

## Department of Mathematics and Statistics

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### MATHEMATICIAN IS THE BEST JOB!

Mathematician ranks as the top job in this year's JobsRated.com report of the ten best jobs in America today. See the story at [http://www.careercast.com/jobs/content/Job-sRated\\_10BestJobs](http://www.careercast.com/jobs/content/Job-sRated_10BestJobs). JobsRated measured 200 different careers by considering qualities such as working conditions, competitiveness, hiring outlook and physical exertion. It is great to know that our mathematics, statistics, and actuarial students can look forward to one of the top three careers identified by JobsRated – in order:

1. Mathematician
2. Actuary
3. Statistician

### DEPARTMENT OFFICERS

Kit Chan	CHAIR
Barbara Moses	ASSISTANT CHAIR
John Chen	GRAD COORD
Warren McGovern	UNDERGRAD COORD

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We hope to include news of many more alumni in future issues, so please tell us about you: new and updated career news, family news, and anything you would like to share. A survey is provided for your convenience on the last page, or simply send an email to one of the editors.

## Message from the Chair



It is very exciting to see the first edition of the department's alumni newsletter Math.Stat.Chat, which reconnects the department with our graduates. We believe that saying good-bye at commencement should not simply be the end of our relationship with you, but rather the beginning of a long-term connection between the department and its graduates and among the graduates themselves. We all share moments together in our professional lives, and we love to recall some of these moments and apply them to our relationship in the future. The newsletter will serve as a tool for communication now and in the years to come. We will update you with happenings in the department. On the other hand, we would love to hear from you too. If you have anything to share with us and other graduates, please send us a note or e-mail to the editorial staff below.

The College of Arts & Sciences started an annual event last year called Career Extravaganza, which invites Arts & Sciences alumni to campus in order to discuss their career trajectory and experiences with current Arts & Sciences students and relate how their major enabled them to succeed in their profession. Last year, we had two graduates from a private company come back for the event and the department hosted a special recruiting session for them to meet our own graduating seniors. It turned out to be a very fruitful experience for both parties. Career Extravaganza usually takes place in November, but you are welcome to come back to the department to recruit our graduating students at any time. Please feel free to let us know, if you are interested.

We had a number of exciting happenings in the department that took place last year. Dr. Arjun Gupta, Distinguished University Professor, was recognized for his outstanding contributions to the field of multivariate statistics as the "Conference Honoree" at the International Conference on Multivariate Statistical Modeling and High Dimensional Data Analysis, June, 2008, in Kayseri, Turkey. Dr. Barbara Moses was named the first Bailey Endowed Professor in Mathematics in September 2008, and is Director of Science and Mathematics Education in Action, with a \$3 million grant funded by the Ohio Board of Regents through their Choose Ohio First program. See the stories in this issue for more details and other faculty in the news.

The Humphrey Fong Distinguished Undergraduate Award in Mathematical Education was awarded for the first time last year. In memory of the late Dr. Humphrey Fong, the Scholarship was established by his family and Professor Emeritus, Dr. Josef Blass. It recognizes two junior students who best demonstrate exceptional talent and professional promise in the field. The original Humphrey Fong Distinguished Undergraduate Award in Mathematics was established in 2006.

The department will host a conference, the MAA regional meeting April 3-4, 2009 at BGSU. Dr. David Meel is the organizer. The 12th Annual International Conference on Ordered Algebraic Structures honoring Professor Emeritus Charles Holland will be hosted by the Department of Mathematics and Statistics at BGSU on June 15 through June 18, 2009, organized by Dr. Warren McGovern. Alumni are welcome to attend and participate in both conferences.

In recent years, universities nationwide are facing budget crises, but we still manage to keep our traditional strengths in algebra, analysis, applied math, math education, and statistics/probability, maintain a solid research output, and run quality undergraduate and graduate programs. To keep up with our large volume of freshman level math courses, we are very fortunate to have a group of dedicated instructors and teaching assistants who provide excellent education.

