The Chair’s Corner
By Kevin Charlwood, PhD, Chair

The 2011 – 2012 academic year was an excellent one for our department. Our number of declared majors continues to climb, from 50 in Fall 2010 to about 60 this spring. Part of the reason for this surge in interest in mathematics (and quantitative disciplines in general) is due to the recent economic downturn, increased media attention, and a shortage of math and science teachers. Among our new declared majors, about 40% are planning on actuarial science, another 40% are pursuing secondary education, and the remaining 20% are going into pure mathematics. We are pleased that over 20 of our students received a total of over $22,000 from our departmental scholarships this past year.

As far as events within the department for 2012-2013, our Math Day on Nov. 1st was a big success, with 18 local high schools represented for our competitive exam and a campus tour. Four of us on the faculty took three students to the Kappa Mu Epsilon regional convention at Evangel University in Springfield, Missouri, March 30 – 31, 2013. Anna Lischke gave a presentation, “Ramsey’s Theorem and Monochromatic Triangles in the Plane.” In April 11-13, 2013 the KME national convention was hosted here at Washburn – it was a great success due to the remarkable and tireless efforts of Washburn’s Mathematics majors, staff, student workers and faculty!

Dr. Hee Seok Nam joined our department as a full-time Lecturer in August 2011; his area of expertise is in statistics. Back in May 2011, our department hosted a special reception for Dr. Al Riveland who retired that spring. Many of our retirees were in attendance, to help celebrate Dr. Riveland’s numerous accomplishments in his 40 years of tireless service to Washburn. Any announcements about future department alumni functions will come via postal mail, so please be sure to keep the Alumni Office apprised of your current address. In the meantime, we always enjoy hearing from our graduates to know how you’re doing – please keep in touch!

Spotlight on Seniors 2012-2013
Fall 2011
Lindsay Edwards (December 2011) graduated with a BA in Mathematics. She is currently working at Security Benefit.

Spring 2012
Amanda Fessenden (Spring 2012) graduated with a BA in Mathematics with emphasis in Secondary Education. She is currently teaching mathematics at Shawnee Heights High School.
Markie Gallagher (Spring 2012) graduated with a BA in Mathematics with Emphasis in Secondary Education.
Elisa Gayle (Spring 2012) graduated with Specialization in Pure Math.

Editor’s Note: This edition covers more time than our usual annual newsletter. If anything has been omitted, or there is something you want addressed added to the next edition, please send a memo to the editor. See attached sheet.
Anna Lischke (Spring 2012) graduated summa cum laude with a BA in Mathematics. She is currently attending graduate school in Iowa. Deana Smith (Spring 2012) graduated cum laude with a BA in Mathematics with Emphasis in Secondary Education. She has taken a teaching job in Scotland with her fiancée. Megan Thompson (Spring 2012) graduated with a BA in Mathematics with Emphasis in Actuarial Science. She is currently working as an Actuary at Security Benefit in Topeka. Lisa Wade (Spring 2012) graduated with a BA in Mathematics with Emphasis in Secondary Education. She is currently teaching at St. Mary’s High School. Fall 2012 Shuang Jang (Fall 2012) graduated with a BA in Mathematics with Emphasis in Actuarial Science. He is currently doing graduate work at the University of Illinois in Statistics. Spring 2013 Kristen Beall (Spring 2013) graduated with a BA in Mathematics with Emphasis in Secondary Education. Alex Hawkins (Spring 2013) graduated with a BA in Mathematics with Emphasis in Actuarial Science and is now working at Security Benefit. Garrett Lundry (Spring 2013) graduated with a BA in Mathematics with Emphasis in Actuarial Science. Trevor McDaniel (Spring 2013) graduated with a BA in Mathematics with Emphasis in Secondary Education. He is currently teaching at French Middle School. Morgan Minihan (Spring 2013) graduated with a BA in Mathematics with Emphasis in Secondary Education. She was recently shown teaching at Seaman High school on the Topeka Capital Journal. Stacy Rottinghaus (Spring 2013) graduated with a BA in Mathematics with Emphasis in Secondary Education. She is teaching at Ceneca Middle School.

Club Mathematica
By Dr. Sarah Cook

This year’s Club Mathematica (aka Math Club) officers are Alex Hawkins (President), Kristin Payne (Vice President), Alexander Weber (Secretary), and Thomas Keyes (Treasurer). Due to the efforts of President Alex Hawkins, students and faculty alike are often seen wearing their new Math Club T-shirts.

