Chair's Corner

The College of Liberal Arts and Sciences celebrated its golden anniversary during the 2009-2010 academic year. As part of the celebration the college recognized the accomplishments of fifty distinguished alumni of the college. These Golden Anniversary Alumni award winners spanned the five decades of the college, and their accomplishments are a testament to the opportunities that an NIU liberal arts education can provide. I am very proud to report that seven of the recipients received their B.S. in mathematics, two their M.S., and one his Ph.D. We congratulate Jerome A. Rich (1961), Arnold E. Hampel (1963), Lorene K. Steffes (1968), Mimi Wolverton (1968), William R. Speer (1969), Norman J. Dovichi (1976), James G. Nagy (1986, M.S. 1988) and Bharath R. Sriraman (M.S. 1999, Ph.D. 2002) for their outstanding and diverse careers. These recipients were chosen from 70,000 alumni of the college. Later in the year the college honored ten faculty/staff members for their positive impact on the college. Two members of our department, Professors Linda Sons and Rodney Angotti, were among those receiving this prestigious award. I invite you visit the college’s web site (http://www.niu.edu/clas/) for profiles of the awardees, photographs, and much other information about the celebration.

Professor John Beachy retired at the end of the spring semester. John joined our department as an assistant professor in 1969, and he rose quickly through the ranks becoming a full professor in 1979. He is well known for his work in noncommutative ring theory and the theory of modules. In addition to over forty research articles, he has published a graduate text Introductory Lectures on Rings and Modules and undergraduate textbook Abstract Algebra which is familiar to a generation of our majors and is now in its third edition. John’s superb teaching has been recognized by an Excellence in Undergraduate Teaching Award (1986) and by his receiving a Presidential Teaching Professorship in 1997. John plans to remain in DeKalb with extended visits to Nicaragua.

Professor David Rusin has accepted an offer from the University of Texas, Austin. Dave came to Northern in 1986. From 1999 through 2006 he was our department’s Director of Undergraduate Studies. Dave is well known in the mathematical community for his outstanding problem solving ability.

Professor Emerita Linda Sons along with David Drasin of Purdue University were recognized for their contributions to function theory by a Conference on Complex Analysis held in their honor at the University of Illinois at Urbana-Champaign in May. Professor Sons has received many awards and honors throughout her illustrious career, and a conference such as this is a truly unique recognition.

As has been our custom in recent years, the department hosted a Reception and Award Ceremony on a Sunday afternoon in late April in the Skyroom of Holmes Student Center. This was a festive occasion for the award recipients, their family and friends, and members of the faculty. We celebrated the accomplishments of many hard working students while enjoying refreshments and a beautiful view of campus on a sunny, spring day. Attendance was so large that the Skyroom was filled to capacity. Again this year both the December and May commencement ceremonies were held in the spacious Convocation Center.

This was the 13th year in which the Huskie Telefund has solicited donations on behalf of the department from our alumni. We greatly appreciate your generous contributions to our scholarship funds.
Each year the number of contributing alumni and the amount of their contributions have grown. We especially appreciate your support during the current times of very tight budgets.

Your comments to the student callers about our department, its faculty, and its programs are passed along to us, and we find these to be encouraging and helpful.

Let us hear from you. If you are in DeKalb, please stop by Watson Hall 320 and say hello.

I will retire on July 1, 2010. I look back on my 39 years at Northern with great satisfaction. I take great pride in the Department of Mathematical Sciences and the College of Liberal Arts and Sciences. I am truly grateful for the opportunity to work with so many talented students, for the dedication to excellence of my colleagues, the steadfast support from our office staff, and the generous support of our alumni, and donors. The department is most fortunate to have Professor Bernard Harris take over as chair on July 1. I wish the department all the best for the coming years.

William Blair
May 24, 2010
Faculty Promotions

Congratulations go to Professor Gerard Awanou, who becomes a tenured associate professor with the start of the 2010-2011 academic year!

