us are aware, our Department, along with three other Departments of the School of Medicine are considered to be VCU Public Health. Roy Sabo has worked diligently for many months to develop two new introductory level biostatistics courses, BIOS 547 and BIOS 548 for this new Masters level program. BIOS 543 will be taught in the Fall Semester 2012 and BIOS 544 in the Spring Semester 2013.

In addition to developing these two new courses for the Master’s level program of the Emerging School of Public Health, Dr. Sabo will develop an on-line version of BIOS 543 to be taken by predoctoral students of the VCU School of Nursing during the coming Fall and Spring semesters. If successful, this online course will supplant the live-version of the BIOS 543-544 course sequence.

Program Evaluation of the Department: Many of you will remember working last year to develop a pilot program for departmental evaluation. This idea was conceived by Dr. Michael Rao, President of the University, so that he could have instant access to all administrative, teaching, research and fiscal aspects of every department in the University. Because of our strong focus on data gathering, management and analysis, our Department was asked to serve as a test case. It was reported back to us that our pilot program was very well received by the President. Now we are at the stage where the program is no longer a pilot program. So we will begin to ferret out key data and provide it to the University leadership in an accessible and user-friendly format.
Congratulations to Dr. Chris Gennings whose T32 training grant entitled “Integration of Mixtures Toxicology, Toxicogenomics and Statistics” was currently awarded its 11th year of support from the National Institute of Environmental Health Sciences. The objective of this training grant is to train biostatisticians to work in inter-disciplinary collaborative teams addressing the problems associated with evaluating the effects of relevant environmental chemical mixtures or in the area of toxicogenomics. Eleven PhDs have graduated who were supported as NIEHS T32 trainees and four additional pre-doctoral students are currently supported.

The training grant links doctoral students with extramural experts in the environmental health field. External collaborators currently include:

- Dr. Barbara Cohn, Director of the Child Health Development Studies (CHDS);
- Dr. Kevin Crofton, Neurotoxicologist from the National Health Environmental Effects Research Laboratory (NHEERL) of the U.S. EPA;
- Dr. Pam Factor-Litvak, Environmental Epidemiologist from the Columbia University Mailman School of Public Health;
- Dr. Ginger Moser, Senior Toxicologist in the Toxicity Assessment Division of the NHEERL of the U.S. EPA; and
- Dr. Tim Zacharewski, Professor in the Department of Biochemistry & Molecular Biology and National Food Safety & Toxicology Center, Michigan State University.

Additional collaborators are added as new areas of biostatistical methodology are identified with focus on topics in environmental health.

The recent addition of spatial statistician Dr. David Wheeler to the Biostatistics faculty has resulted in a fruitful collaboration with post-doctoral trainee and vector-borne disease researcher Dr. Kevin Caillouet. Dr. Wheeler and Dr. Caillouet were recently awarded a grant from the AD Williams Foundation to develop a novel approach to modeling West Nile virus (WNV) transmission with the goal of creating a high-resolution map of the risk of virus transmission. Traditional monitoring for WNV outbreaks focuses on detecting WNV infected mosquitoes - an indicator that may occur after human infection has already transpired. The approach of Drs. Caillouet and Wheeler seeks to integrate effects of both WNV vectors and an array of hosts, each different in their ability to transmit (vectors) and carry (hosts) WNV. By combining aspects of field, laboratory, and modeling research they hope to translate the current state of the science into a predictive tool that defines transmission risk areas at fine spatial scales with the advanced warning needed to prevent human infections. Dr. Caillouet will oversee the primary data collection for this project. The collection of avian species counts at 40 sites across Henrico County will begin in May and continue throughout the summer.

Dr. Wheeler and Dr. Caillouet also recently collaborated in training for the Ukrop’s Monument Avenue 10k. Past collaborations have also included brewing small batches of beer.

Click a link below to visit that section of the Biostatistics Department website:

- Publications List
- Graduate Program
- Consulting a Biostatistician
- Biostatistician Research Interests
- Biostatistics Research Seminar Series

Featured student

Bob Carrico, PhD Candidate

Bob Carrico received his Bachelors of Science in Mathematics at the University of Mary Washington in Fredericksburg, Virginia (May 2007) Bob Carrico is a fifth year student currently advised by Dr. Yongyun Shin. During his time here at VCU, Bob served as the BASS scholar in the fall of 2010, and has served as the student representative to the faculty since 2009. In his spare time, he is an avid cyclist, competing in mountain bike, road bike, and cyclocross races in the mid-Atlantic region. He also enjoys quality time with his XBOX360, and fishing on the James River in Richmond.

