Dear Alums and Friends,

One of the truly great losses for our department occurred in January, 2002, with the passing of Shanti S. Gupta. He headed the department from its inception until 1995 and continued to be an integral and vital part of it until the end. We are all saddened by the loss. He was a great supporter of statistics and of the profession and the loss is not just for Purdue.

We are happy to have three new tenure-track assistant professors joining us for the coming year: Kristofer Jennings in statistics with the Ph.D. from Stanford, Anastasia Ruzmaikina in probability with the Ph.D. from Princeton, Tonglin Zhang in statistics with the Ph.D. from Michigan.

We will also welcome many new graduate students bringing the total of supported MS and Ph.D. students to about 70. This is more than double the number in 1990 and the strong job market for statistics graduates plays an important part in that increase.

The new faculty and graduate students are the good news. The bad news is that we do not have the space to house everyone on the fifth floor of the MATH Building (or even all in MATH.) We will be spread out further than we would like in Fall 2002.

A great group of new undergraduates affiliated with Statistics will join Purdue in the Fall. Most are majors in Actuarial Science which is jointly administered by the Department of Statistics and the Department of Mathematics.

The Statistics Department is one of seven in the School of Science and its Dean, Harry Morrison, stepped down on July 1, 2002. He made many important contributions to the School and he will be missed. It seems likely that a new dean will be in place by the beginning of the Fall 2002 semester.

The coming year will bring many new opportunities and challenges for the department. I and our faculty, students and staff appreciate your advice and support as we face them.

Sincerely,

Mary Ellen Bock


Mike Wendl, Genome Sequencing Center, School of Medicine, Washington University, “Relational Schema Design for DNA Sequencing Laboratory”, November 6, 2001.


Friedrich Liese, University of Rostock and Visiting Purdue University, Selection of the Best Population Based on Rare Data”, December 6, 2001.


Helen Kim, Department of Pharmacology & Toxicology, University of Alabama at Birmingham, “Proteomics Analysis of Brain Protein Changes Induced by Polyphenol-Enriched Dietary Supplements”, January 22, 2002.


Ciprian A. Tudor, Universite de La Rochelle, France, Visiting Purdue University, “Fractional Brownian Motion: Stochastic Calculus and Local Time Theory”, February 7, 2002.


(Cont. page 27)
Dr. Shanti Swarup Gupta passed away on January 11, 2002, after a brief illness.

He was born in Saunasi, Mainpuri, India, on January 25, 1925. After completing a master’s degree in mathematics at the University of Delhi and several years of teaching there, he came to the United States as a Fulbright Scholar in 1953. He received a doctorate in statistics from the University of North Carolina at Chapel Hill in 1956 and subsequently worked in statistics research at Bell Labs in Allentown, PA.

Dr. Gupta held teaching positions at the University of Alberta and the Courant Institute, New York University, as well as visiting appointments at Stanford University, the University of California-Berkeley, and the Technical University of Darmstadt, Germany.

In 1968 he founded the Purdue University Department of Statistics and served as department head until 1995. During this period and up to his illness, he was engaged in research and teaching. He was a Professor of Statistics and Mathematics at Purdue University from 1962 until his death.

His honors include Fellow of the American Association for the Advancement of Science, of the American Statistical Association, of the Institute of Mathematical Statistics, as well as Erskine Fellow of the University of Canterbury in New Zealand, Honorary Fellow of the Indian Statistical Association, Special Chair in Academia Sinica, Taipei, Taiwan.

He was president of the Institute of Mathematical Statistics and Editor-in-Chief of the Journal of Statistical Planning and Inference. He was a prominent scholar in the area of statistical ranking and selection. He was the author of more than 200 published articles and books and was the major advisor to 30 doctoral students.

Surviving are his wife Marianne Heinicke Gupta and their daughter Maya Gupta of Athens, GA.

A Celebration of the Life and Works of Shanti S. Gupta was held at Purdue University March 2, 2002. Donations in his honor may be made to: Purdue Foundation, c/o The Shanti S. Gupta Fund, West Lafayette, IN 47907.
Professor David S. Moore Honored with American Statistical Association Founders Award

David Moore, the Shanti S. Gupta Distinguished Professor of Statistics at Purdue University, has been honored with the 2001 American Statistical Association (ASA) Founders Award. This is the highest honor given by the ASA and is given annually to a member whose career achievements result in distinguished service to the field. He was honored with the title of Founder, a framed certificate, and a crystal bowl.

Professor Moore is internationally known in the statistics profession for his extraordinary contributions to statistics education. His scholarly interests include statistical education and applied statistics. He is a former president of the American Statistical Association.

Professor Moore’s books have changed the way statistics is taught and have influenced countless other authors. His book, *Introduction to the Practice of Statistics*, coauthored with George McCabe (Purdue University), is one of the best sellers in history for a text at any level. It is also the basic reference for the new Advanced Placement high school statistics course. His leadership in the production of the video series “Against All Odds” has added greatly to the public understanding of statistics and is an integral component of many introductory statistics courses taught across the country. He is also the author of several books including: *Statistics: Concepts and Controversies; Introduction to the Practice of Statistics* (with George McCabe); *The Basic Practice of Statistics*; and *Perspectives on Contemporary Statistics* (edited with David C. Hoaglin).

