

Odds & Ends

DEPARTMENT OF

STATISTICS NEWSLETTER

2007-2008

A Message from the Department Head

CONTENTS



Dear Alums and Friends,

With a new President, France Córdova, on board, the University and the College of Science are rolling out new strategic plans. Nick Fisher of Valuometrics (www.valuometrics.com), Australia, visited Purdue this spring to guide our efforts for a new departmental strategic plan. He left a great

legacy of new practices that faculty and staff can use to tackle problems and work on improvements. He promises to check back in five years to see if we have accomplished our lofty goals!

Another successful hiring season led to four new tenure-track assistant professors who will arrive in fall 2008. They are Bo Li, Guang Cheng, Sergey Kirshner, and S.V. N. Vishwanathan. These talented individuals will be featured on our Web pages in the coming semester.

The annual Joint Statistical Meetings are a golden opportunity to renew old acquaintances for our Purdue friends and alums. This year they are being held in Denver, Colorado. We look forward to seeing you at the Purdue Reception in Denver on Sunday, August 3, 2008, at 6:30 pm. It is at the Hyatt Regency in HY Mineral Hall A, 650 Fifteenth Street. Children and families are welcome! Please RSVP to Becca Mitchell, rlmitche@stat.purdue.edu or (765)494-6030.

See you in Denver!
Mary Ellen

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PURDUE
UNIVERSITY

NEW FACULTY

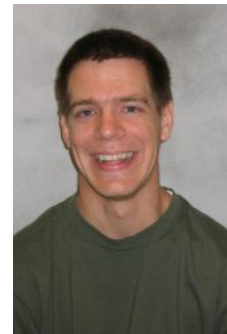


Assistant Professor, Fall 2007

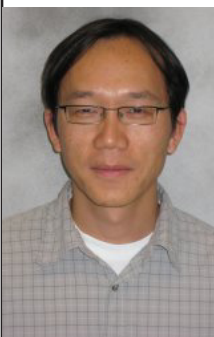
Jose Figueroa-Lopez received his PhD in applied mathematics from the Georgia Institute of Technology in 2004. In 2006 he completed a one-year post-doctorate in mathematics from Purdue University and in 2007 he completed a one year post-doctorate in statistics from the University of California, Santa Barbara. His primary research interests are quantitative and statistical methods for stochastic models and their application to mathematical finance, including nonparametric estimation, price modeling, stochastic control, portfolio optimization, valuation and hedging of contingent claims, and numerical methods; emphasis on continuous-time incomplete models such as (time-changed) exponential; and Levy processes, jump-diffusion models, and stochastic volatility models.

Assistant Professor, Fall 2007

Mark Daniel Ward received his PhD in 2005 from Purdue University in mathematics with a specialization in computational science. Before returning to Purdue, he was on the faculty in mathematics at the University of Pennsylvania. His research interests are in analysis and design of algorithms and data structures, analytic combinatorics, data compression game theory, information theory, pattern matching, probability theory, random structures, symbolic computation, and tree structures.



Assistant Professor (joint appointment in computer science), Fall 2007



Yuan (Alan) Qi received his PhD in 2005 from Massachusetts Institute of Technology. He has spent the last few years as a postdoctoral associate at MIT in the Computer Science and Artificial Intelligence Laboratory, researching computational biology and machine learning. His research interests are in approximate Bayesian inference, computational biology, Bayesian conditional random fields, nonparametric Bayesian models, semi-supervised learning, feature selection, and applications of machine learning in computer vision, neuroscience, communications, and signal processing.

Professor (joint appointment in forestry and natural resources), Fall 2007

Hao Zhang received his PhD in 1995 in statistics from Michigan State University. He has spent the last ten years at Washington State University, where he interacted extensively with faculty in agricultural sciences. He firmly believes that statistical theory and applications mutually enrich each other. His research interests are in asymptotics, environmetrics, risks and insurance, spatial statistics, statistical computing, and time series analysis.



Visiting and Limited Term Faculty



Ce-Ce Furtner joined the Department of Statistics as a limited-term lecturer. Furtner received an MS in statistics from the University of Central Florida. She has been an advisor in the College of Science for the last two years, working with undergraduate math and statistics majors.

Zhenqiang (James) Lu joined the Department of Statistics as a visiting assistant professor. His research interests are data visualization, healthcare engineering, and statistical model building. He received his PhD in statistics from Purdue in December 2007.



Tiantian Qin joined the Department of Statistics as a visiting assistant professor. She received her PhD in management information systems in 2007 from the University of Arizona. Qin received her MS in statistics from the University of South Carolina and BS in statistics from the University of Science and Technology of China. Her research interests include data mining, information security, and bioinformatics.

Huiping Xu joined the Department of Statistics as a visiting assistant professor. She received her PhD in statistics from Purdue University in 2007. Her research interests include estimation of accuracy of diagnostic tests, computational methods, and statistical modeling for healthcare data.



Shannon Knapp joined the Department of Statistics this semester as a visiting assistant professor. She received her PhD in statistics from Purdue in December 2007. Her research interests include statistical issues in wildlife biology and population genetics.

ACCOMPLISHMENTS

Congratulations to **Profs. Bruce A. Craig, Jun Xie, and Jiashun Jin** on their recent promotions. **Prof. Craig** was promoted to professor, and **Prof. Jin** and **Xie** were promoted to associate professor. Their positions were effective July 1, 2007.

