

## Department of Mathematics and Statistics

[www.bgsu.edu/departments/math](http://www.bgsu.edu/departments/math) • [mathstatchat@bgsu.edu](mailto:mathstatchat@bgsu.edu)

### BGSU makes triple appearance in U.S. News 'America's Best Colleges'

Bowling Green State University has reason to celebrate. The 2009-10 edition of U.S. News and World Report's "America's Best Colleges" cites the University for excellence in undergraduate education in three categories—a strong commitment to teaching, first-year experience programs and learning communities.

Reflecting its strong emphasis on teaching, BGSU is ranked 11th with eight others among 80 institutions that have a focus on undergraduates in the "national universities" group. The group comprises public and private institutions including the University of Michigan and Howard, Princeton, Yale and Stanford universities. Rated by their peers, the 80 were singled out for their "unusual commitment to undergraduate teaching" and for "emphasizing that aspect of academic life."

One way of creating an integrated educational experience is through learning communities, an area in which Bowling Green has been at the forefront.

#### To view the listings visit:

<http://rankings.usnews.com/best-colleges/national-ut-rank>

<http://rankings.usnews.com/best-colleges/first-year-experience-programs>

<http://rankings.usnews.com/best-colleges/learning-community-programs>

### DEPARTMENT OFFICERS

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

### TABLE OF CONTENTS

1. Message from the Chair
2. Department News
3. Dept. News continued
3. Faculty News
4. Alumni News
4. 2009 Graduates

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.

Maria Rizzo, Editor  
[mrizzo@bgsu.edu](mailto:mrizzo@bgsu.edu)

Marcia Seubert, Associate Editor  
[msproul@bgsu.edu](mailto:msproul@bgsu.edu)

## Message from the Chair



Year 2010 marks the 100th anniversary of BGSU. We are excited to start the next hundred years with a national recognition in US News and World Report, which ranked the University as high as 11th among the nation's universities in terms of best undergraduate teaching. That puts us on the same list as Princeton, Yale, Stanford, Brown, UC Berkeley, Michigan, just to name a few. Besides the high ranking, we were also recognized for our first-year programs and our residential learning communities as BGSU made it to the top lists in those two categories. Of course, we are very proud of our achievements. The University continues to improve its undergraduate curricula, by launching a special program called "Connecting Undergraduate Experience," which has sparked many

discussions about the way we structure our undergraduate courses and co-curricular activities. Particularly, math is one of the foci. As the name of the program suggests, we are finding ways to teach math with context related to the students' academic interests. However, this idea is currently still at a developing stage.

The department was also honored for our undergraduate teaching, as Dr. Barbara Moses was named the 2009 winner of the Kenneth Cummins Math Award for Best Post-Secondary Teaching presented by the Ohio Council of Teachers in Cincinnati, November 2009. The award recognized Dr. Moses' exemplary teaching that has touched thousands of students and her preparation of many math teachers throughout Ohio. "Every student is unique and comes to my class with their own learning style and their own math background. It is my job to work with these students as they are, and not as I wish they were. I encourage risk-taking during the class period," said Dr. Moses at the award ceremony.

The 100th birthday of BGSU is celebrated with year-long events, including the Centennial Alumni and Friends Weekend on June 25 — 27, and the Centennial Homecoming Celebration tentatively set for the first weekend of October. Many other alumni celebration events take place outside of Ohio, perhaps close to your home. Please check the University's Centennial Master Calendar on the web to see which might interest you. If you happen to be on campus for anything, please remember to stop by. The department would love to hear about your news and to show you some of the departmental changes.

As part of the celebration, the Alumni Association will present Centennial Alumni Awards to 100 prominent BGSU graduates from the first century in a ceremony on April 24, 2010. The awards will honor individuals who personify the BGSU tradition of excellence. We are very proud that our math alum, James Bailey, is among one of the 100 awardees.

On a very happy note, our former department secretary, Cyndi Patterson, received the 2009 Outstanding Classified Staff Award before she retired on June 1, 2009. She was recognized for contributing in a positive way to the lives of students across campus and for creating liaisons between our department and other units in the University. We all miss her.