WILLIAM BLAIR RETIRES AS DEPARTMENT CHAIR

Few people are asked to be chair of a University department for 20 years, and among those who might do it, fewer still are truly effective ALL those years! William (Bill) Blair has wisely led the largest department in the College of Liberal Arts and Sciences for two decades, a department which touches nearly every undergraduate student in NIU and which offers wide-ranging expertise in its faculty for its major programs.

Bill’s strong, positive impact as department chair stems from a number of personal and professional characteristics. First among these is the fact that Bill is a solid mathematician who is respected by both the department and the broader mathematics community. He has remained knowledgeable about the mathematics in ring theory and served the community through doing

CALLING ALL MATH TEACHERS!!!

The 61st Annual Meeting and Conference of the Illinois Council of Teachers of Mathematics with the theme "Building Communities, Creating Opportunities" is to be held October 15-16, 2010 in Springfield, Illinois. The associated Leadership Conference is set for October 14 at the same location.
reviewing and refereeing of research manuscripts. His abstract algebra book, written with John Beachy and now in its third edition, receives accolades nationally. He has served the professional organizations by working on national committees and being a Board member for the Illinois Section of the Mathematical Association of America. As department chair Bill chose excellent supporting administrative personnel. He hired and promoted strong faculty expecting them to be excellent in research AND teaching, and he nurtured their creative endeavors. He chose to teach each semester, modeled first-rate teaching, and shared his approaches with others. He was a recipient of both the NIU Excellence in Undergraduate Teaching Award (1990) and the Presidential Teaching Professor award (2004). He was available tirelessly for counseling and helping students and faculty.

Bill plans to stay in DeKalb with time to visit family on the coasts of the USA. We thank him for his years of service and friendship, and we wish him many, many happy years in retirement!

The annual spring meeting of the ISMAA reported its largest attendance ever!

The total number attending was 209 of which 138 were students!!! NIU had 19 students present and actively participating in the many sessions and the student mathematics competition. Two graduate students, Min Wang and Jeremy Chamberlain, gave presentations on their research work. Responsible for the excellent program was NIU's Professor Zhuan Ye!

Sabbatical and other leaves

On sabbatical leave for the fall 2009 was Professor Sien Deng, while on sabbatical leave for the spring 2010 were Professors Biswa Datta and Hamid Bellout. Taking a personal leave for the spring 2010 was Professor Hui Hu.

Seventieth Annual William Lowell Putnam Mathematical Competition

Once again NIU had a contest team for the December Putnam Contest. On Saturday, December 9, 2009, Robert Beavers, Brock Hutchinson, Chi Zhang, Kimberly Dye, and James Tonyan spent the day working on the two-part exam. Professor Gleb Sirotkin worked with the team this year. Here are three problems from the competition for you to try!

Let \( f \) be a real-valued function on the plane such that for every square ABCD in the plane, \( f(A) + f(B) + f(C) + f(D) = 0 \). Does it follow that \( f(P) = 0 \) for all points \( P \) in the plane?

Is there a finite abelian group \( G \) such that the product of the orders of all its elements is \( 2 \) to the power \( 2009 \)?

Say that a polynomial with real coefficients in two variables, \( x,y \), is balanced if the average value of the polynomial on each circle centered at the origin is \( 0 \). The balanced polynomials of degree at most \( 2009 \) form a vector space \( V \) over the real numbers. Find the dimension of \( V \).
Departmental Awards

The 32nd annual Awards Ceremony was held on April 18, 2010, in the Holmes Student Center Skyroom. At the reception, Department Chair William Blair gave out the following awards:

**Dean's Award**
- Kimberly Dye
- Cara Wyrostek

**Chair's Award**
- Stephen Reilly

**Director's Award**
- Jason Schoenfelder

**Stelford Award**
- Kevin Deichl
- Scott Hickey
- Paul Hoffman
- James Tonyan

**M.M. Wheeler Scholarship Award**
- Maricelle Bertrand
- Timothy Daly
- David DeMuro
- Heather Hayes
- Marjean Pobuda

**M.M. Wheeler Teaching Award**
- Katie Brummel
- Tracy Clery
- Julie Goodin
- James Kelly
- Katie Nolan
- Natalie Olson
- Eric Schumacher