The ASA Board of Directors voted to establish the ASA Founders Award in 1988 to recognize members who have rendered distinguished service to the Association. Typically, no more than two awards are granted annually.
Joining the Department in May and August 2002

New Faculty

Assistant Professor of Statistics
Kristofer Jennings - Dr. Jennings comes to Purdue as Assistant Professor of Statistics. He received his Ph.D. from the Stanford University in 2002. His research interests are bootstrap and resampling methods and applied statistics.

Assistant Professor of Statistics
Anastasia Ruzmaikina - Dr. Ruzmaikina received her Ph.D. from Princeton University in 1999. Her research interests are probability theory, stochastic processes, large deviations, mathematical physics, PDE’s, dynamical systems and statistical mechanics.

Assistant Professor of Statistics
Tonglin Zhang - Dr. Zhang received his Ph.D. from University of Michigan in 2002. His research interests include problems in restricted parameter spaces, statistical problems in clinical trials, and spatial data analysis.

Limited-Term Lecturer
Sarah Sellke - Sarah received an M.S. in Mathematics from Purdue University in 1991 and an M.S. in ECE from Purdue University in 1993. Her research interests include statistical methods in research in the areas of digital image/signal processing, artificial intelligence and neural networks.

Visiting Faculty

Visiting Assistant Professor
Messan (Charles) Amewou-Atisso - Charles received his Ph.D. in 2002 from Purdue University. His research interests include Bayesian nonparametrics, Bayesian survival analysis and Markov chain Monte Carlo.

Visiting Professor
Kalyan Das - Kalyan received his Ph.D. in 1986 from Calcutta University, India. His research interests include Bayesian nonparametrics, other methods to longitudinal and over dispersed epidemiological data and frailty models.

Visiting Professor
Maria Cristina Mariani - Maria received her Ph.D. in 1992 from the Universidad de Buenos Aires. Her research interests include applied mathematics, nonlinear differential equations with applications to physics and finance and numerical methods.

Visiting Associate Professor
Paul-Andre Monney - Paul-Andre received his Ph.D. in 1991 from the University of Fribourg, Switzerland. His research interests include reasoning under uncertainty, Dempster-Shafer theory of evidence, model-based diagnostic of complex systems, probabilistic decision support systems and information fusion.

Visiting Assistant Professor
Jyothi Subramanian - Jyothi received her Ph.D. in 2001 from the Indian Institute of Technology, Bombay, India. Her research interests include bioinformatics and use of nonparametric statistics for protein data analysis.
The Department of Statistics’ commitment to Statistical Genetics and Bioinformatics continued this year with even more involvement from our faculty (Professors Bruce Craig, Rebecca Doerge, Katy Simonsen, and Jun Xie) through teaching, research, and seminars.

Along with faculty members from the Biology and Computer Science departments Jun Xie took part in team teaching an undergraduate “Introduction to Bioinformatics” course. The purpose of this course was to introduce undergraduate students in biology, computer science and statistics to bioinformatics as the study of molecular information. Topics such as evolutionary organization of genes (genomics), structure and function of gene products (proteomics), and the dynamics of gene expression in biological processes (transcriptomics) were covered. The result of this interdisciplinary course introduced both the faculty and students to analytical methods from biology, as well as the statistics and computer science concepts necessary for bioinformatics investigations.

Once again, the Statistical Genetics and Bioinformatics Seminar was held both Fall (2001) and Spring (2002) semesters under the organization of Professor Doerge. As in past years, the seminar drew students, faculty, and staff from at least 15 different departments across campus, and served as a forum for interesting topics in both Statistical Genetics and Bioinformatics. In particular, a three part seminar series dedicated to the three components of Bioinformatics, namely Data generation (high throughput sequencing: Dr. Phillip San Miguel), Databasing (Dr. Lauren McIntyre), and Data Analysis/Bioinformatics (Mr. Rick Westerman) introduced seminar attendees to the capabilities of Purdue’s Genomics facilities, and how these components function together. Building upon these themes the Fall 2001 seminar were dedicated to both modeling gene expression and databasing (both sequence and gene expression). Spring 2002 seminars involved both Purdue scientists, as well as outside scientists working on issues of macroarrays, protein identification, and novel approaches for complex trait analysis and target identification.

The department saw three Ph.D. students graduate this year that emphasize the interdisciplinary efforts involved in Statistical Genetics and Bioinformatics. Brian Munneke (advisor: R.W. Doerge), Jayson Wilbur (co-advisors: Jayanta Ghosh and R.W. Doerge), and Michael Black (advisor: R.W. Doerge). Dr. Munneke is currently working at Chiron, Inc. in California; Dr. Wilbur is an Assistant Professor at Worcester Polytechnical Institute in Massachusetts, and Dr. Black is an Assistant Professor at Auckland University, Auckland, New Zealand.
Assistant Professor Frederi Viens continued as coordinator of Purdue University’s Computational Finance Program, in which the Statistics Department a major component. As a consequence of last year’s restructuring of the Master’s Program in Statistics with Computational Finance Specialization, the enrollment for Fall 2002 has more than doubled when compared to prior years. The high quality of the successful applicants holds the promise of a continued increase in the program’s level. Professor Viens led the weekly Computational Finance Seminar in the Spring of 2002, which gathered a wide variety of invited speakers from mathematics, statistics, business, finance, economics and actuarial backgrounds, including: Luis Seco, Department of Mathematics, University of Toronto and Director, University of Toronto Risk Lab; Siddhartha Chib, Olin School of Business, Washington University in St. Louis; Thierry Kauffman, TradeLink, Chicago, Illinois; William C. Hunter, Senior Vice President and Director of Research, Federal Reserve Bank of Chicago; Philip Protter, Operations Research and Industrial Engineering, Cornell University; Ronnie Sircar, Operations Research & Financial Engineering, Princeton University.