Prof. Bruce A. Craig received his PhD in Statistics from University of Wisconsin-Madison in 1996. He joined the Department of Statistics that fall and has



been one of the leaders in the department's interdisciplinary efforts. **Craig's** research is focused primarily on the utilization of hierarchical models to address problems in the life sciences. Areas of research include diagnostic testing, protein structure determination, plant and human genetics, wildlife population demographics, disease progression modeling, and medical decision making.

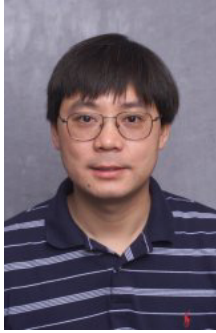
Professor Craig is also the director of the Statistical Consulting Service (SCS), which provides University-wide advice and assistance with the design of experiments, data analysis, and interpretation of results. In 2005, **Prof. Craig** was appointed Purdue University Scholar.

Prof. Jun Xie received her PhD from UCLA in 2000 and joined the Department of Statistics in 2001.

The main focus of **Xie's** research is on the development and application of new statistical methods for computational biology. The progress of the human genome project and development of biotechnologies have created a rich source of data. Typically, these data are noisy and of high dimension, making estimation of signals very difficult. By employing novel statistical approaches, **Xie** is able to escape local optimal regions of estimation and provide better global results. The ideas generalize to other statistical computing fields to overcome convergence difficulties.



Xie's statistical developments and applications in biological sequence analysis are supported by the National Science Foundation (NSF). In addition, **Xie** is leading a collaborative group consisting of computer scientists from Indiana University, Bloomington and statisticians from Purdue University in developing computational methods for identification of gene transcriptional regulation. **Xie** is also collaborating with many experimental groups at Purdue to help biologists construct and support their biological hypotheses.



Prof. Jiashun Jin received his PhD in statistics from Stanford University in June 2003, and joined the Department of Statistics that August.

Jin's major research interest is in the area of large-scale inference and high dimensional data analysis, in which one must estimate very large numbers of parameters or test very large numbers of hypotheses. The topics that interest him often involve exploiting sparsity in large-scale inference. Here, sparsity refers to the situation where out of a large number of cases (such as parameters, genes, and proteins), only a small proportion of them contains the real effect. In collaboration with a few of the finest statisticians, **Jin** has made interesting contributions to this area by developing new statistical theories and methods. They include Higher Criticism for detecting sparse heterogeneous mixture, Cai–Jin–Low confidence lower bound for the proportion of non-null hypotheses, and a family of oracle estimators for proportions based on the Fourier transform.

He has explored several application areas including astrophysics, genomics, and computer security. One topic that he has studied carefully is the non-Gaussian signature detection in the cosmic microwave background. He is one of the key members of the Astrostatistics group at Purdue. In 2007 he received an NSF Career Award.

Prof. John Deely, 1965 Purdue statistics PhD graduate, 1958 Purdue mathematics MS graduate, and instructor for the largest Department of Statistics course, STAT 113, was honored at a conference last July at the University of Canterbury in Christchurch, New Zealand. The conference was held in tandem with the New Zealand Statistical Association (NZSA) 2007 Conference held at the University of Canterbury. **Deely** is the former chair of statistics at the University of Canterbury.



Congratulations to **Profs. John J. Deely, Rebecca W. Doerge, and Chuanhai Liu,**



who were named fellows of the American Statistical Association (ASA), the nation's preeminent professional statistical society. The honor recognizes their outstanding professional contributions and leadership in the field of

statistical science. They were honored at a ceremony in 2007 during the 167th annual Joint Statistical Meetings in Salt Lake City, Utah. **Liu** also became elected member for the International Statistical Institute in 2006.





Prof. Guy Lebanon, assistant professor of statistics and electrical and computer engineering, with an assistant professor courtesy appointment with the Department of Computer Science, has been awarded the Teaching for Tomorrow Award for 2007-2008. The Office of the Provost annually selects a class of faculty to receive this award. Three senior faculty considered to be best-teachers are selected to serve as team leaders, assisting up to 12 junior faculty with demonstrated teaching potential. Working in teams, the faculty will address topics throughout the year that can enhance the learning environment across Purdue. In addition, the program provides professional development funds to each member of the class to further enhance his or her skills as a teacher-scholar.

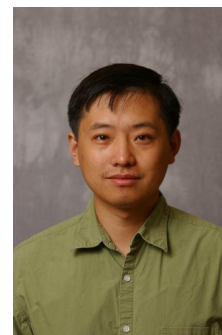
In February 2007, Dean Jeffrey Vitter presented **Emeritus Professor of Statistics David Moore** and his wife, **Nancy**, with the Ovation Award in Naples, Florida.



The Dean's Ovation Award was established in the College of Science to recognize individuals who have made extraordinary gifts—contributions either of exemplary service and leadership, or of financial resources—in support of the college's mission to achieve excellence in discovery, learning, and engagement. "Both kinds of gifts—of service and of financial resources—are critical in moving the college forward," states Dean Vitter.

This year's Ovation Award recognized the **Moore's** generosity to the Department of Statistics and statistics students. As he presented the award, Dean Vitter noted the **Moore's** passion for excellence in learning, commitment to support outstanding students, and their outstanding challenge gift for the Shanti S. Gupta Professorship. **Prof. Moore's** research, teaching, and leadership in the statistics profession were also been recognized.