On a sad note, we share the news that Dr. David Meronk passed away in 2009. As many of us know, Dr. David Meronk was an algebraist who loved to share his passion for mathematics in his classes, including modern algebra, set theory, logic, number theory, discrete math, combinatorial math, algebraic number theory, as well as math education. He is well remembered for his role as the Graduate Coordinator from 1972 to 1974, during which time a final proposal for the PhD program was prepared, submitted and implemented. He also served as the interim chair of the department in 1994.

After the first issue of Math.Stat.Chat came out last spring, we were excited to hear back from some of our graduates. We certainly would like to keep going and rebuild our connection. Please write back to us. We would love to hear from you.

Kit Chan, Professor and Chair

## Department Hosts ORD/OAL Algebra Conference and NSF Workshop

**B**GSU hosted the 12th Annual International Conference on Ordered Algebraic Structures June 15-18, 2009. The conference was a celebration of the work and achievement of retired BGSU Distinguished Research Professor W. Charles Holland. The main themes of the conference centered on the theories of lattice-ordered groups and MV-algebras.

Several alumni of our graduate programs attended, including Harold Putt and Janet Roll. Steve McCleary, who retired from BGSU in 2000, gave a talk at the conference.

Prior to the conference, the Department of Mathematics and Statistics also hosted a workshop



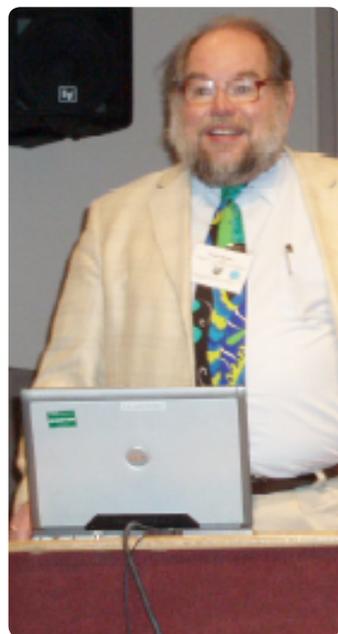
for new faculty and graduate students on Lattice-Ordered Groups and MV-Algebras, June 8-12, 2009, sponsored by the National Science Foundation. The workshop consisted of four mini-courses directed by Nick Galatos, Warren Wm. McGovern, Vincenzo Marra, and W. Charles Holland. ■

## Spring 2009 Meeting of the Ohio Section of MAA at BGSU

**T**he Department of Mathematics and Statistics extended a warm welcome to the Ohio Section of the Mathematical Association of America for its Annual Meeting, April 3-4, 2009. Fred Rickey, a former Section member and former Professor of Mathematics at BGSU, started things off with his talk entitled "Jared Mansfield: Ohio's First Mathematician."

The after-dinner talk on Friday featured Keith Devlin with "Street Mathematics: And What We Can Learn From It" and he closed the meeting with his interesting talk "When Mathematics Changed Us." Devlin is a commentator on National Public Radio's Weekend Edition Saturday where he is known as "the Math Guy." He is also known for his prolific writing in the column entitled "Devlin's Corner" that appears on MAA Online, and his web site at <http://www.stanford.edu/~kdevlin/> has a wealth of information.

Many alumni and friends were seen at the meeting. Photos from the meeting are posted on the Ohio Section web page at:



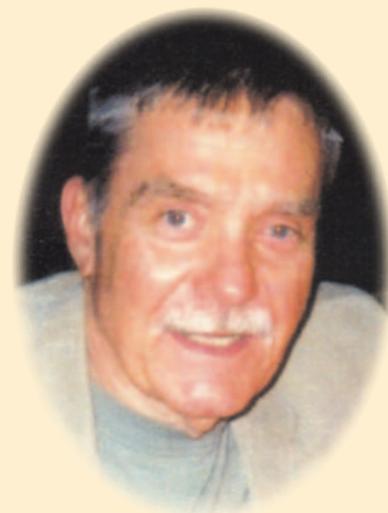
<http://www.jcu.edu/math/ohiofocus/minifocusspring2009.pdf>