Ten new PC’s with large flat panel LCD monitors have been purchased for our full professors. Flat panel LCD monitors have also been added to the desks of our secretarial/administrative staff. Eight new laptops and a new computer projector should be available for classroom use by the start of the fall semester. Additional PC’s will be added to our current computer labs and work is in progress to obtain an additional PC lab.
During the 2001---2002 academic year a community service group called STATCOM was founded by Nels Grevstad. Nels is a Ph.D. student in the statistics department and has worked for the Statistical Consulting Service and the Technical Assistance Program. Volunteer graduate students in STATCOM are currently involved in projects with two local school districts. The first project involves an analysis of data related to state funding for school districts and in particular, addressing the question of whether or not changes need to be made in the formulas that the state uses to allocate the funds. The second involves an analysis of pre- and post- survey data to assess the effectiveness of a program designed to help incoming middle school students adjust to their new learning environment. Nels provided the following description of this new group.

**STATCOM: Statistics in the Community**

What is STATCOM? STATCOM is a community outreach program provided to the greater Lafayette area by graduate students in the Department of Statistics at Purdue University. The program offers free of charge to non-profit community organizations the expertise of statistics graduate students in the areas of data collection, organization, and interpretation.

Why STATCOM? STATCOM was born out of a desire to enhance the existing partnership between Purdue University and the community at large, thereby impacting the quality of life in the area in a positive way.

Who benefits from STATCOM? Potential recipients of the service include, but are not limited to, organizations such as: schools, government agencies, health centers, homeless shelters and homeless advocacy groups, libraries, adult learning centers and other agencies and organizations.

What kinds of services are provided by STATCOM? Advice will be offered and assistance given on a wide variety of statistical issues including: use of data to improve decision making processes, survey/sample design and analysis, experiment design and analysis, graphical methods to summarize and gain meaning from data, use of data to detect trends and make predictions and projections and finding meaningful information when large amounts of data are available.

How will STATCOM’s services be administered? Projects can be initiated either by the community organizations that seek out assistance with statistical issues, or by members of STATCOM who have an interest in a particular project. Students will work on the projects in teams and will be assigned to projects at the beginning of each semester. The students will commit to the program for a period of six months at a time, although community agencies can receive help over a longer period of time. The students will attend periodic meetings to discuss ideas about the projects they’re involved with, and about ways improve STATCOM’s impact on the community.

Community agencies that would like to learn more about the program should contact Nels Grevstad (grevstad@stat.purdue.edu) or Regina Becker (494-0105, rbecker@stat.purdue.edu).
Of Special Note

Rebecca Doerge has been appointed a University Faculty Scholar for both the School of Science and the School of Agriculture. This award was established to recognize outstanding accomplishments by faculty midway through their academic career. It is a five-year nonrenewable award that includes discretionary funds to further her research program. Dean Lechtenberg, School of Agriculture and Dean Harry Morrison, School of Science presented the award.

Virgil Anderson, Professor Emeritus of Statistics, celebrated his 80th birthday in May, 2002. Best wishes from the Statistics Department!

Bruce Craig has been promoted to Associate Professor of Statistics. Congratulations Bruce!

Tom Kuczek has been appointed a Malcom Baldrige Award Examiner in education. The Baldrige National Quality Program annually seeks a board of experts capable of evaluating organizations eligible for the Malcom Baldrige National Quality Award, and willing to serve as representatives of the Award Program. The Award Program includes five eligibility categories: manufacturing, service, small business, health care, and education. Category coverage and balance are important factors in selecting the Board of Examiners’ members. The goal is to ensure broad representation from many industries, companies and organizations including those from for-profit, not-for-profit, and public sectors.
Department News (cont.)

Weddings

Lei Liu and his new wife, Meina, were married June 23, 2001. Lei is a Ph.D. student in the Department of Statistics and Meina is a Ph.D. student in the Department of Communication.