Tonglin Zhang received the Department of Statistics Outstanding Assistant Professor Undergraduate Teaching Award for 2007.

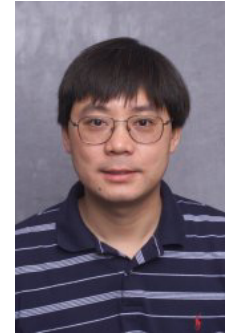




In January, **Prof. Alexander Gluhovsky** was appointed associate professor of statistics with a joint associate professor appointment in earth and atmospheric sciences. “This formalizes his long-standing association with the two departments,” stated **Mary Ellen Bock**, department head and professor of statistics. **Gluhovsky** has been a visiting professor in the Department of Statistics since 1996. His association with the Department of Earth and Atmospheric Sciences began in 1992.

Gluhovsky received his PhD. from USSR Academy of Sciences in applied mathematics in 1973. His research interests include computational methods for statistical inference, nonparametric regression/density and models, resampling, time series, as well as geophysical fluid dynamics, turbulence, and statistics of extremes in weather and climate.

The National Science Foundation (NSF) has granted a CAREER award to **Jiashun Jin**, assistant professor of statistics at Purdue, for his proposal, “Inferences on Large-Scale Multiple Comparisons: The Temptation of the Fourier Kingdom.” The CAREER program recognizes and supports the early career-development activities of teacher-scholars who are most likely to become academic leaders of the 21st century.



Congratulations to **Frederi Viens** upon his promotion to professor beginning July 1, 2008.

Jim Dobbin was the recipient of the 2008 David S. Moore Service Teaching Award.



Jim Dobbin receives the David S. Moore Teaching Award from Dr. Moore.

Statistics Members Recognized at College of Science Faculty and Staff Recognition Luncheon

Congratulations to **Prof. Rebecca W. Doerge, Ellen Gundlach, Mary Roe, and Teena Erwin**, who were recognized at the inaugural College of Science Faculty and Staff Recognition Luncheon held in February.



Doerge, professor of statistics and agronomy, and **Gundlach**, continuing lecturer in statistics, both received the Graduate Student Mentoring Award which recognizes excellence by the College of Science in the mentoring of graduate students. Individuals receiving this award effectively nurture the professional and personal growth of graduate students. **Gundlach** was also the recipient of the 2007 David S. Moore Service Teaching Award.



Roe, administrative assistant, received the Professional Achievement Award, which recognizes exceptional staff contributions to the College of Science. Individuals receiving this award consistently perform assigned duties at an exceptional level, go above and beyond normal expectations, volunteer for additional assignments, maintain a professional manner, and serve as a role model for other staff. **Roe** was recognized for her 20 years of hard work at Purdue University in June 2008.



Teena Erwin, information processing systems operator V and secretarial assistant for the Statistical Consulting Service, was recognized for 30 years of service to Purdue University.

Erwin also received the Barbara Cook Chapter of Mortar Board Rose Award which is presented to members of the clerical or service staff for unselfish service to Purdue University and the community.

Mary Ellen Bock Honored as Woman Pioneer at Purdue University



Mary Ellen Bock, professor and head of the Department of Statistics, was honored by Purdue's Council on the Status of Women as one of fifteen women pioneers at Purdue. A luncheon was held in August at the home of Purdue President Martin C. Jischke and his wife, Patty, to honor the women pioneers.

The 15 honorees, from both the past and the present of Purdue, were chosen from more than 90 submissions. Among the recipients were Amelia Earhart and Lillian Gilbreth. **Bock** was one of the five living honorees.

Bock was the first woman to become a full professor in the Department of Statistics and has served as head of the department since 1995. Under her leadership, the department has grown from 13% women faculty to 33% today. **Bock** was instrumental in securing National Science Foundation funding to develop "Pathways to the Future" workshops to help young female faculty succeed in academia. These workshops, usually held prior to the Joint Statistical Meeting, have been conducted since 1988. She is president-elect of the American Statistical Association.

Jeffrey Beckley was voted College of Science Outstanding Undergraduate Teacher for the second time in a row. He is a continuing lecturer in statistics, continuing lecturer in mathematics, and professional actuary in residence.



He was also voted, along with **Mark Daniel Ward**, as one of the Top Ten Outstanding Teachers in the College of Science for the 2007-2008 academic year.



Odds & Ends is published annually for alumni and friends of the Purdue Department of Statistics. We welcome comments and suggestions for future newsletters.

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If you would like to receive your newsletter electronically, please e-mail **Becca Mitchell** (rlmitche@stat.purdue.edu) with your name and current e-mail address. Thank you.

SPECIAL NEWS

In 2008, the Department of Statistics commemorated 40 years as an independent entity within the College of Science. We celebrated this milestone with a series of lectures by Persi Diaconis, followed by a reception honoring Diaconis and celebrating the department's 40th anniversary and the College of Science centennial. Diaconis is the Mary V. Sunseri Professor of Statistics and Mathematics, Stanford University.