Kit Chan, Professor and Chair



## HDM 2008 Conference Honoree Arjun K. Gupta

**D**istinguished University Professor Arjun K. Gupta was the conference honoree at the HDM-2008 International Conference on Multivariate Statistical Modelling & High Dimensional Data Mining held June 19-23, 2008 in Kayseri, Turkey. The conference celebrated his distinguished contributions

in multivariate statistics and also his 70th birthday. Dr. Gupta was recognized for his fundamental contributions in multivariate distribution theory, elliptically contoured distributions, matrix valued multivariate statistics, skew-multivariate distributions, modeling, and more. He also gave a keynote address "Ubiquitous

Gaussian Distribution and Modeling Skewness." He is a Fellow of the American Statistical Association, the Institute of Statisticians, Royal Statistical Society, Ohio Academy of Science, and an elected Member of the International Statistical Institute. Dr. Gupta has supervised 21 Ph.D. students and has current

Ph.D. students working under his guidance. He is former chair of the department and has contributed in many leadership roles at the department, university, state, and international level. A biographical sketch is available at the conference website <http://hdm2008.erciyes.edu.tr/>. ■

## Congratulations to the class of 2008!

**H**ere's where some of our newest alumni are headed after graduation.

### **COLLIN ADAMS**

(2008 Math/Applied Math). Combat Systems Officer, U.S. Air Force, Randolph AFB, Texas.

### **JEFF BATTISTE**

(2008 Math and English). Graduate student pursuing mathematics Ph.D., University of Oregon, Eugene, Oregon.

### **GREGORY BRUTSCHE**

(2008 MA, Statistics). High school math teacher for Pasadena Independent School District, Pasadena, Texas.

### **PAUL ERFORD**

(2008 Mathematics and Actuarial Science). Operations Center Analyst, Marathon Pipeline, Findlay, OH.

### **VINCENT GEORGETTI**

(2008 Actuarial Science). 2LT Officer, U.S. Army.

### **JOSHUA HURLEY**

(2008 Actuarial Science). Actuarial Analyst, Prudential Financial, Hartford, CT.

### **BRYAN JOHNSON**

(2008 MA, Pure Math). Graduate student pursuing mathematics Ph.D., Michigan State University, East Lansing, Michigan.

### **JUSTIN KEAR**

(2008 Mathematics and Actuarial Science). Actuarial Student Entry, Hewitt Associates, Waltham, MA.

### **MATTHEW LALONDE**

(2008 Pure Math). Accepted to graduate school.

### **ERIN LEATHERMAN**

(2008 MSAS). Graduate student in statistics Ph.D. program, The Ohio State University.

### **QIE LI**

(2008 MSAS). Graduate student, BGSU Ph.D. program.

### **ELIZABETH MADSEN**

(2008 Actuarial Science). Ellee is studying computer information systems in Columbus, OH.

### **LONIE D. MOORE**

(2008 Actuarial Science and German). Actuarial Associate (consulting), Towers-Perrin, Cincinnati, OH.

### **JIA TANG**

(2008 MSAS).

### **KRISTA WEINBERGER**

(2008 MSAS). Healthcare Statistician, Assurant Health, Milwaukee, WI.

### **TONYA WHARTON**

(2008 Actuarial Science). Graduate student in MBA-Finance at Barry University, Miami, Florida.

### **WENJUN ZONG**

(2008 MSAS).

# Barbara Moses named First Bailey Endowed Professor in mathematics



**D**r. Barbara Moses was named the first Bailey Endowed Professor in Mathematics in September 2008. This professorship carries a three-year term, and a stipend for promoting math education. The endowed professorship is a part of a \$1 million gift from our alumnus, Jim Bailey and his family made to BGSU in 2004. In April, 2004, the BGSU Monitor reported on the \$1 million gift from James L. Bailey (Mathematics, 1967) family to support mathematics education and scholarships.

Their cash contribution of \$500,000 will be split three ways, with \$250,000 allocated to the creation of an endowed professorship in mathematics education in the College of Arts and Sciences; \$125,000 for endowment of a scholarship for students in the College of Education and Human Development, and another \$125,000 for an endowed scholarship for students in arts and sciences.

The remaining \$500,000, a deferred gift through the Baileys' estate, will benefit the same three areas at the same levels.