Since the last edition of Slice of Pi, Math Club has had the privilege of hearing presentations from faculty, current students, and alumni. We were fortunate to have six presenters finish out the 2010-2011 academic year. Dr. Jennifer Wagner discussed Proofs from ‘The Book’ while Dr. Gaspar Porta and Dr. Sarah Cook helped us to have some Fun with Vi Hart Videos. Students Andrew Lake, Sean VanDyke and Michael Reb respectively taught us about Exam Scheduling and Graph Theory, Magic Math Tricks, and The Hat Problem: A Math Student’s Perspective.

During the 2011-2012 academic year, we have had three alumni speak to Math Club to offer insights and advice to our current students. Stephanie Kenney, Assistant Actuary at Security Benefit, gave our students a better understanding of the many different opportunities available for actuaries. Tamela Lake, Secondary Mathematics Educator at Washburn Rural High School, provided graduated with a BA in Mathematics with Emphasis in Secondary Education.

Our secondary education majors with first-hand knowledge of not only teaching high school students, but also dealing with parents, school administrators, and state requirements. Michael Reb returned as an alumnus and first year graduate student at Kansas State to educate our students on What Graduate School is Really Like.

Current student Anna Lischke gave two presentations to Math Club in the 2012 Spring semester. In 2011, Anna was selected to participate in two competitive mathematics programs: the Joint Program in Survey Methodology at the University of Maryland and the Mathematics Advanced Study Semesters at Pennsylvania State University. In her talk titled Discovering a World of Opportunities for
Undergraduate Mathematicians, Anna shared her experiences and encouraged students to apply for similar programs.

Anna’s second presentation to Math Club, Utilizing Mathematical Modeling to Study the Distribution of Phytoplankton in Water, was on a research project that she completed for Washburn’s Apeiron. Student, Ty Lewis, also presented his Apeiron research project, Some Explorations into Variable-Sided Dice.

Math Club is always looking for alumni to give presentations. If you are interested in giving real-world insight to our students, please contact Sarah Cook at sarah.cook@washburn.edu. We will be happy to schedule meetings around your schedule.

Kansas Delta Chapter of KME Hosts 39th National Biennial Convention
By Kevin Charlwood
This past Thurs.-Fri.-Sat., Washburn's chapter of the national mathematics honor society Kappa Mu Epsilon hosted the 39th national biennial convention on campus. It drew over 100 total participating faculty and students from schools around the country (including schools from Texas, New York and Pennsylvania). The central focus of the meetings was to hear 19 undergraduate student research presentations on mathematical or statistical topics, given all day Friday and on Saturday morning.

Three Washburn students presented their work at the convention: Kristen Beall, Brandon Marshall, and Stacy Rottinghaus. Some great news to report - Stacy Rottinghaus was given a "People's Choice" award for her presentation, "An Exploration of Tropical Mathematics," and Kristen Beall was one of the "top 4" award winners for her presentation, "Queuing System Analysis of Math Tutoring.” Brandon Marshall presented his paper on, "Complex Variables: What Can We See?"
Congratulations to all of them for their countless hours of hard work, and to their project advisers for helping make this happen! On Saturday morning, four recent mathematics graduates were panelists for a discussion on career options. Two Washburn alumni, Carolyn (Cole) Covington ('06, actuarial science) and Tamela (Bolen) Lake ('08, secondary education) participated on our panel, and shared how their interest in mathematics has shaped their careers thus far. We appreciate their taking the time from their busy schedules to do this!

Finally, many participants from other schools were commending us for our quality facilities on campus, and, for how well-organized the convention was. A big "thank you" to my colleagues in Mathematics & Statistics for making this convention a huge success!

A Letter on the Subject of KME
From Al Riveland
Greetings,

Members of the Math Department have received numerous WELL DESERVED accolades concerning their gracious efforts in preparation and implementation of the KME convention. Let me add my congratulations for your hard work and usual professional performance. I thought the Resolutions Committee was right on target, as was Ron when he complemented the department’s team efforts. Kevin's coordinating the effort and the three paper advisors deserve special credit but it takes a "village" to pull this off. YOU DID GOOD!!

As you all know KME is very dear to my heart so I got special enjoyment from your efforts throughout the week-end. A funeral in the middle complicated my attendance and I sadly missed some of the local paper presentations, the panel discussion, and some other activities but I did have the opportunity to spend considerable quality time with some really special friends. The current KME National officers are a remarkably dedicated and gracious group of talented leaders, continuing a tradition that I have witnessed for most of 50 years. One of the things that keeps the organization vibrant is the constant camaraderie and friendship of the leaders and the many faculty from across the country who remain involved and dedicated, year after year. Thanks, all!!!!