The Department of Statistics at Purdue was formed in 1963 as part of what was then the Division of Mathematical Sciences, became an independent entity within the College of Science in 1968. Prior to 1963, statistics and probability courses at Purdue were taught within the Department of Mathematics mainly by professors associated with the Statistical Laboratory, which ceased to exist in 1966. Until the early 1970s the department's graduate programs and teaching were part of or closely intertwined with those of the Department of Mathematics. PhD students majoring in statistics were required to take the mathematics department PhD qualifying exam and promotions for junior faculty in statistics were processed through the Department of Mathematics.



Persi Diaconis

The growth of the Department of Statistics has been intimately tied with the leadership of its first department head, Prof. Shanti S. Gupta. He headed the department from its inception until he stepped down as head in 1995. Gupta received his PhD in theoretical statistics from the University of North Carolina in 1956 and worked in Bell Telephone Laboratories. In 1962 he was hired in the Purdue Department of Mathematics and Statistics in anticipation that his theoretical and practical experience would promote the growth of statistics at Purdue. It was largely through his efforts that the department was made an independent entity within the College of Science. This was critical to the growth of statistics and probability at Purdue.

When Gupta stepped down in 1995, **Prof. Mary Ellen Bock**, became the second head of the department and the first female department head in the College of Science. Building on the solid foundation established by Gupta, **Bock** further helped to develop statistics and probability at Purdue. During the 1990s a growing importance of data in industry and government emerged. The ability to analyze data became a highly sought-after skill. To meet this demand, the department added research and courses in areas of application such as bioinformatics, genomics, massive data, machine learning, visualization, and computational finance. Since then, the increasing importance of statistics in interdisciplinary fields has led to departmental faculty hires with appointments in agronomy, biology, computer science, earth and atmospheric sciences, electrical and computer engineering, forestry and natural resources, and mathematics. As a result, today's Purdue statistics students find positions in a wide variety of industries. In addition to expanding the research scope of the department, **Bock's** leadership has seen the size of the department double, both in the number of faculty and the number of students.

CONGRATULATIONS

NEW ARRIVALS

Richard (Rich) Benz (MS '94) and his wife, **Naomi (MS '94)**, welcomed their newest family member, Claire Elizabeth, on April 11, 2007.

Zhenqiang (James) Lu (MS '03, PhD '07) and his wife, **Lingling An (MS '03)**, welcomed their third child, Eric Y, on April 27, 2007.

Joanne Daggy (current PhD student) had a baby girl, Ellison Kate, on September 12, 2006 with husband Christopher.

Pang Du (MS '03, PhD '06) and his wife, Zhen, had a baby boy, Anthony Paul, on October 2, 2006.

Scarlett Yu was born on October 5, 2006 to **Lianbo Yu (MS '02, PhD '06)** and his wife, Grace.

Department Secretary, **Becca Mitchell** and her husband, Jim, had their first child, Bryce James, on December 1, 2006.

Wen-Chi Tsai (PhD '00) gave birth to a baby girl on December 3, 2006.

Business Office Manager **Triva Woodley** had her first child, Cole Anthony, with husband Randy on March 14, 2007.

Current MS student **Dina El Souda** and husband Ahmed Amin welcomed Talia A. on January 4, 2008.

Former professors Seongjoo and Jongwoo Song welcomed their second son in 2007.

Huiping Xu (MS '04, PhD '07) and **current PhD student Zuoyi Zhang** had a baby boy, Ethan Zichen Zhang, on July 10, 2007.

Assistant Professors, **Dabao and Min Zhang** welcomed their first child, Lucia Xilei, on July 2, 2007.

Assistant Professor **Guy Lebanon** and wife Kathrin are the proud parents of Hannah, born August 8, 2007.

Lingmin Zeng (current PhD student) and her husband, Xiao Gang Dong, are proud of their new daughter, Michelle Dong, born September 4, 2007.

Surya Tokdar (PhD '06) and his wife, Sukanya Chaudhuri, had a daughter, Sreejoni, on December 7, 2007.

WEDDINGS

Congratulations to **Teena Seele** and Steve Erwin on their marriage March 30, 2007.

Yang Zhao and **Tianhong He** were married on October 29, 2007.

Continuing Lecturer Joe Nolan and Leah Ding were married on March 10, 2007.

STUDENT AWARDS

Undergraduate Awards

College of Science Outstanding Science Students

Statistics

Kyle Bemis
Adriana Vars
Joy Nyenhuis-Rouch
John Steenbergen

Actuarial Science

Grant Goedde
Irene Brian
James Humphrey
Amanda Brown



Actuarial science student Amanda Brown accepts her Outstanding College of Science Senior Award from Professor Richard Penney.

Purdue CNA Exam Award for Actuarial Science Majors

Sam Oglesby
Irene Brian
Brittany Hanners
Steven Balog
John Carroll
James Humphrey
Kuan Yang
Molly Amstutz
Kyle Castronova
Weepoh Ee
Sennett Johnson

Petrina Kusliawan
Dhaval Jadhav
Gita Himawan
David Hoover
Alex Morton
Amanda Brown
Matthew Schoolman
Matt Sell
Zachary Fohl
Katie Poon
Jacqueline Keller

Xueyao Chen
Jennifer Aschenbrenner
Andrew Chung
Rob Fulton
Ian Jones
Shannon Kiyonaga
Elizabeth Moss
Brian Schwartz
Jane Steigerwald
Kyle Allen
Katie Quinn

CIGNA Award

Nora Zhao Ying Li

Kyle Allen

Steven Balog



Kyle Allen with Prof. Richard Penney



Steven Balog with Prof. Penney

Swiss-Re Award

Ian Jones

Craig Allen

Elizabeth Moss



Craig Allen with Prof. Penney



Elizabeth Moss with Prof. Penney

STUDENT AWARDS

Undergraduate Awards

Actuarial Science Merit Award

Jason Clarkson Alex Morton



Actuarial Science student Alex Morton accepts her Merit Award from Prof. Richard Penney.