**D.R. Ostberg Award**
- Angela Antonou

**Clarence Ethel Hardgrove Scholarship**
- Caroline Jordan
- Nathanael Kozinski

**Allstate Actuarial Scholarship**
- Xiaoyang Bi
- Cara Wyrostek

**Carol J. Feltz Scholarship**
- Kristin McCullough
- Jinglan Sun

**Dale G. Jungst Memorial Scholarship Award**
- Brock Hutchinson
- Michael Kilcheman
- Marjean Pobuda

**Joseph C. & Marion E. Huber Memorial Scholarship**
- Ethan Berillo
- Nathaniel Luker

**Eugen Hellmich Award**
- Eric Schumacher

**Honorable Mention**
- Vincent DiFabio
- Jennifer Heisler
- Nimit Shah
The Department of Mathematical Sciences saw three students receive their Ph.D. degree in the December 2009 and May 2010 commencements. These were:

Kristen Campbell, who completed her work under Professor Douglas Bowman in number theory. Her dissertation was entitled "Sequential Closures of 1_1 limit periodic continued fractions and certain q-continued fractions". She has a tenure-track appointment as an Assistant Professor of Mathematics at Aurora University.

Paul Gunsul finished his dissertation in complex analysis under the direction of Professor Linda Sons. His dissertation was called "A class of small functions in the unit disk". He has an appointment as an Assistant Professor of Mathematics at Rock Valley College.

Mohan Thapa did research work in computational linear algebra under the direction of Professors Karabi Datta and Yoopyo Hong. His dissertation was entitled "A new hybrid method for finding eigenpairs of a symmetric quadratic eigenvalue problem in an interval". He has an appointment as an Assistant Professor at the University of Wisconsin at Janesville.
RING THEORY
CONFERENCE
TO HONOR
JOHN BEACHY &
BILL BLAIR

The 2010 Session of the Midwest Ring Theory Conference will be held on the campus of Northern Illinois University on Saturday, September 25th, 2010. Over the years, the Midwest Ring Theory Conference has brought together ring theorists from the Midwestern states and beyond to listen to talks, discuss current trends, and visit with friends and colleagues. This session will feature a series of talks by Lance Small (Univ. of California at San Diego), Victor Camillo (University of Iowa), Donald Passman (University of Wisconsin), and Alon Regev (Northern Illinois University). In the evening there is planned a dinner in honor of John Beachy and Bill Blair on the occasion of their retirement. More information should be available at the website www.math.niu.edu/MWRT2010.

25th Annual NIU MATH CONTEST

Although one does not have to be a mathematics major, or an upperclassman, to do well in the annual Northern Illinois University Mathematics Contest, junior and senior level Mathematical Sciences students swept the board in this year’s competition. The 25th running of the annual event was held this semester on March 17. The winners were recognized at the Department of Mathematical Sciences’ Awards Ceremony and Reception on April 18.

Chi Zhang, a junior Computer Science/Mathematical Sciences major from Qingdao, China, successfully defended his first place finish in the 2009 contest and received the first prize of $75.00. Bradley Fischer, a senior Mathematical Sciences major from Winnebago, won second place and $50.00. Mr. Fischer improved upon his third place finish last year. There was a tie this year for third place. Konrad Dalecki, a junior Mathematical Sciences major from Gurnee, and Kimberly Dye, a senior Mathematical Sciences major from DeKalb, each was awarded $25.00.