The Ohio Masters of Mathematics web page maintained by the Ohio Section includes a biographical article about Jared Mansfield at:

[http://activities.ashland.edu/ohio/maa/ohio\\_masters/index.html](http://activities.ashland.edu/ohio/maa/ohio_masters/index.html) ■

## David B. Meronk 1934-2009

**D**avid B. Meronk, who retired from the department in 1995, 74, died July 30, 2009 at Hospice of Northwest Ohio, Perrysburg, Ohio. David served in the U.S. Air Force during the Korean War. After he received his bachelor's degree from Marquette University in 1959, he received an MS from Notre Dame in 1961, and then a PhD in Mathematics from Notre Dame in 1969 under the direction of the noted algebraist Hans Zassenhaus. He taught at St. Mary of the Springs College (now known as Ohio Dominican) in Columbus, Ohio. He joined the department at BGSU in 1967. During his tenure in the department, David taught a full range of courses related to his expertise, including modern algebra, set theory, logic, number theory, combinatorial mathematics, algebraic number theory, as well as mathematics education courses. He is well remembered for his role as the Graduate Coordinator from 1972 to 1974, during which time a final proposal for the PhD program was prepared, submitted and implemented. He also served



as the interim chair of the department in 1994. He was a well-respected algebraist, who started a research career in integral representation theory of finite groups, and eventually branched out to ordered semigroups, partially ordered sets, and computational number theory. His dissertation was entitled "On faithful irreducible integral representations of cyclic over cyclic groups." ■

## Carolyn Hollister 1935-2010



**C**arolyn Hollister, former secretary in our department and mother of a few of our mathematics majors, died March 31, 2010 at age 74. She was the widow of former faculty member Herb Hollister (1933-1997), who was a student of Charles Holland in ordered groups. Herb retired in 1994. ■

## 2009 Midwest Graph Theory Graph Theory Conference held at BGSU

**T**he MIGHTY XLVIII Midwest Graph TheorY Conference was held at BGSU on May 15-16, 2009. The Harary Lecturer was Allen Schwenk of Western Michigan University. Dr. Schwenk is one of Frank Harary's 17 students and the title of his talk was "2, 3, 7, and possibly 57? Where do these numbers come from?" ■



Cyndi Patterson with BGSU President Carol Cartwright.

## CSC Award Goes to Cyndi Patterson

Cynthia Patterson, Administrative Secretary in Mathematics and Statistics, was honored by Classified Staff Council April 16, 2009 with the Outstanding Service Award. Cyndi Patterson, who retired in 2009, was nominated by Diane Mott, an instructor of mathematics and statistics who wrote that "I find it very difficult to find adequate words to describe all that Cyndi does" for the department and the BGSU community. "In my estimation, Cyndi exemplifies the best of what BGSU can and should be. ... Because she has been such an integral part of the department," Mott added, "Cyndi has touched the lives of every student who has taken a math class in the past 30 years, even the students who have never met her." ■

## Cyndi Patterson Retires

Cynthia Patterson, Administrative Secretary in the Department of Mathematics and Statistics, retired in 2009 with 30 years of service in this department. She joined the department on May 1, 1979 as Typist I, continuing in that position for seven years. She was a technical typist and Graduate Secretary for 13 years, before taking over her responsibilities as administrative secretary until her retirement. Cyndi has served under a number of different department chairs, starting with Vern Terwilliger, who hired her, and then under Arjun Gupta, Hassoun Al-Amiri, Charles Holland, Vijay Rohatgi, Andrew Glass, David Meronk, Jack Hayden, Neal Carothers, and Kit Chan. Cyndi commented that what she really likes about the job is that she enjoys the people. She plans to enjoy family life and her grandchildren in retirement. She will be greatly missed both for her professional contributions and her wonderful personality, and remembered fondly by all of us in the department. We wish her all the best in retirement. ■



L to R: Mary Busdeker, Marcia Seubert, Diane Mott, Jim Albert, Cyndi Patterson, Kit Chan, Barbara Moses, Tom Hern.