AEGON Scholarship

Eric Krafcheck

Eric Krafcheck accepts the AEGON Scholarship from Prof. Penney.



Glen E. Baxter Award

Arman Sabbaghi William Young



(Left to right) William Young, Professor Robert Zink, and Arman Sabbaghi

David S. Moore Undergraduate Scholarship

Kyle Bemis Angela Hancock

V. L. Anderson Scholarship Award

Arman Sabbaghi

William Chen Scholarship Award

Wee Poh Ee

New Era Life Scholarship

Angela Hancock

STUDENT AWARDS

Graduate Student Awards

I. W. Burr Award

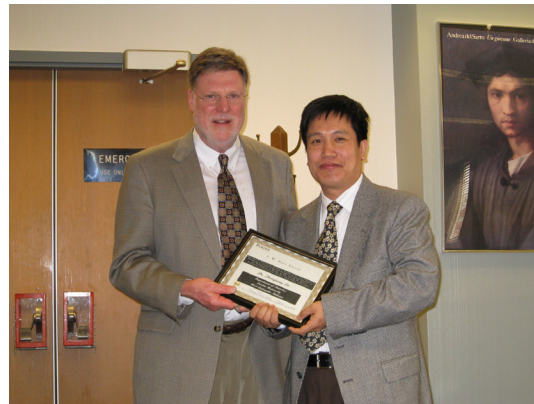
Dr. Martina Muelbach Bremer (2007) Shannon Knapp (2008)
 Zhenqiang (James) Lu (2008)



Dean Christie Sahley with Dr. Martina Muelbach Bremer



Dean George McCabe with Dr. Shannon Knapp



Dean McCabe with Dr. Zhenqiang (James) Lu

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

Amy Watkins (2007) Yanzhu Lin (2008)



Dean Sahley, Amy Watkins, and Emeritus Prof. Louis J. Cote



Dean McCabe, Yanzhu Lin, and Emeritus Prof. Louis J. Cote

STATCOM Community Service Award

Gayla Olbricht (Summer 2006)
Cherie Ochsenfeld (2006-2007)

Shraddha Mehta (Summer 2007)
Andrew Lewandowski (2007-2008)



Dean Chrisie Sahley with Gayla Olbricht



Dean George McCabe with Shraddha Mehta



Dean Sahley with Cherie Ochsenfeld

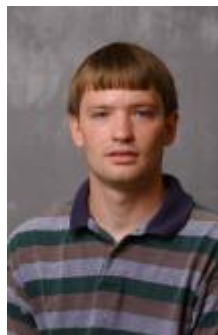


Dean McCabe with Andrew Lewandowski

Graduate Student Teaching Award

Jesse Cunningham (2007)

Tilman Achberger (2008)



STUDENT AWARDS

Graduate Student Awards

Outstanding Teaching by a Teaching Assistant Award

Cherie Ochsenfeld (2007) Kelvin Ma (2008)



Dean Christie Sahley with
Cheri Ochsenfeld

Mortar Board Awards

Shannon Knapp received the Tip of the Cap award for her work with the student government. **Amy Watkins** also received the Tip of the Cap award for her involvement in Statistics in the Community (STATCOM).

Teena Erwin was also recognized for her contributions to STATCOM..



Teena Erwin received the Mortar
Board Rose Award

OF SPECIAL MENTION



Congratulations to **Gayla Olbricht**, current statistics PhD student, on receiving a \$500 travel grant awarded by the Women in Science Programs during the Spring 2007 semester. The travel grant funded her trip to attend the 2007 Joint Statistical Meetings in Salt Lake City, Utah where she presented at an invited session on the Future of Pro Bono Statistics in July.

Congratulations to **Kyle Bauer**, a current senior in actuarial science and statistics, on receiving a John Culver Woody Scholarship for 2007/2008. **Bauer** was one of nine college seniors selected from across the United States and Canada this year.



Job Search Network

If you have job information that you would like to include on our Web site, please e-mail the job announcement to stat-jobs@stat.purdue.edu.

STATCOM UPDATE

By Andrea Rau, Advisor,
Network Outreach Coordinator

This has been a busy year for STATCOM at Purdue, which offers pro bono statistical services to non-profit organizations. A publicity campaign has resulted in several new projects, including five with United Way partner organizations. During the fall 2007 semester, STATCOM consultants were involved in four projects. Nine potential clients contacted STATCOM to start working on projects during either the spring or summer 2008 semester. Three of these clients have already worked with STATCOM volunteers in the past.

Most of these projects involved the writing and analysis of surveys, particularly customer satisfaction surveys. Other recent projects include analyses of employee turnover rates over a period of five years at a local nonprofit organization and customer demographics for local arts groups. In addition to our consulting work, the P-12 Outreach component of STATCOM has also been active during the past year in implementing hands-on statistics activities at Purdue University's Camp Calcium and Spring Fest.