The annual Northern Illinois University Mathematics Contest has a format where freshmen and sophomores have a fair chance to compete with juniors and seniors. The underclassmen have fewer restrictions on their choice of problems to attempt. The contest is open to all full-time undergraduates at NIU. Each contestant turns in solutions to a choice of six out of eleven problems. Topics this year ranged from high school level algebra, geometry, and combinatorics, through calculus, linear algebra, and differential equations.
Professors Harvey Blau and Gleb Sirotkin supervised the competition. Here is a problem from this year's contest that is easy to state but not routine to solve:

Ten people attend a party at which some of the guests shake hands with other guests and no two people shake hands with each other more than once. If there are a total of 31 handshakes, prove that there must be three people at the party each of whom has shaken hands with both of the others.

For more information, contact Harvey Blau (815-753-6772; blau@math.niu.edu)

2010 Abel Prize

John Torrence Tate received the Abel Prize from HM King Harald at an award ceremony in Oslo, Norway, Tuesday 25 May. The Abel Laureate was received in audience at the Royal Palace earlier the same day. His Majesty King Harald was also present at the banquet at Akershus Castle in honour of this year's Abel Laureate. Tora Aasland, the Minister of Higher Education and Research, was the host for the banquet. Sir Michael Atiyah, the 2004 Abel Laureate, was the main speaker of the evening.

An extensive program was set up for the Abel Laureate with the award ceremony as the main event. John Tate receives the 2010 Abel Prize for his «for his vast and lasting impact on the theory of numbers.» The chairman of the Abel Committee Kristian Seip said in his speech that the theory of numbers through the last century has developed into one of the most elaborate and sophisticated branches of mathematics, interacting profoundly with other areas. John Tate has been one of the prime architects of this development. - Many of the major lines of research in algebraic number theory and arithmetic geometry are only possible because of the incisive contribution and illuminating insight of John Tate. He has truly left a conspicuous imprint on modern mathematics, Kristian Seip concluded.

The president of the Norwegian Academy of Science and Letters, Nils Chr. Stenseth emphasized in his speech that the Abel Prize and similar prestigious prizes help strengthen the position of and regard for science and basic research in the society. - Basic research work is a long-term endeavor. Thus, it is important to have institutions that maintain and defend such endeavors and to convey the joy and importance of this work to new generations of researchers. Our universities are such institutions, as is the Norwegian Academy of Science and Letters.

The Abel Prize helps to call attention to these institutions as bearers of the long-term perspective of basic research, said Nils Chr. Stenseth. Stenseth was also eager to highlight the fact that one of the goals of the Abel Prize is to strengthen the interest in mathematics among children and young people. To support the Holmboe Prize, which is a prize for math teachers, and also the two school competitions - KappAbel and the Abel Competition - are important means to achieve this aim. As part of the annual Abel celebrations the Abel Laureate visits one Norwegian university in addition to Oslo University where the Abel Lectures are presented. This time Agder University, the youngest university in Norway, could welcome Abel Laureate John Tate. He gave a public lecture and met some of the 1200 schoolchildren who had come to the unversity campus to learn about mathematics in a playful way.

(Write-up courtesy of www.ams.org)
Alumni of
25 Years

Congratulations on the 25th anniversary of the class of 1985. Here is a listing of the class of 1985 and their current hometowns. If you can update some of the information, we would appreciate your help.