Jim was inspired by math professors when he attended BGSU in the 1960s, and eventually achieved great success in his career as a banking executive. He remarked at the naming ceremony that, "We wanted to raise the level of math education, not just at BG but to reach out to the rest of the world by teaching the teachers." James Bailey has been involved in the BG community in many ways. He co-taught a history class with Dr. Don Nieman in 2007. Dr. Nieman was the Dean of the College of Arts and Sciences at that time. Jim also gave the commencement speech in 2007, and is a member of the BGSU Foundation Board. ■

## James Bailey

**B**iographical sketch from the BGSU Monitor, April 2004:

A banking executive, James Bailey graduated from Bowling Green in 1967 with a bachelor's degree in mathematics. While an undergraduate, he was an assistant to mathematics professor Frank Ogg and was active in student groups, including Kappa Mu Epsilon mathematics honor society. He went on to earn a master's degree in mathematics from New York University in 1970.

As the first members of their families to attend college, he said, he and many of his fellow students worked hard to pay the \$600-per-semester tuition, but "Bowling Green gave us a chance to change the trajectory of our lives. We may not have realized that when we first set foot here 40 years ago."

Bailey spent 28 years of his career at Citibank, where he managed its North American Consumer Bank and Credit Card business. Shortly after retiring as Citibank's executive vice president in 2000, he accepted his present position as executive vice president of U.S. Trust's Product Management Group.

A former member of the boards of directors at VISA and the Depository Trust Corp., he currently serves on the board of the Visiting Nurse Service of New York and the BGSU Foundation Board.

He and his wife chose mathematics education for one part of their gift after hearing a presentation to the foundation board by Barbara Moses, mathematics and statistics and director of COSMOS, a collaborative effort to improve the teaching of math and science. Moses spoke about the crucial importance of mathematics to our society and our economy and the disturbing dwindling of interest in the subject.

The Baileys targeted math education specifically because "teachers have an underappreciated skill. Teachers have the opportunity to turn people off or turn people on," James Bailey said, recalling that he had gotten a C in his first math class at BGSU but then had a great professor "who made all the difference in the world." ■

## Dr. Barbara Moses

**D**r. Barbara Moses earned a bachelor's degree in mathematics education from Carnegie-Mellon University, and a masters degree and Ph.D. from Indiana University. She joined the BGSU faculty in 1978 and was promoted to Professor in 2003. Over her career Moses and her colleagues in math and science education have received more than \$1.7 million in external funding. She was the founding director of COSMOS (Center of Excellence in Science and Mathematics: Opportunities for Success) at BGSU, helping to make northwest Ohio one of the leading centers of math and science education in the state.

Bailey Endowed Professor Barbara Moses was named Director of Science and Mathematics Education in Action, a grant funded by the Ohio

Board of Regents through their Choose Ohio First program. The \$3 million grant will provide unique training for future teachers of mathematics and science at the middle and high school levels. A total of 100 students will receive scholarships at BGSU or at one of the partnering institutions (University of Findlay, Owens Community College, Terra Community College and Northwest State). Students will engage in scientific research, as well as pedagogical research. The end product should be a cadre of reflective, well-prepared math and science teachers. ■

# Faculty News

**Drs. James Albert and Barbara Moses** received a two-year, \$192,710 award from the Ohio Department of Education. The grant, with support from BGSU, covers the cost of running workshops "Developing Reasoning about Data and Chance" for 50 high school teachers, on teaching statistical concepts using real data. Albert and colleagues Dr. Barbara Moses, and instructor Diane Mott work with teachers to better prepare them to teach these concepts. Participants gain three hours of graduate credit at no cost. Much of the course content is based on a textbook Albert wrote, "Data Analysis and Probability for Teachers", that will be published by Wiley.

**Dr. Alex Izzo** was selected as a New Directions Research Professor for a program in mathematics and chemistry at the Institute for Mathematics and Its Applications, University of Minnesota. He is an analyst working on Banach algebras and several complex variables. Supported by both the Institute and BGSU, Dr. Izzo will spend one year there to use his pure math background to investigate problems in chemistry. As his title suggests, he will gain a totally new research direction to add to his current interests when he returns.