New Arrivals

Vince and Marcey (M.S. 1993, Ph.D. 1995) Abate are once again proud parents, this time to a girl, Quinn Isabel. Her brother, Kelden, now has a new playmate. Lingling An and her husband, Zhenqiang (James) Lu, had a daughter, Annie Lu, on June 13, 2002. Lingling is a current student. Greg Ball (M.S. 2000) and his wife, Kim, have a new addition to their family. Elyse Carolyn was born September 20, 2001. Joan Brenneman and her husband, Wes, are the parents of a baby boy born April 19, 2001. Joan taught for us Fall 2001. Kristy Brewer, who is a department staff member, and her husband, Monte, are the proud parents of a new daughter, Madison, born May 3, 2002. Kuo-Mei Chan and her husband, Ti-Chium Chang, have a new daughter, Claire Chang, born August 26, 2001. Kuo-Mei is a current student. Josephus Lee Colver is the new son of Y. Chou and Tadd Colver. Tadd is a current student. Philip Gundlach has a new brother, Callum John, who was born July 28, 2001. Their parents are Erich and Ellen Gundlach. Ellen is a current student. Kiseop Lee (M.S., 2002; Ph.D., 2002) and his wife, Gil Jung Hwang, are new parents of a daughter, Kara H. Lee. Kiseop graduated in May 2002. Jasmiee Su was born on September 30, 2001. Her parents are Chunsu Li (M.S., 2001) and Taichi. Lei Liu and his wife, Meina, had a daughter, Michelle Liu, on June 5, 2002. Lei is a current student. Yali Liu and her husband, Qiangbing Chen and a new son, Albert Chen, who was born October 7, 2001. Yali is a current student. Chris Rellinger (M.S. 1995) and his wife, Dawn, are the proud parents of a daughter, Abigail Dawn, who was born August 23, 2001. Katy Simonsen and her husband, Doug Moore, have a new son, Sean Alan Moore, who was born January 4, 2002. Katy is an assistant professor in our department. Seongjoo Song and her husband, Jongwoo, also have a new son. Daniel Won-Joon Song was born on June 13, 2001. Seongjoo is an assistant professor in our department. John Stevens and his wife, Heather, are the proud parents of a daughter, Emily Ann, born June 3, 2002. John is a current student. Anton Sebastian Vitek was born December 30, 2001. His parents are Olga Vitek and her husband, Jan. Olga is a current student. Jayson Wilbur (M.S., 2000; Ph.D., 2002) and his wife, Stephanie, have a new daughter, Elisabeth Grace. She was born February 2, 2002. Suk-Young Yoo (M.S., 2002; continuing for Ph.D.) and her husband, Min Kyun Kim, are the proud parents of a baby boy. Luis was born May 11, 2002. We would like to congratulate all the new families.

Job Search Network

If you have job information that you would like to include in our web site, please e-mail the job announcement to stat-jobs @stat.purdue.edu.
"Stat Day"

The Statistics Department hosted the fifth annual “Stat Day” on March 28, 2002. This is an informal get-together with colleagues from the Indiana University Biostatistics Group, and more recently, the Indiana University Medical Genetics Group. When Purdue University hosts this event, it coincides with the Myra Samuels Lecture so the invited speaker (this year Dr. John Quackenbush) can also attend and hear about research being done in Indiana. Given Dr. Quackenbush’s research interests, a lunch meeting was arranged to discuss current research in the areas of bioinformatics and genetics.

Colleagues enjoying their lunch.

Tatiana Foroud, Indiana University School of Medicine, Associate Professor in Department of Medical and Molecular Genetics.
Memorial Lectures

Myra Samuels Memorial Lecture

The 2002 Myra Samuels Memorial Lecture was presented on Thursday, March 28, 2002 by Dr. John Quackenbush, Associate Investigator, The Institute for Genomic Research (TIGR), Rockville, Maryland. The title of the address was “Back to the Future: Integrating Expression with Genomic, Genetic, and Metabolic Data”. The lectures were founded in memory of Dr. Myra Samuels who worked for many years in the Statistics Department and was an Associate Professor in Veterinary Pathobiology at the time of her death. The Myra Samuels Biostatistics Fund provides support for these lectures.

K. C. S. Pillai Memorial Lecture

The 2002 K. C. S. Pillai Memorial Lecture was presented on Thursday, March 21, 2002 by Professor John Marden, University of Illinois, Urbana-Champaign. The title of the address was “Iterated Multivariate Ranks - Truly Nonparametric Procedures?”. The lectures were founded in memory of Professor Pillai, who taught in the Department of Statistics from 1962-1985.

John Marden received his Ph. D. in Statistics from the University of Chicago in 1978, and has taught at the University of Illinois at Urbana-Champaign in the Mathematics and Statistics Departments ever since. Research interests include multivariate analysis, ranking data, decision theory, and nonparametric statistics. He is also involved with teaching, and developing interactive computer routines for, elementary statistics. He is currently Co-Editor of the Annals of Statistics.
I. W. Burr Award

This award was established in 1974 upon the retirement of the late Professor Irving W. Burr, an eminent statistician who taught at Purdue for nearly 35 years.

The student receiving this award should have completed or nearly completed the Ph.D. in statistics. The criteria for selection are: 1) Promise of contribution to the profession as evidenced by academic excellence in courses and exams and by the quality of the thesis research and 2) Excellence in teaching or consulting while the student is at Purdue.

The co-recipients of the 2002 I. W. Burr award are Kiseop Lee and Jayson Wilbur which was presented by Dean Harry Morrison.

Kiseop Lee was born in Seoul, South Korea. He received his B.S. in Mathematics from Seoul National University in 1995. He came to Purdue University in 1997. His research area is Financial Mathematics. He is a member of the American Mathematical Society and American Statistical Association. Kiseop graduated in May 2002 with his M.S. and a Ph.D. in Statistics from Purdue University. His Major Professor is Philip Protter.