Dr. Mark Arnold, Fayetteville, AR
Mr. Michael Ballard, Clearwater, FL
Mr. Richard Bogovich, Madison, WI
Mrs. Diana Bonham, Batavia, IL
Mrs. Brenda Bradley, Wheaton, IL
Mr. Keith Chavey, River Falls, WI
Mrs. Ava Chun, Alpharetta, GA
Mr. Thomas Delorenzo, Chicago, IL
Mr. Gregory Dierks, Geneva, IL
Mrs. Noca Ervin, DeKalb, IL
Mr. Hrong-Tai Fai, Lexington, KY
Dr. Mark Gruenwald, Evansville, IN
Ms. Jodel Guentzel, Madison, WI
Mrs. Susan Highland, Saint Peters, MO
Mrs. Kelly Hock, Crete, IL
Mr. Jay Hopkins, Chattanooga, TN
Mr. Kwan Hur, Palatine, IL
Mrs. Elizabeth James, Sprints, TX
Mr. Timothy Kennedy, Elk Grove Village, IL
Mr. James Kostecki, Huntley, IL
Mr. Michael Lambdin, Rockford, IL
Ms. Christina Leith, Carol Stream, IL
Mrs. Deborah Letscher, Simsbury, CT
Mr. Jim Lewellen, West Chicago, IL
Mr. David Lewis, North Aurora, IL
Mr. Robert Mader, Seattle WA
Mrs. Karen Manarik, Crystal Lake, IL
Ms. Cheryl Mantel, Canyon Country, CA
Mr. Jaime Mantel, Canyon Country, CA
Mrs. Susan McCoy, Davis, IL
Mr. Lawrence McGuire, Middleton, WI
Mrs. Janet McMullin, Chino Hills, CA
Mr. Allen McWilliams, Lombard, IL
Mr. Patrick Meyers, Glen Ellyn, IL
Mr. Robert Moser, Tinley Park, IL
Mr. Hugh Norman, Tulsa, OK
Mr. Cho Nguyen, Plano, TX
Mr. Kyungwhan Oh, Aurora, IL
Ms. Diana Park, Schaumburg, IL
Ms. Cynthia Robbins, Glenview, IL
Mr. Richard Rahn, Glen Ellyn, IL
Mrs. Jeanne Reed, Naperville, IL
Mr. Andrew Ross, Glen Ellyn, IL
Mr. David John Rundo, Naperville, IL
Mrs. Stacy Ryckman, Brookfield, IL
Ms. Linda Sabella, Algonquin, IL
Mrs. Susan Sarrazine, Dundee, IL
Mr. Alexander Schmidt, Highland Park, IL
Mr. David Schofield, Boca Raton, FL
Ms. Denise Smith, Arvada, CO
Ms. Jeanette, Steiner, Naperville, IL
Dr. Hisaya Tsutsui, Phoenix, AZ
Mrs. Vicki Webb, Rockford, IL
Dr. David Wilkins, Naperville, IL
Ms. Camille Wojtasiak, Sacramento, CA

Field Experiences for the Applications Involvement Component

Some nine students in our Ph.D. program have work this summer in their field experiences for the A.I.C. They are:

Andrew Wang working in the decisions science division of Argonne National Laboratory with Dr. Macal on the adaptation of epidemiological models to agent-based systems.
Angela Antonou working on comparisons of human and chimp DNA with Dr. Hou in the NIU Computer Science department.

Jayleen Wangle studying collaboration with middle school teachers under the direction of Dr. Helen Khoury at NIU.

Allen Montz working in the atmospheric science division of Argonne National Laboratory on stochastic processes in atmospheric modeling.

Arpita Chatterjee and Suchitrita Sarkar involved in projects at Abbott Laboratories.

Chigira Osamu researching numerical methods for dispersive electromagnetic materials with Dr. Demir of NIU's Electrical Engineering department.

Caroline Kettlestrings and Benjamin Thomas working with the Ecor Consulting Group on developing a simple and scalable artificial intelligence engine.

As in many years in the past, the Department of Mathematical Sciences again hosted an Illinois Council of Teachers of Mathematics Regional High School Mathematics Contest on February 20, 2010. Professor Peter Waterman served as the able chair of the contest committee which made arrangements for the competitions and associated recognition event for the winners. Special thanks go to Eric Behr, Cindy Stecher, Nancy Leifheit, Dan Grubb, and Kitty Holland for their hard work before, during, and after the contest day! Thanks also go to a large number of other faculty and NIU students who served in the various roles of grading, registering, hosting, etc. needed for a successful day.
Bob Cherry ('73) recently retired from Wheaton Warrenville South H.S. after 36 years of teaching, 13 years as department chair, and 29 years of coaching boys tennis. He is currently the interim math division head at Oak Park & River Forest H.S. in Oak Park, IL.