Distinguished Research Professor **W. Charles Holland** will be the conference honoree at the 12th Annual International Conference on Ordered Algebraic Structures, hosted by the Department of Mathematics and Statistics at BGSU on June 15 through June 18, 2009. More information is available on the conference web page: <http://personal.bgsu.edu/~warren/Workshop/Conference09.html>

**Dr. Gábor Székely** is spending a third year at the National Science Foundation as a program director of statistics and probability. His primary responsibilities are to direct the review of grant proposals, make recommendations for awards, and prepare research highlights to demonstrate notable outcomes funded by NSF and used in press releases and budget justifications. In 2008 Dr. Székely received the NSF Director's Award for Collaborative Integration. It is great for the department to have a faculty member serving as a mathematician at the federal level. ■

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## Alumni News

**G. Jay Kerns** (Ph.D. 2004) presented a colloquium talk here on "Monte Carlo Statistical Methods for Finite Exchangeable Sequences" in January, 2009. Dr. Kerns is Associate Professor in the Department of Mathematics and Statistics at Youngstown State University in Youngstown, Ohio. He and Xiaojing Lu (Ph.D. 2006), who also teaches statistics at YSU, are proud parents of a daughter age 2 and infant son.

**Mihaela Marcusanu** (Ph.D. 2007) and Adrian Cuc (MSAS) returned to BGSU on a recruiting visit to participate in Career Extravaganza 2008 as representatives of Allstate Insurance Company. Dr. Marcusanu is Senior Analyst, Research & Actuarial COE. Adrian Cuc is Predictive Modeling Manager in Quantitative Research and Analytics.

**John McVey** (Mathematics 1995) visited BGSU in March, 2008

as a KME invited speaker to present an interesting view of "A Mathematician's Life at NSA." Dr. McVey, who is a cryptologic mathematician at the National Security Administration since 2004, discussed 'life as a codebreaker'. After earning his undergraduate degree in mathematics at BGSU, Dr. McVey received his masters degree and Ph.D. (2001) in mathematics from Kent State University.

**Lonie Moore** (2008) accepted a position as Actuarial Associate at Towers-Perrin in Cincinnati, and returned to his alma mater just a few months after graduation accompanying consultant Sue Guzior on a recruiting trip. At the information session they provided our current students with valuable insights into the work of actuaries and consultants. We greatly appreciate Lonie's initiative in helping to bring Towers-Perrin to

BGSU to meet and interview our actuarial students for internships and full time positions.

**Ronald Taylor, Jr.** (Ph.D. 2000) was named Master Teacher at Berry College, Mount Berry, GA, in 2008. Dr. Taylor is Associate Professor of Mathematics in the Department of Mathematics and Computer Science since 2000.

**Pamela Warton** (Ph.D. 1997) received tenure at the Univ. of Findlay, where she is Associate Professor of Mathematics.

**C. Deniz Yenigun** (Ph.D. 2007) presented topics from "Elements of Statistical Learning" by Hastie et al. in our statistics seminar during his visit in January, 2008. Dr. Yenigun is Assistant Professor of Statistics, Faculty of Business Administration, at Bilkent University in Ankara, Turkey. ■

## 2008 Ph.D.'s in Mathematics and Statistics

**Champike Attanayake** (2008). "Finite Elements and Practical Error Analysis of Huxley and EFK Equations", supervised by Tong Sun. Dr. Attanayake is Assistant Professor in the Department of Mathematics and Statistics at Miami University Middletown in Middletown, Ohio.

**Fanglong Dong** (2008). "Bayesian Model Checking in Multivariate Discrete Regression Problems", supervised by Jim Albert. Dr. Dong

is Visiting Assistant Professor in the Department of Mathematics and Statistics at Northern Arizona University in Flagstaff, Arizona.

**Vidyardhar Phadke** (2008). "Convergence Results for Sums of Dependent Trigonometric Random Variables", supervised by Gábor Székely and Craig Zirbel. Dr. Phadke has recently accepted a position as Statistician with Cytel in Pune, India.

**Mamunur Rashid** (2008). "Inference on Logistic Regression Models", supervised by John Chen. Dr. Rashid is Visiting Assistant Professor of Statistics at Ohio Northern University in Ada, Ohio.

**Ceren Vardar** (2008). "On the Correlation of Maximum Loss and Maximum Gain of Stock Price Processes", supervised by Gábor Székely and Craig Zirbel. ■