Jayson Wilbur was born in Worcester, Massachusetts. He received his B.S. in Mathematical Sciences from Worcester Polytechnic Institute in 1997. He entered Purdue in 1997 and received his M.S. in Mathematical Statistics from Purdue University in 2000. His areas of research include Applied Statistics, Bayesian Analysis, Resampling Methods, Multivariate Analysis and Bioinformatics. He is a member of the American Statistical Association and the Institute of Mathematical Statistics. He graduated in May 2002 with his Ph.D. in Statistics under the direction of R. W. Doerge and J. K. Ghosh.
V. L. Anderson Scholarship and School of Science Outstanding Achievement Award

The V. L. Anderson Scholarship is awarded to an undergraduate student who shows promise of contributing to statistics and its applications. The scholarship is in honor of Virgil Anderson who retired from the Department of Statistics in December of 1986 after nearly 36 years.

Mr. Sheng-Kung Michael Yi is the recipient of the 2002 V. L. Anderson Scholarship. Mr. Yi was born in Detroit, Michigan and lives in Cincinnati, Ohio. He graduated from Turpin High School in Cincinnati in May 2000. He entered Purdue University in the Fall of 2000 and expects to graduate in May of 2004.

L. J. Cote M. S. Excellence in Statistics

This award is in honor of Louis J. Cote who retired from the Department of Statistics in June of 1991. The student receiving this award will obtain an M.S. in applied statistics. The criteria for selection are the qualities required of an applied statistician: 1) Technical skill as evidenced by course performance, faculty evaluation, and performance on the final M.S. Examination and 2) Skill in consulting and communication, normally evidenced by excellence in supervised consulting or secondarily in teaching.

Professor Emeritus Cote and Dean Harry Morrison presented the 2002 L. J. Cote M. S. Excellence in Statistics award to Chenghong Li. Chenghong was born in Shanxi Province, People’s Republic of China. She received her B.S. in Textile Chemical Engineering from Tianjin Institute of Technology in 1993. She received her M.S. in Material Engineering from Beijing Institute of Chemical Fiber Technology in 1996. She came to Purdue University in 1996. She received her Ph.D. in Textile Science/Biochemical Engineering from Purdue University in 2001. Her areas of research include Bioinformatics, biostatistics, and bioseparation. She is a member of the American Statistical Association, American Chemical Society, Purdue University Outstanding Graduate Student Teacher, 2000 and Andrew’s Fellowship, 1996-98. She graduated in May 2002 with her M.S. in Statistics from Purdue University. Her Major Professors were Shanti S. Gupta since Fall 2000 and then George McCabe since February 2002.
Student News (cont.)

Outstanding Classroom Teaching by a Teaching Assistant

Teaching Assistants contribute substantially to the teaching mission of the Department of Statistics. The faculty of the department has established an annual award to recognize service to the department and to students through outstanding classroom teaching of Statistics by a Teaching Assistant.

The Spring 2002 award was presented by Dean Harry Morrison to Aarti Sriram. Aarti was born in Bombay, India, and moved to Indianapolis, Indiana at age 12. She came to Purdue University in 1996. She received her B.S. in Economics (Honors) and Management with minors in Statistics and Spanish, from Purdue University in 1999. Her areas of research include marketing and aspects of risk management. She is a member of Delta Sigma Pi, Professional Honors Society, and is Undergraduate Vice President of the Graduate Student Association. She graduated in May 2002 with her M.S. in Applied Statistics, specializing in computational finance from Purdue University. Her Major Professor is Mary Ellen Bock.

School of Science Outstanding Senior Award

The 2002 winner of the School of Science Outstanding Achievement Award for Statistics is Marcus Ewe. Marcus is from Penang, Malaysia. He is majoring in Actuarial Science. He is a member of the Actuary Club since Fall 2000, Vice President 2001-2002 and the Purdue Malaysia Student Association. His honors and awards include the Purdue University CIGNA Scholarship and the Dean’s List and semester honors since Fall 2000. After he graduates from Purdue University, Marcus plans to be working for a property and casualty insurance company. His goal is to become a fellow of the Casualty Actuarial Society.
Student News (cont.)

Glen E. Baxter Award

The Glen E. Baxter Memorial Fund was established in 1983 by family and friends of Professor Baxter shortly after the premature death of this gifted teacher-scholar. The annual proceeds from the fund are used to award scholarships to honor undergraduate students who have demonstrated excellence in mathematics. The recipients of the awards are selected by a committee of professors from the Departments of Mathematics and Statistics.

The 2002 recipients of the Glen E. Baxter Award are Justin David Mazur and Keith Andrew Henderson. Justin and Keith are both students in the School of Science, and both have a baccalaureate degree in the Mathematical sciences as immediate degree objective. Both scholars have been recipients of a multiplicity of honors, including election to Phi Beta Kappa during their Junior years.

Both have made excellent use of the opportunities that Purdue University has made available to them. Keith’s course of study contains strong components both in Computer Science and in pure Mathematics, and this program will lead to a double degree, BS Computer Science/BS Mathematics. Justin has been following a curriculum, more heavily weighted on the side of pure Mathematics, that contains, in addition to many of the honors courses designed for undergraduates, several courses ordinarily filled entirely with graduate students.

Both Justin and Keith became dedicated to the pursuit of things mathematical at an early age, and it seems safe to predict that they will persist in this activity. Both have the same educational goal, to earn the doctorate in Mathematics, and both plan to make careers as Professors of Mathematics.