Russ Forrer ('70 and '73) writes that he retired from East Aurora High School in 2003 where he was Math Department chair and hired numerous NIU graduates. After retirement he has worked as a consultant for McDougal-Littell, taught math courses at Waubonsee Community College, served as a consultant for CPS, and most recently was working part time as a DOE funded grant director at East Aurora High School. He recalls many happy memories of his NIU days and especially remembers math professors Rodney Angotti, Merlyn Behr, and Dale Jungst.

Thomas Rhodes of Zion, Illinois, reported to us the sad news of the death of his brother Jerry on February 1, 2009. Jerry was a 1972 graduate.

Joseph Winiarski ('00) reported living in Aurora, Illinois. He completed a masters degree from Concordia University River Forest in School Leadership and obtained a Type 75 Certificate in School Administration in August 2009.

Lou Bahrmasel ('84) wrote that he completed an MS in Applied Mathematics at the Univ. of Illinois in Champaign and subsequently worked in the defense industry until 1998 focusing on numerical analysis. Since 1998 he served as a project manager in several industries--biotechnology, satellite imagery, and IT electrical hardware. He taught part-time at the University of Missouri for 15 years. He currently lives in the metropolitan St. Louis area where he works as project manager for American Power Conversion. He is married to Peggy, a horticulturist, and has two daughters from a previous marriage.

George Rivard ('68) retired in 2002 after 34 years as a Department of the Army civilian and since started a consulting business, Rivard Executive Management, INC. He also contracts for the Department of the Army about two days a week.

Tina (Hauch) Brown ('06) and her husband Ryan Brown ('06 in Spanish) are excited to announce the birth of their son Thatcher Thomas Brown on December 27, 2009. The Brown family resides in Rockford, IL.

Kenneth Beynon ('05) and his wife are excited to announce the birth of Olivia Sophie Beynon on April 28, 2010. Ken also recently got an appointment for the fall at Elgin Community College as a mathematics instructor.
Kathy (Nicholls) Dams (’96) and her husband Marc happily announced the birth of their second daughter in summer 2009. Baby Corinne Denise joined big sister Amelia at their home in Rantoul, IL.

Kari Fowler (’04) is now tenured at the University of Tampa and gave a research presentation at the May Conference in Complex Analysis held at the University of Illinois in Champaign.

Djamel Benbourenane (’98) of the United Arab Emirates gave a research presentation at the May Conference in Complex Analysis held at the University of Illinois in Champaign.

Sadly, we report the passing of Chuck Hamberg (’63 and ’69) in early July 2010. Chuck was a long time mathematics teacher, Math/Science Director and Math team coach at Adlai E. Stevenson High School in Lincolnshire, IL. He finished his teaching career as a pioneer at the Illinois Math and Science Academy (IMSA). He was also the first Presidential Awardee for Excellence in Teaching Mathematics from Illinois.

Mark Lund (’09) has just been offered a position as Assistant Professor of Mathematics at Northwood University in Midland, MI.

Bonnie Kersten (’69 and ’72) has accepted an appointment at NIU as Coordinator of Teacher Certification in mathematics.

Joshua Eggenberger (’04) has accepted an appointment as a mathematics instructor at a community college in Minneapolis, MN.

Nicola Wethall (’96) is a 2010 winner of the Presidential Award for Excellence in Mathematics and Science Teaching. She teaches at Oak Harbor high school in Oak Harbor, Washington. The award is the highest honor which can be given to math and sciences teachers. Prior to moving to Washington, Nicola taught in Illinois and Hawaii and worked on her masters at NIU.

Web Page

Look for announcements regarding the latest department activities at the website:

www.math.niu.edu

Also full of useful information is the statistics division page at:

www.math.niu.edu/StatDiv

If you would like to see the newsletter in color, please visit:

www.math.niu.edu/alumni/

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