## Dr. Barbara Moses Wins State Teaching Award

The Ohio Council of Teachers of Mathematics honored Dr. Barbara Moses for excellence in teaching with the 2009 Kenneth Cummins Award, presented annually to the top college-level math teacher in Ohio. Like the Kent State University math professor for whom the award is named, Moses is known for her deep love of mathematics—a love she has felt since she was in middle school and that has inspired her to help students learn, and teachers teach, math better. Moses has had an impact on individual students in the classroom and on the teaching of math nationally, as well as on the recruitment and preparation of the next generation of middle- and high-school math teachers.



Barbara Moses is the principal investigator and director of Science and Mathematics Education in Action, funded by a five-year, \$3 million grant from the Ohio Board of Regents. The program awards scholarships to incoming freshmen who show the potential to become excellent teachers of middle-school math and science. Moses and her teams have received more than \$5 million in external funding. Moses' research focuses on visualization in algebraic thinking, and she is co-author, with retired faculty member Dr. Alice Calderonello, of Algebra for Teachers and editor of the 1999 book Algebraic Thinking, Grades K-12. She was the founding director, in 2002, of COSMOS (Center of Excellence in Science and Mathematics: Opportunities for Success) at BGSU. The collaborative center is designed to help produce more and better-prepared math and science teachers. More than 200 K-12 teachers and university faculty participate each month in inquiry-based teaching presentations and activities. COSMOS has also attracted attention outside northwest Ohio. Moses was asked by the Mathematical Association of America to lead a Preparing Mathematicians to Educate Teachers workshop at BGSU, which was attended by mathematics faculty from universities throughout the country to learn about appropriate curriculum for the preparation of middle school math teachers.

A talk by Moses on the importance to society of math education and teacher preparation—and of countering the disturbing decline in interest in math and science—helped shape the direction of a \$1 million gift to BGSU in 2004 and resulted in Moses being named the first recipient of the Bailey Family Endowed Professorship in Mathematics. ■

## Faculty News

**Jim Albert** presented the Keynote address at The Institute of Mathematics and Its Applications (IMA) 2nd International Conference on Mathematics in Sport, Groningen, Netherlands in June 2009. Dr. Albert presented invited papers on the application of statistical thinking in sports at the 2009 Japanese Joint Statistical Meeting, Kyoto, Japan, and the Meeting of the Institute of Statistical Mathematics in Tokyo, Japan, September, 2009. He also was one of the Keynote speakers at the 25th Workshop on Item Response Theory in Twente, The Netherlands, in October 2009.

**Dr. Juan Bes** will spend a year at the Institute of Pure and Applied Mathematics of the Universidad

Politecnica de Valencia, Spain. Our departments have enjoyed growing collaborations in the area of linear dynamics over the last decade.

**Prof. Kit Chan** gave a plenary lecture "Zero-One Laws in Hypercyclicity" at the Hypercyclicity and Chaos for Linear Operators and Semigroups Conference, in Valencia, Spain, June 1, 2009.

**Dr. Daria Filippova** (Ph.D., 2001) received the KME Teaching Excellence Award in Mathematics and Statistics, presented on April 30th, 2009. This award goes to the outstanding teacher selected by student members of KME math honor society. ■

## Alumni News

**H. Ruth (Hyland) Hall** (Math 1954) retired mathematician (NACH-NASH) Cleveland, OH, now resides in Spokane, Washington.

**A. David Capko** (BA Math 1963, MA History 1968) is currently retired from teaching at Port Clinton High School where he lives with his wife Lillian, also a BGSU graduate.

**Bob Holliker** (Math 1968) went into the U.S. Air Force after graduation, first into Aerospace Munitions, then on to pilot training. Eventually he flew for 18 years in the USAF.