Bob has garnered a great deal of research experience since beginning his PhD work. Mr. Carrico was supported by Dr. Shumei Sun’s research grants that included working with the Fels Longitudinal Study (FLS). These grants studied longitudinal obesity related outcomes in both adolescence and adulthood. He spent a great deal of time studying the effects in adulthood of timing of changes in height in adolescence. He also works in collaboration with Dr. Sun and Dr. Bernard Rosner of Harvard Medical School in the time-series study of longitudinal blood pressure measurements in the FLS using ARMA models. His research has allowed him to study generational trends in the FLS which led to a publication and formulations of area of study for his dissertation.

Bob is set to defend his dissertation “Unbiased estimation for the contextual effect of adolescent height growth duration on adulthood obesity and health outcomes via hierarchical linear and nonlinear models” May 22, 2012. After his successful defense, Bob will begin working for the United Network for Organ Sharing (UNOS) early this summer.
DEPARTMENT LAURELS

Honors

Dr. Chris Gennings, was awarded 1 of the 10 “Best Abstract” awards in the Mixtures Specialty Section at the 2012 Annual Society of Toxicology.

Dr. Donna McClish, was elected to the University Graduate Council.

Dr. Karl Peace, was a recipient of the Board of Regents of the University System of GA Alumni Hall of Fame Award. He was also honored with a reception and a portrait at the home of GSU President Brooks Keel and First Lady Tammie Schalue. The portrait of Dr. Peace was created by the renown artist Susan Oliver and will hang permanently in Hendricks Hall, home of the Jiann-Ping Hsu College of Public Health, that Dr. Peace endowed in honor of his late wife. Dr. Keel praised Dr. Peace’s contributions to the university and used the occasion to announce that the JPHCOPH was recently accredited by the Council on Education for Public Health. Lastly, Dr. Peace had two awards named after him: (1) ASA: Karl E. Peace Award for Statistical Contributions for the Betterment of Society and (2) the Delta Omega chapter: Karl E. Peace Leadership Award.

Adam Sima, PhD Student completed the Preparing Future Faculty Program during the 2011-2012 academic year.

Recent Graduates

PhD in Biostatistics, May 2012
- Dr. Tobias Guennel is a Statistician at Biostat Solutions Inc. in Mt. Airy, MD.

MS in Clinical Research & Biostatistics, May 2012
- Dr. Teresa Randelle Camp-Rogers is an Assistant Professor in the Department of Emergency Medicine at University of Texas in Houston.
- Dr. Amrita Sethi is an Assistant Professor in the Division of Gastroenterology and Hepatology, Interventional Endoscopy at Columbia University College of Physicians and Surgeons in New York.

PhD in Biostatistics, August 2012
- Dr. Robert “Bob” Carrico will be working with United Network for Organ Sharing (UNOS)
- Dr. Stephanie Pearson is exploring her work options now.

MS in Biostatistics, August 2012
- Hali Esinhart is exploring her work options.
- Yan Jin, a Health Data Analyst, continues to work with Massey Cancer Center.

Newly awarded grants & contracts, October 2011-April 2012

Kellie Archer, PhD
Co-I on NIH’s award entitled “Molecular Pathways leading to Chronic Graft Dysfunction” with Dr. Mas of Surgery and Pathology as PI.

Kevin Caillouet, PhD
Co-PI on AD Williams grant entitled “Neighborhood-Scale Risk Map for the Prevention of Human West Nile Virus Infections” with Dr. David Wheeler as PI.

Chris Gennings, PhD
PI on her competitive renewal award entitled “Integration of Mixtures Toxicology, Toxicogenomics and Statistics.”

Roy Sabo, PhD
Co-I on Department of Education award entitled “Organizational Skills Interventions for Children with ADHD” with Dr. Langberg of Psychology as PI.

Leroy Thacker, PhD
Co-I on Rock Creek Pharmaceuticals, Inc award entitled “Planning Grant for Studies to Test the Hypothesis that Anatabine is an Effective and Safe Anti-Inflammatory” with Dr. Sterling of Internal Medicine as PI.

David Wheeler, PhD
- PI on AD Williams grant entitled “Neighborhood-Scale Risk Map for the Prevention of Human West Nile Virus Infections.”
- Subcontract PI on National Cancer Institute award entitled “Statistical Modeling of Environmental and Occupational Chemical Exposures using Spatial Models and Data Mining Methods.”

WWW.BIOSTATISTICS.VCU.EDU
Announcements

Bob Johnson’s Retirement

Dr. (Bob) Robert E. Johnson will be retiring from VCU June 1, 2012. He and his wife, Janice, will relocate to Nashville, TN, where they will be close to family, including grandchildren. Bob will continue to work as a biostatistical collaborator and is pursuing a part time position in the Vanderbilt Department of Biostatistics.