With the help of a Strategic Initiatives Grant from the American Statistical Association (ASA), STATCOM at Purdue has helped establish a network of pro bono consulting groups. Today, the STATCOM Network includes programs at eight universities. In addition, several other new programs are currently in development. The STATCOM Network Newsletter can be found along with other information on the STATCOM page of the ASA's Web site (www.amstat.org). This newsletter is an excellent means of communication for both members of the STATCOM Network and the general public interested in pro bono community work. It features information about many of the consulting projects taken on over the past semester by members of the STATCOM Network, including work with a local cancer support group and the Illinois

State Police. It also highlights the efforts of members of the Chicago chapter of the ASA to establish a multi-school city-wide STATCOM program.

We look forward to continuing to play an active role in the department, the local community, and the statistical community across the nation in the coming year!



Pictured from left to right are Purdue graduate students Duncan Leaf, Allison Cummins, and Glen DePlama

STATCOM Web site: www.stat.purdue.edu/external_relations/statcom/

OUR GRADUATES

August 2006

Bachelor's in Actuarial Science

Kevin Napadow

Bachelor's in Statistics

Kevin Napadow

Master's

Ramakrishnaiah Bezawada

Sharath Tadepalli

Long Wang

Shang Xue

Hong Zhang

Xiaolu Zhang

Fei Zhou

Yu Zhu

Doctorates

Pang Du (Chong Gu): *Some Problems in Hazard Estimation with Smoothing Splines*

Joseph Nolan (George P. McCabe): *Statistical Methods for Using ^{41}Ca to Assess Treatment Effects on Bone Turnover*

Junyong Park (Jayanta K. Ghosh): *Classification and Variable Selection for High Dimensional Multivariate Binary Data: Adaboost Based New Methods and A Theory for the Plug-in Rule*

Surya Tokdar (Jayanta K. Ghosh): *Exploring Dirichlet Mixture and Logistic Gaussian Process Priors in Density Estimation, Regression, and Sufficient Dimension Reduction*

December 2006

Bachelor's in Actuarial Science

Laura Delaney

Brian Goedde

Bredly Kambuno

Zulfigar Maslan

Bachelor's in Statistics

Li Chen

Laura Delaney

Melanie Driemeier

Matthew Fonner

Michelle Glass

Brian Goedde

Bredly Kambuno

Zulfigar Maslan

Lingling Mu

December 2006 (Cont.)

Master's

Craig Codrington
 Jason Hatfield
 Xin He
 Sehee Kim
 Hsiao-Fan (Bonnie) Tang
 Dimitar Vangelov
 Cheng Zheng

Doctorates

Martina Bremer (Rebecca W Doerge):
*Identifying Regulated Genes through the
 Correlation Structure of Time Dependent
 Microarray*



Martina Bremer and Prof. Rebecca W. Doerge

May 2007

Bachelor's in Actuarial Science

Dustin Adams
 Ryan Bedel
 Erin Boley
 Katherine Duket
 Joseph Gartenhaus
 Katherine Graves
 Thomas Grawey
 Isaac Hall
 Jennifer Hicks
 Noor Diyana Jasme
 Rahul Jyoti
 Jessica Maves
 Anthony Notardonato
 Kara O'Shaughnessey
 Daniel Poore
 Kevin Query
 John Raatz
 Carmen Rhodes
 Peter Rokosz
 Rachel Smith
 Jessica Snavelly
 Andres Soria Zapata
 Pei See Audrey Tung
 Ruijuan Wang
 Pei Shan Wong

Bachelor's in Statistics

Dustin Adams
 Ryan Bedel
 Erin Boley
 Brandon Bowman
 Lisa Bramer
 Tung-Chieh Chuang
 Suraj Datta
 Eric Day
 Katherine Duket
 Joseph Gartenhaus
 Katherine Graves
 Thomas Grawey
 Isaac Hall
 Jennifer Hicks
 Noor Diyana Jasme
 Rahul Jyoti
 James Martindale
 Jessica Maves
 Anthony Notardonato
 Kara O'Shaughnessey
 Daniel Poore
 Kevin Query
 John Ratz

May 2007 (Cont.)

Bachelor's in Statistics (Cont).

Carmen Rhodes
Peter Rokosz
Adam Rutan
Jason Scott
Rachel Smith
Jessica Snavely
Andres Soria Zapata
Pei See Audrey Tung
Ruijuan Wang
Pei Shan Wong

Master's

Ronald Carl
Baris Cetin
Mahua Dasgupta
Claire Engelbrecht
Michael Gorman
Paul Kidwell
Kelvin Ma
Thomas McLean
Shraddha Mehta
Alla Merkuyeva
Balagopal Panicker

Master's (Cont.)

Andrea Rau
Ivan Vassilev
Andrew Vizcarra
Xiaomei Wang
Amy Watkins
Xiaoli Zhang

Doctorates

Nilupa Gunaratna (George P. McCabe):
*Evaluating the Nutritional Impact of
Maize Varieties Genetically Improved
for Protein Quality*

Kyunga Kim (Rebecca W. Doerge):
*Statistical Issues in Mapping of Genetic
Determinants for Expression Level
Polymorphisms*

Benjamin Tyner (William S.
Cleveland): *Experimental Methods for
Model Selection*



Pictured clockwise from upper left are
Andrea Rau (MS), Nilupa
Gunaratna (PhD), Prof. and Associate
Dean George McCabe, Amy Watkins (MS),
Kyunga Kim (PhD), and Prof. Rebecca W.
Doerge.