Actuarial Science Awards

The Actuarial Science Awards are funded by the Lincoln Financial Group, the Trustmark Corporation, Towers Perrin Insurance, CIGNA Insurance, and alumni donations. They are awarded to outstanding Juniors, Sophomores and Freshmen on the basis of academic performance, actuarial exams passed, and extracurricular activities.

Actuarial Science is an undergraduate program jointly administered by the Department of Statistics and the Department of Mathematics. The Director is Richard Penney, Professor of Mathematics. The following students were awarded scholarships: Junior Awards: Lauren Coleman, Lincoln Scholarship; Michael Knowles, Trustmark Scholarship. Sophomore Awards: Sebastine Kleber and Jeanette Roell, Towers-Perrin Scholarships; Haizhi Lin and Wendy Thompson, Lincoln Scholarships; Freshman Awards: Patrick Jessee, Kensey Thurner and David Weissenborn, CIGNA Scholarships; Devin Gardner, Alumni Scholarship.
Actuarial Exams Passed May and November, 2001. (CIGNA Exam Awards given earlier)

Course 1 Exam covers Calculus and Probability: Lauren Coleman, Marcus Ewe, Carl Ghiselli, Michael Knowles, Mark Mishler, Nick Otterman, James Ryan and Le Ann Yoder;

Course 2 Exam covers Finance, Economics and Interest Theory: Paresh Gopaldas, Jeffrey Alan Johanningsmeier and Jim Shaheen; and Course 3 Exam covers mathematical topics specific to Insurance and Risk Management: Dwane Alan Johnson.

J. Roell, D. Woods, Towers Perrin Insurance, and S. Kleber

D. Gardner, Freshman Alumni Scholarship and D. Weissenborn, Freshman CIGNA Scholarship

Ph.D. student, Ping Ma, won the Charlie Sampson Award at the 25th Annual Midwest Biopharmaceutical Statistics Workshop held on May 20-22, 2002 at Ball State University, Muncie, Indiana.

Ping also received a travel award from the Executive Committee of the ASA Biometrics Section. His manuscript submission was one of the top three manuscripts out of 11.
Student News (cont.)

Teaching Assistantships and Fellowships for 2002-2003

The following new students for 2002-2003 have been awarded teaching assistantships and fellowships in the Department of Statistics.

Tina Alexander (Indiana University), Peter Edward Carson (University of Washington), Jesse Cunningham (University of South Carolina), Scott Diehl (Kent State University), Pang Du (Johns Hopkins University), Jing Feng (Purdue University), Kyle Harrison (Purdue University), Gayla Renee Hobbs, Southwest Missouri State University, Lanqing Hua (Nanjing University), Prasanth Karumanchi (Indian Institute of Technology), Taeeun Kim (Purdue University), Shannon Michele Knapp (Virginia Polytechnic Institute and State University), Alexander Lipka (University of Florida), Zhenqiang Lu (Texas Technical University), Deming Mi (Purdue University), Martina Muehlbach (University of Hannover, Germany), Keith Portman (University of Notre Dame), Rochelle Remke (Virginia Polytechnic Institute and State University), Liang Shi (Nankai University, China), Surya Tokdar (Indian Statistical Institute), Benjamin Tyner (University of Florida), Yongtao Wang (Purdue University), Yong Wang (Purdue University), Jeffrey Wilde (Pennsylvania State University), Hui Xu (University of Georgia), Jianying Zhang (University of Idaho), Martin Andreas Zihlbauer (Technische University, Munich).

Recent Graduates

August 2001 Graduates

Doctorates

Jianjun Li (S. S. Gupta) On Some Statistical Inference Problems Using Empirical Bayes Approach

Bhramar Mukherjee (W. J. Studden) Optimal Designs for Estimating the Path of a Stochastic Process

Brian Munneke (R. W. Doerge) Null Model Methods for Cluster Analysis of Gene Expression Data

Masters

Specialization in Applied Statistics

Dachuang Cao
Chunsu Li
Lixiang Liu
Yaohua Zhang
### December 2001 Graduates

#### Doctorates

Eric Chicken (T. Cai and W. J. Studden) *Nonparametric Regression and Density Estimation in Besov Spaced via Wavelets*

Dejun Tang (M. E. Bock and J. O. Berger) *Choice of Priors for Hierarchical Models: Admissibility and Computation*

#### Masters

**Specialization in Mathematical Statistics**

- Messan Amewou-Atisso
- David Annis
- Nels Grevstad
- Kyunga Kim
- Nak-Kyeong Kim
- Young-Ju Kim
- Jeonggang Seo
- Olga Vitek

**Specialization in Applied Statistics**

- Ziyi Jiao
- Jing Su

### May 2002 Graduates

#### Doctorates

Olga Korosteleva (T. Sellke) *Limit Theorem for the Spread of Branching Process with Stabilizing Drift*

Kiseop Lee (P. Protter) *Hedging of Options When the Price Process Has Jumps Whose Arrival Rate Depends on the Price History*

Jayson Wilbur (R. W. Doerge) *Variable Selection Methodology for High-Dimensional Multivariate Binary Data with Application to Microbial Community DNA Fingerprint Analysis*

#### Masters

**Specialization in Computational Finance**

- Kuo-Mei Chen
- Kiseop Lee
- Balkrishna Singhania
- Aarti Sriram
Greetings from the Department of Statistics Graduate Student Organization (GSO). It is the end of another school year, and each of us can reflect on the year’s events from his or her own unique perspective, be it a teacher’s perspective, a student’s, or otherwise. This is a retrospective overview of the year’s events from the perspective of one of the three GSO representatives.