Bob came to VCU in 1982 as an instructor in the Department of Mathematical Sciences. He was promoted to Assistant Professor the next year and was tenured at the Associate Professor level in 1989. While a faculty member in the Division of Statistics and Operations Research, Bob taught undergraduate and graduate level courses in statistics and mathematics. He worked with a team to develop the College of Humanities and Sciences general education curriculum in introductory statistics culminating in a teaching supplement that is still being used.

In 1984, Dr. Hans Carter, Professor and Chair of Biostatistics, introduced Bob to colleagues in the Department of Family Medicine. This initiated a partnership that grew in 2000 to a faculty appointment in Family Medicine. This connection also opened the door for collaboration with researchers in the VCU Center on Human Needs.

In 2000, Bob moved to the MCV campus to accept a faculty appointment in the Department of Biostatistics (with a joint appointment in Family Medicine). He taught biostatistical computing, mathematical statistics, linear models, and generalized linear models. He directed four PhD dissertations and served on several graduate advisory committees. Bob served four years as the Graduate Program Director. During his twelve years in Biostatistics, Bob coauthored 37 peer reviewed articles, nine proceedings papers, and over 50 presentations.

Bob will be greatly missed in the Department of Biostatistics and we wish him the best of luck!!!!

On a personal note...

Brian Bush, IT Director

Congratulations to Brian and his wife who are expecting their third child in July 2012.

Bob Carrico & Caroline Carr, Graduate Students

Congratulations to Bob and Caroline who got engaged April 2012.

Mary, Clauson, Graduate Student

Congratulations to Mary, who married Caleb Haynes on March 17, 2012.

Cindy Sabo, Scientific Administrator & Roy Sabo, Assistant Professor

Congratulations to Cindy and Roy who are expecting their second child in July 2012.

Job Opportunity & Welcome

Job Opportunity

Assistant Professor, Position #F34070

Description: The Department of Biostatistics at Virginia Commonwealth University (VCU) is seeking to fill a tenure-eligible faculty position at the level of assistant professor. The candidate should have interdisciplinary research interests with the potential for external funding and scholarship that complements existing expertise in the department. Research areas of particular interest include (but are not limited to) longitudinal and hierarchical modeling, stochastic processes, and risk analysis. Faculty are expected to maintain extramural grant support, teach and advise graduate students, and provide departmental and university service.

Application Process: Potential candidates can submit applications, including a statement of research, teaching philosophy, curriculum vitae and contact information for three professional references, via mail to Mrs. Yvonne Hargrove, Department of Biostatistics, Virginia Commonwealth University, P.O. Box 980032, Richmond, VA 23298-0032 or by e-mail to yfhargro@vcu.edu. Virginia Commonwealth University is an equal opportunity/affirmative action employer. Women, minorities and persons with disabilities are encouraged to apply.

For Additional Information: Yvonne Hargrove Phone: (804) 828-9824 Fax: (804) 828-8900 Web: http://www.biostatistics.vcu.edu/

Welcome

Karl Peace, PhD

Dr. Karl Peace joined our department this spring as an Adjunct Professor of Biostatistics. During the Spring 2012 semester, Dr. Peace taught "Statistical Issues in Drug Research and Development". The content of the course derives from his support of various R&D programs in the pharmaceutical industry and from his book of the same name (as the course). The course provides a blend of theoretical, applied and practical insights.

Dr. Peace previously taught at Georgia Southern, Clemson University, Virginia Commonwealth University and Randolph-Macon College, where he was a tenured professor of mathematics. He holds or has held numerous adjunct professorships at the Medical College of Virginia, the University of Michigan, Temple University, the University of North Carolina and Duke University.

He has a lengthy record of philanthropy to education. He has created 21 endowments. Three of these are with the MCV Foundation to support biostatistics, and fourteen are at Georgia Southern, including five for students from his native Baker County, Ga. Additionally at Georgia Southern, Dr. Peace endowed the JPHCOPH - the first school of public health in the University System of Georgia – and the first Eminent Scholar Chair in Biostatistics. He founded the Karl E. Peace Center for Biostatistics and the Karl E. Peace Public Health Library, and brought the Central Office of the International Chinese Statistical Association to the JPHCOPH. Peace is also Founder and Chair of the internationally renowned Biopharmaceutical Applied Statistical Symposium (BASS) – which generates funds to support graduate work in Biostatistics.

His work has been published extensively in pharmaceutical, statistical, medical and scientific literature. He is the author or co-author of more than 150 articles and 10 books and the editor or reviewer of several peer-reviewed journals, including the founding editor of the Journal of Biopharmaceutical Statistics, now in its 22nd year.

Since joining our department he has been working closely with our alumni to (1) develop an alumni infomercial to be included in our updated Biostatistics website (stay tuned this should be rolling out late Summer/Early Fall 2012; (2) getting key alumni to agree to become an affiliate professor with our department; and (3) getting several alumni to return and give a biostatistics seminar.