**Mrs. Debora (Gerhardinger) Sadowski** (Math Educ. 1987) is Administrative Associate at Lorain County Community College, Elyria, OH.

**Bradley Hinesman** (1997, Actuarial Science) is International Consulting Actuary for Hewitt Associates SA. He and his wife

Jennifer Hinesman, also a BGSU graduate, live in Nyon Switzerland.

**Larry Zaborski** (BS 1983 Math and Statistics) is Statistical Programmer/Analyst at the Dept. of Health Care Policy at Harvard Medical School, where he has worked for 14 years since finishing his Master's in Statistics at University of Wisconsin, Madison. He and his wife Anne Brown have two children Grace (9) and Ben (5). "Enjoy music, politics, Red Sox baseball, biking and puzzles."

**Mrs. Kathryn (Leed) Arocho** (Math 2001) Assistant Professor at Lorain County Community College in Elyria, OH, received tenure. She earned her BS in Mathematics at BGSU and MA in Applied Math at Indiana University.

**Ben Otto** (BS 2001, MA 2002) joined the department as Visiting Assistant Professor in 2009. Ben received his PhD from

University of Wisconsin in 2009, under the supervision of Martin Isaacs. His dissertation is titled "Supercharacters of Algebra Groups." Ben married Sonia Dragulin in 2006.

**Monica Schneiderman** (AYA Integrated Math and International Studies 2009) is a graduate student in Language Teacher Education at Monterey Institute of International Studies, Monterey, CA, majoring in PCMI in TESOL (Peace Corps Masters International in Teaching English to Speakers of Other Languages). In the summer of 2009 she worked with the Ohio Migrant Council and the Ohio Department of Education as ESL teacher in Kansas, OH.

**Lynette Boos** (PhD 2006) has accepted a tenure track teaching position at Providence College after spending three years at Trinity College.

**Lonie Moore** (Math/Actuarial Science 2008) is Associate with Towers Watson in Cincinnati, OH. Lonie visited campus with consultant Sue Guzior in November, 2009 for an information session and interviews with actuarial students, and recently returned to lead an actuarial exam-prep strategy and information session for students.

**Brittany Wulff** graduated in May 2009, Integrated Mathematics.

**Erin Noss** graduated in May 2009, AYA Integrated Mathematics.

**Stephanie Brazie** (Math/Actuarial Science 2009) accepted an actuarial position with Nationwide Insurance in Columbus, OH.

**Jeana Hilvers** (Math/Actuarial Science 2009) accepted an actuarial position with Motorists Insurance in Columbus, OH. ■

## 2009 Graduates

### Ph.D.'s

**Deniz Akdemir** (2009). "On a Class of Multivariate Skew Distributions," supervised by Arjun Gupta.

**Papiya Bhattacharjee** (2009). "Minimal Prime Element Space of An Algebraic Frame," supervised by Warren McGovern. Dr. Bhattacharjee is Assistant Professor of Mathematics at Penn State Erie, The Behrend College.

**Ian Deters** (2009). "On the Cyclicity and Synthesis of Diagonal Operators on the Space of Functions Analytic on a Disk," supervised by Steve Seubert.

**Keven Drees** (2009). "Cp(X,Z)," supervised by Warren McGovern.

**Hong Li** (2009). "Multiple Comparisons Under Unequal

Variances and its Applications to Dose Response Studies," supervised by Wei Ning.

**Naima Shifa** (2009). "Estimation of QVF Measurement Error Models Using Empirical Likelihood Method," supervised by Hanfeng Chen. Dr. Shifa is Assistant Professor of Mathematics at DePauw University in Indiana. ■

### Masters Degrees

Rachel Crowe, MAT  
Kristen Mowery, MAT  
Leonardo Pinheiro, MAT  
John Barrow, MA  
Timothy Cieplowski, MA  
Jin Huang, MA  
Jeremy Joseph, MA  
Yong Lin, MS  
Francis Medina, MA  
Timothy Roshko, MA  
Jeffrey Sampong, MS  
Rajitha Siriwardana, MA  
Yang Wang, MA