The fall semester was kicked off with a picnic and barbecue at the home of Steve and Joan Samuels. The picnic is an annual event held each August as a way of giving the incoming graduate students a warm welcome and a chance to meet the current students, faculty and staff. This year we barbecued hamburgers and bratwursts to go with the assortment of potluck style homemade dishes that people brought. Brad Johnson took over at the helm of the grill, and did a great job keeping people’s bellies filled. After lunch, those who brought swimming gear made use of the Samuels’ pool. Eventually though the sky began to turn dark gray, and most people gathered their belongings and headed home. As those of us who stayed behind were cleaning up, the sky let
loose with a torrential downpour, and although we were nearly finished by the time the rain began to fall, we still got pretty soaked. Christina Wassel and Sylvie Mrug pulled up just as we were heading inside, and even though they missed the picnic, they were able to join us for hot drinks inside after a mad dash from their car to the Samuels’ front door.

As tradition has it, the GSO meetings featured talks by both professors and graduate students. Among the speakers were Mik Black (“A Brief History of the Purdue Department of Statistics”), Professor Jayanta Ghosh (“Finding the Boundaries of an Ancient River with Bayesian Model Selection”), Christopher Tong (“An Introduction to Support Vector Machines for Pattern Recognition”), Messan Amewou-Atisso (“Survival Analysis with Multiple Endpoints”), and Professor Anirban DasGupta, who spoke twice (“Ubiquity of Normal Distributions and Transformations to Normality” and “Bode’s Law of the Solar System: Coincidence, a Sign, or a Versatile Approximation”). Thanks to everyone who took time out of their busy schedules to speak this year.

The Statistics Department Christmas party was held at The Trails banquet facility. Along with the food and drinks came the holiday entertainment, courtesy of the GSO. It featured Ionut Florescu and myself telling a whole slew of statistics related jokes that had the audience howling with laughter. Well, OK, so maybe that’s a bit of an exaggeration, but I’m pretty sure that I did hear one or two people chuckle. In any case, the entertainment also featured Tadd Colver and his wife Yi-Chou performing wonderful traditional Hawaiian song and dance routines complete with ukulele accompaniment and audience participation.

Each year the GSO invites a speaker from another university to come to Purdue to give a lecture in the spring. This year we were honored to have as our invited speaker Professor Edward George from the Wharton School at the University of Pennsylvania. After spending the day meeting with numerous students anxious to discuss their research with him, Professor George spoke to a filled room about a new Bayesian approach to finding and fitting treed regression models. His visit to Purdue ended with a dinner at C-Ray’s, a local restaurant, with Mary Ellen Bock and many graduate students attending.

As of this writing, three of next year’s four GSO representatives have been selected. They are Tadd Colver, Betsy Miceli and Wen-Chi Tsai. Thanks Tadd, Betsy and Wen-Chi. We wish you the best and offer our support in whatever way we can.
Dr. Deng-Yuan Huang received the 2002 School of Science Distinguished Alumni Award. These awards were established in 1990 to recognize outstanding achievement in professional and related fields of endeavor for alumni of the School of Science. He received his Ph.D. degree in Statistics from Purdue University in 1974.

Deng-Yuan Huang is Professor and Director, Institute of Applied Statistics, and Dean of the College of Management at Fu-Jen Catholic University in Taipei, Taiwan. He is a renowned scholar in multiple decision theory, and has published numerous books and journal articles. Professor Huang has held positions of great honor in the research community of his country. He has also served as a member of the Committee on Statistics and the Committee on the Census of the Directorate General of Budget Accounting and Statistics of Taiwan. Before beginning his doctoral studies under Professor Shanti Gupta, he received the B.S. in mathematics from National Taiwan Normal University and the M.S. in Mathematics from National Taiwan University. Professor Huang is a member of the Institute of Mathematical Statistics, the Chinese Mathematical Association, and the Chinese Statistical Association.

James Albert (M.S. 1977) is a Professor of Mathematics and Statistics at Bowling Green University. He is a co-author of *Curve Ball: Baseball, Statistics, and the Role of Chance in the Game*. Jim and his co-author, Jay Bennett, believe that just a slightly more sophisticated approach to statistics can greatly increase our understanding of baseball numbers, and our appreciation of the game.

Richard E. Beckwith (Ph.D. 1959) retired Professor of Operations Research and Statistics, School of Business Administration, California State University, Sacramento. In the last newsletter, we mentioned that Professor Beckwith was planning on donating his academic gown and hood to the our department. We have received both and thank Professor Beckwith for his generosity.

Arjun K. Gupta (Ph.D. 1968) is a Professor of Mathematics and Statistics and Distinguished University Professor, Bowling Green State University. He has been elected a Fellow of the Ohio Academy of Sciences.
Jing Y. Shyr (Ph.D., 1984)
Chicago, March 4, 2001. Celebrating her innovative vision and outstanding contributions to the field of software development, Jing Y. Shyr, SPSS Inc.’s vice president and chief statistician, has been named to i-Street magazine’s third annual Women in Black listing. Each year the magazine recognizes 25 outstanding women leaders in the Chicago-area high technology industry: women who have excelled to the top of their field in traditionally male industries.