August 2007**Bachelor's in Statistics**

Neil Gupta
 Brian Hong
 Meepa Kim
 Matthew James Spangle

Actuarial Science

Neil Gupta

Master's

Benjamin Fanson
 Zhenyin Li
 Kyung-Mi Park
 Shuangcai Wang

Doctorates

Hui Xu (Herman Rubin): *Some Applications of the Prior Bayes Approach*

Huiping Xu (Bruce A. Craig): *Estimation of a General Correlation Structure for Latent Class and Latent Variable Models of Multivariate Binary Data*

**December 2007****Bachelor's in Statistics**

Kyle Bauer
 Lily Hudiera
 Matthew Lange
 Brian McCormick
 Craig Renn
 Neil Schneider
 Andrew Steenman
 Daniel Thompson
 Maureen Webb
 Brandon Wilson

Bachelor's in Actuarial Science

Kyle Bauer
 Yancy Hollonquest
 Lily Hudiera
 Matthew Lange
 Craig Renn
 Neil Schneider
 Andrew Steeman
 Maureen Webb

Master's

Ching-Yun (Veavi) Chang
 Li Jin
 Duncan Leaf
 Jinguang (Tony) Li
 Meng (Mike) Li
 Yanfant Pang
 Jingyi Wu

December 2007 (Cont.)

Doctorates

Riyan Cheng (Rebecca W. Doerge, Jun Xie): *Statistical Methods for Mapping Multiple Complex Traits*

Shannon Knapp (Bruce A. Craig): *Incorporating Uncertainty into Non-Invasive DNA-based Mark-recapture Population Estimates*

Zhenqiang (James) Lu (William S. Cleveland): *Stenosis Surveillance for Hemodialysis Patients*



Clockwise from top left: Prof. Bruce A. Craig with Dr. Shannon Knapp, Prof. William S. Cleveland with Dr. Zhenqiang (James) Lu, Prof. Rebecca W. Doerge with Dr. Riyan Cheng.

DISTINGUISHED ALUMNI AWARDS



2008 Distinguished Alumni David S. Chen

(MS '83, statistics, Purdue University).

In 1984, David S. Chen began working with General Motors Technical Center in Warren, Michigan, where he conducted research in image processing, computer vision, statistical pattern recognition, and factory automation. His research interests focused on applying artificial neural networks and statistical exploratory data analysis techniques to manufacturing process control and advanced vehicle control systems. He has published a number of articles in major referred journals on signal processing, computer vision, and artificial neural networks.

Chen has been working on General Motors programs in China since 1994. He has held positions as managing director of Delphi Shanghai (then called General Motors Automotive Component Group), executive director of new business development and planning, executive director of product development, and general manager of Shanghai General Motors Dongyue JV. He is currently the vice president of General Motors China and the general manager of General Motors China Beijing Operation, responsible for corporate affairs and advanced technology management. Chen has played a key role in joint venture negotiations, merger/acquisition projects, product portfolio planning/development, and joint venture management. In addition to his degree in statistics, Chen also holds master's and doctoral degrees in engineering.

Career Highlights

Present - Working with key stakeholders in lead Chinese universities, government agencies, and energy industry to develop a comprehensive automotive energy strategy for China to ensure will have a sustainable future for its auto industry.

2004 - Plant manager for the second largest plant for General Motors in China, which built 50,000 cars in its first year of operation.

2003 - Responsible for development of a compact passenger car for General Motors in China. The car, Excelle, is the best selling car for Shanghai General Motors.

1990s - Responsible for a machine (computer) vision lab at General Motors Advanced Engineering Staff.



2008 Distinguished Alumni Shun-Zer (Bill) Chen

(MS '67, statistics, Purdue University
PhD '70, statistics, Purdue University).

Shun-Zer “Bill” Chen did not even know about actuarial science until after his PhD, when he learned about it from a friend. Like many statistics students, he had assumed after graduating he would go into research either as a professor at a university or somewhere like Bell Labs. He requested information about the field from the Society of Actuaries. He learned about the 10 actuarial exams and about how actuarial science involved a wide variety of other disciplines such as medicine and law, which Chen found very exciting. And Purdue had given him a good background to deal with the technical part of actuarial science.

Every day Chen spends his time doing three things: (1) creating marketing strategies and generating revenue; (2) solving an internal crisis; and (3) making sure the financial bottom-line is doing well. “Every day in business I have a crisis...every crisis is different. Every day is different,” he says. While that may sound stressful to some, Chen clearly revels in the excitement each crisis brings: “Doing a PhD helped me learn to think.”

Chen says that the research skills statistics student learn in school will help them substantially in dealing with reality. “Statistics taught me how to analyze the alternatives,” he says, along with how to make good decisions in a crisis and when to take risks. Few CEOs have the statistical background Chen has, and he believes it puts him at a distinct advantage.

Career Highlights

1989 - Named president and CEO of The New Era Group

1985 - Became senior vice president, chief actuary, and board member of Columbia Universal Life

1981 - Named senior vice president and chief actuary for Great Southern Life

1971 - Joined Liberty Life as an assistant actuary

ALUMNI NEWS

Alan Berens (PhD '63) was awarded the USAF Lincoln Award for 2007. It was presented to him at the ASIP Conference in Palm Springs.