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Faculty members Kevin Charlwood, Mike Mosier, Hee Seok Nam and Gaspar Porta took three students, Kristen Beall, Anna Lischke and Brian Oxendine to the North Central Regional Convention of Kappa Mu Epsilon on March 30 - 31, 2012, held at Evangel University in Springfield, Missouri. There were 55 participants from 8 institutions overall, and 11 students presented papers at the convention. Anna Lischke presented her work on, "Ramsey's Theorem and Monochromatic Triangles in the Plane."

**Apeiron**
In Spring 2013, WU 10th Apeiron had three of our students present - Anna Lischke and Ty Lewis gave oral presentations and Stacy Rottinghaus was in the poster session.

**Math Day**
On Saturday, November 10, our department sponsored a symposium for area high school teachers. Eleven teachers from seven high schools attended. They had the opportunity to talk to each other and to us about the changes they face regarding transition to the Common Core State Standards. The discussions seemed
to be valuable to the teachers, and we got lots of ideas of ways we can help in the future.

What’s Happening in the Department?

WU Math faculty have been very busy over the last two years. Here are just a few of the activities some of our tenure-track faculty took part in this year. Actually many of the activities had to be left out as we ran out of room.

Kevin Charlwood (Chair)
- Attended the JMM in New Orleans, January 2011;
- attended the KS MAA annual Sectional Meeting at Baker University, March 5, 2011
- planned and attended the KME national convention trip to Harris Stowe State University in St. Louis, April 14 – 16, 2011;
- planned and attended the KME regional convention trip to Evangel University March 30 – 31, 2012.
- Serving on the national MAA Actuarial Education Committee since 2007. Coordinator for Washburn’s Faculty Development Program since 2008.

Sarah Cook
- Led workshop on “Game Show Mathematics” at Washburn’s Women in Science Day (with Jennifer Wagner and Hwa Chi Liang)
- Led workshops on "The Mathematics of Games" at Emporia State University's Sonia Kovalevsky Day (with Janet Sharp)
- Piloted the use of the computer system ALeKS in MA 103 Basic Algebra and MA 104 Intermediate Algebra
- Presented "Developmental Algebra in a Lecture/Lab Environment” at the Sectional MAA Meeting held at Washburn University
- Attended the Regional Kappa Mu Epsilon convention

Mike Mosier
- Presented a full day tutorial workshop in conjunction with the Drug Information Association (DIA) annual meeting, in Washington, DC, on June 13, 2010. The title of the workshop was “Clinical Statistics for Non-Statisticians.” The DIA is a global professional society for the pharmaceutical industry.

Pat Mower
- Served as Editor for math dept’s annual news letter, Slice of Pi
- Published a third book for her Math Out Loud series, this one is titled PreAlgebra Out Loud, published by Jossey-Bass,a division of Wiley, Inc.

Gaspar Porta
- Spent two months on a Sweet Sabbatical in Buenos Aires, Argentina working with colleagues there at the Paseo Colon Sede (part of the Engineering School) of the Universidad de Buenos Aires.
- Submitted two papers to journals for review as a result of this collaboration, and a third has already been accepted as a refereed presentation at an international conference in Tenerife, Spain. [Gaspar has recently come back from this conference with wonderful tales of his adventure in Spain!]

Hwa Chi Liang
- Earned tenure and was promoted to Associate Professor.

Jennifer Wagner
- Participated in the Washburn Faculty Colloquium on "Play, Puzzles, and Problem Solving" (fall 2011)
- Presented "Building Mathematical Community Using Course Wikis" with Donna LaLonde at the Kansas Association of Teachers of Mathematics conference (October 2011)
- Served as Vice Chair and Chair of the Kansas Section of the MAA (spring 2012-present)
- Wrote the paper "On the spectra of simplicial rook graphs" with Jeremy Martin of KU (summer 2012),
- Approved for tenure and promotion to associate professor (March 2013)

Janet Sharp
- Became tenure and Associate Professor 2013

Many faculty accomplishments were deleted due to lack of space. However, the math faculty continues to excel in teaching, service, and publications.
Pat Mower, PhD, Editor
Department of Mathematics and Statistics
Washburn University
1700 SW College Avenue
Topeka, KS 66621

WU Department of Mathematics & Statistics
Sheet for Alumni Information and/or Recommendation of Potential Student

PLEASE PRINT OR TYPE
Name: __________________________________ Year of Graduation from WU: __________
Address: __________________________________ Phone: (___) ______________________
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Employer or Business (address):
____________________________________________ Phone: (___) ______________________
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____________________________________________ Web URL: ________________________
News: (Tell us about yourself; recommend a potential student – name, address, something about her or him;
other news of interest or update your last entry.)
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