“Jing is an excellent representative of the thought-leadership and innovative spirit at SPSS Inc.,” said Jack Noonan, president and CEO of SPSS Inc. “She is more than deserving of this level of recognition. Her contributions in the research and development of SPSS Inc. analytics have been instrumental in our evolution from a developer of desktop statistical products to a provider of analytical solutions, and our company’s sustained growth in Chicago and around the globe.”

Shyr leads a team of researchers and software developers responsible for the creation of data mining technology and analytical solutions, an emerging area within SPSS Inc. and the technology industry. Today she is applying her technological vision and business savvy to create technology that enables both expert and novice users to apply the predictive power of data mining to improve business operations.

She also leads two key development initiatives at SPSS Inc., including the transformation of the company’s technology into components and the development of its CRM solution framework. The components initiative has resulted in the conversion of SPSS Inc.’s technology for data mining, statistical modeling and results deployment into moveable pieces that allow developers, at SPSS Inc. and third-party vendors, to quickly build seamless analytical applications and solutions that analyze data to measure, predict and optimize business performance. Ms. Shyr also led the development of a solution framework for analytical CRM applications, which provides an open environment for SPSS Inc.’s technology to more easily integrate with that of third-party vendors. This framework enables end-user organizations to build more personal and profitable customer relationships by applying predictive analytics to customer data and deploying the results throughout an organization.

Since joining SPSS Inc. in 1986, Ms. Shyr has held a variety of positions including statistician, master statistician and then principal statistician and manager of statistical development. She holds a master’s in applied statistics from National Tsing Hua University, Taiwan and a Ph.D. in statistics from Purdue University. She is an active member of the American Statistical Association, the PMML group (part of W3C) and the Advisory Council of the Statistics Department, Purdue University. She is also a recipient of the Distinguished Alumna Award from Purdue University.
Gifts to the Department

Special Thanks To Our Friends

The Department of Statistics would like to give a heartfelt “Thank You” to the following donors for their generous contributions from Spring 2001 to Spring 2002. We apologize in advance if we have omitted anyone or incorrectly spelled a name.

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Matching Gifts

Traveling Speakers (cont. page 4)

**Philip Protter**, Purdue University and Cornell University, “When is the Kramkov Decomposition Predictable?”, April 15, 2002.


In the week before the beginning of the fall semester, the department sponsors different activities for the new graduate students. The first is a pizza party one week before the start of classes. The purpose of this party is for the new students to meet each other as well as a few members of the faculty and staff. They are given information about the department, classes and computers. The pizza party was held on Sunday, August 12, 2001.

The second activity is a reception in honor of the new students. This is usually held in the Mathematics Library where they are “officially” welcomed by the department faculty, students and staff. The reception was held Friday, August 17, 2001.

The third activity is a mixer. Professor Steve Samuels and his wife, Joan, hosted the party again this year. This provides a more relaxed atmosphere to get to know people from the department. It was held Saturday, August 18, 2001. There was plenty of conversation, swimming and music.
The 2001 Statistics Department Picnic

The 2001 Statistics Department Picnic at Fort Ouiatenon, West Lafayette, Indiana was held on Sunday, August 26. The picnic gives families of new students a chance to get to know the faculty and staff. Bill Lucas, husband of Norma Lucas, once again agreed to see that nobody went hungry.

With a grill full of pork chops our taste buds were satisfied by his cooking.

The 2002 Fall Department Picnic will be held on Sunday, August 25, again at Fort Quiatenon.

2002 Annual Holiday Party

The 2002 Statistics Department Holiday Party was held on Thursday, December 6, 2001, at The Trails in Lafayette, Indiana. After dinner, a few of the graduate students entertained everyone.

The 2002 Holiday Party will be Thursday, December 5, at The Trails in the Outlook Room.

Above: N. Grevstad and I. Florescu try their hand at telling jokes and (Right:) Yi-Chou, wife of graduate student T. Colver (behind with ukulele), attempt to teach A. Deely and J. Craig an Hawaiian dance.
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New Aquatics Center Construction Photo

The Aquatics Center, which will be attached to the sports center, will feature a 50-meter pool and separate diving well. Two moveable bulkheads will allow varied use of the swimming pool simultaneously. For instance, lap swimming can take place on one side of the bulkhead while one-on-one coaching and instruction are done in another part of the pool. For more information on the new aquatics center go to http://www.purdue.edu/oop/aquatics/news.html
Scenes from Campus (cont.)

Krannert School of Management building, Rawls Hall

For more construction information and pictures go to http://www.mgmt.purdue.edu/news/building/RH_construction.htm.

Ross-Ade Stadium Renovation

Work is progressing on the pavilion. By this time next year, the new structure that will provide outdoor club seating will be under construction at the base of the pavilion. More construction pictures and information can be found at http://purduesports.ocsn.com/.
The Statistics Department Newsletter is published annually for alums and friends of the Statistics Department at Purdue University.

We welcome your comments and suggestions for future newsletters. Please send a fax to 765-494-0558, send e-mail to seele@stat.purdue.edu, call 765-494-5324 or write to

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