Ping Ma (MS '01, PhD '03) was appointed to Fellows and Associates of the Center for Advanced Study, University of Illinois, for the 2008-09 year.

Ming-Hui Chen (MS '91, PhD '93) was elected to IMS fellow in 2007.

Jessica Lasky-Su (MS '99) and husband Mark had their first son, Christian James, on June 4, 2005, just two weeks after she defended her thesis.

Patricia Yoshida (MS '06) is working for Affinova Inc. with a team responsible for the analytical functions of the company.

Dipek Dey (PhD '80) received the University of Connecticut's Board of Trustees Distinguished Professor Award for 2008. He also received the Purdue University Department of Statistics Outstanding Alumnus Award for 2007.

Surya Tokdar (PhD '06) was awarded the L.J. Savage Award for best dissertation in theory and methods by the International Society of Bayesian Analysis at the Joint Statistical Meeting in 2007.

Gary McDonald (MS '66, PhD '69) received the ASA 2007 Founders Award. This is the highest level given by the ASA and was presented to him at the Presidential Awards Session at ASA's 2007 Joint Statistical Meetings in Salt Lake City, Utah.

Jim Tomkins (MS '67, PhD '70) was appointed president and vice-chancellor of the University of Regina in March 2007. His term extends through June 2008.

Roland Thorpe (MS '97) is a faculty member at The Johns Hopkins University Bloomberg School of Public Health in the Department of Health Policy and Management within the Center for Health Disparities Solutions.

Yunqing Li (MS '02) and her husband, Bin Yao, celebrated the birth of their second child, Karen Annabelle Yao, on August 11, 2006.

Kim L. Ong (MS '81) received the Asian American Engineer of the Year Award (AAEOY) in March 2007. The award, presented jointly by the Chinese Institute of Engineers-USA and the National Engineers Week Foundation, is part of the celebration of National Engineers Week.

Betsy Hughes (MS '04) was promoted to principal statistician and strategist for Boston Scientific Corporation in St. Paul, Minnesota. She also celebrated the birth of her third child, Quinn Jacie Hughes, on December 12, 2006.

Send us your news/Update your
Information: [www.stat.purdue.edu/alums/
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The Purdue University Department of Statistics

Cordially invites you to attend the

Purdue University Friends and Alumni Reception

held during the

2008 Joint Statistical Meetings

Hyatt Regency Denver
HY-Mineral Hall A
650 15th Street
Denver, CO 80202

Sunday, August 3, 2008
6:30 pm

Please RSVP to Becca Mitchell by July 11, 2008:
rlmitche@stat.purdue.edu or (765) 494-6030

Children and families are welcome!

*****SAVE THE DATE*****

2009 Joint Statistical Meeting
Washington, DC
Washington Convention Center
August 2-6

Alumni, have you visited the new Department of Statistics alums Web page yet? On these pages, you'll find information about alumni events, news from the department and from other alumni, Statistics Distinguished Alumni award recipients, and alumni profiles.

You can check out the alums Web pages by visiting <http://www.stat.purdue.edu/people/alums>. We love to hear about what's been happening in your life, so if you have news to share with us or would like to update your information with us, you can submit your news online by following the "Send Us Your News/Update Your Information" link found on the alumni page.

Is there something you'd like to see on these pages? Please let us know by sending your suggestions to webmaster@stat.purdue.edu.

THANK YOU



Greetings from West Lafayette!

What an amazing year we have had here at the Purdue University Department of Statistics! Of special note is the recent *U.S. News & World Report* America's Best Graduate Schools 2009 issue, in which our Purdue Department of Statistics Graduate Program was ranked in the Top Ten of graduate programs! This only happens when a dedicated faculty and staff work every day to provide an educational experience that is not only top-notch but also provides amazing career opportunities for our graduates.

Equally impressive is the fact that 2008 marked the 40th year of the Purdue Statistics Department! Since 1968 we have undoubtedly seen much growth and numerous changes.

However, one constant has been the ever-present commitment by our faculty and staff to provide the highest level educational experience for our students. Research and courses in areas of application such as bioinformatics, genomics, massive data, machine learning, visualization, and computational finance are preparing our students for futures in industry as well as academia. To read more about the 40th, please visit our Web site: <http://www.stat.purdue.edu/40th/history/>.

In the spring President France Córdova's inauguration and the announcement of her Access and Success campaign became the inspiration for our future vision at Purdue. The seven initiatives under this program will provide additional scholarships and community-building opportunities that will serve to attract even more talented students who desire receiving a world-class education from Purdue University!

Although I have been at Purdue for only a few short months, I am quickly getting to know and understand the generosity of our alumni and friends. And I am honored to be a part of the Purdue Department of Statistics. It is only through your continued and generous gifts that we are able to provide scholarships, enhance our program, and attract world-class faculty to the statistics department at Purdue University. Thank you!

Alumni, please remember that we enjoy hearing about what's new in your life and career. Share your news with us by going online to Send Us Your News/Update Your Information link found on the Alumni page. And please do contact me if you have questions or need any assistance regarding your philanthropy to our statistics department.

Boiler Up!
Sandy Howarth
Director of Development
765.496.7502
showarth@purdue.edu

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