Pitt State Mathematics Department Newsletter

Special points of interest:

- Dr. Childers returns
- Two faculty have sabbaticals
- Three faculty receive teaching awards
- The number of math majors is currently 57 undergraduate and 31 graduate students.

Inside this issue:

Kaemmerling and	2
Wade Honored	
Davis picks up uke	2
PSU at KME Regional	3
KSMAA Meeting	3
Alumna at JMM	4
Study Abroad Trips	4
Picnic Pictures	5
Pre-Images	6
Math in Paraguay	8
Colloquium Series	8
Graduation pics	8
Student Published	9
Research Banquet	9
News Briefs	10
Christmas party	11
Math Honor Banquet	12
Faculty Updates	14
Alumni Highlight	21

Pittsburg State University College of Arts and Sciences

News from the Chair

We are on the verge of kicking off another academic year within the department. As you peruse this newsletter, you can see many of the exciting successes of our faculty and students from last year. We look forward to another successful year!

We have experienced personnel changes in the department again this year. Dr. Wade has left us to pursue opportunities in the great northwest. His wife Jessica completed her advanced nursing degree and took a job in Eugene, Oregon. The Wades are expecting a baby in the near future. We are certainly saddened by their departure; however, we wish them both the best.

We welcome Dr. Leah Childers back to fill Dr. Wade's position. This opportunity became possible thanks to some fortuitous timing. A position in the History Department came open at the same time so PSU was able to hire her husband, Dr. Chris Childers, as well. We are excited to have the Childers family back as part of the Pittsburg community and the PSU family. As we say, "Once a Gorilla, Always a Gorilla."



In addition to the personnel change, we have had more physical changes in Yates Hall as well. This summer the ceilings in the classrooms throughout the building were replaced. This has helped to freshen up the classrooms; but not much else has changed. If you happen to visit one of our classrooms, everything would feel pretty familiar (unless you happen to predate Yates Hall). There is some talk across campus about updating the furniture in our classrooms; however, a funding source has yet to been identified.

One of the most exciting "happening" within the department is the great influx of graduate stu-

dents. As you can see from the chart, we have nearly doubled our number of graduate students since 2014. One Issue 2016-2017

major contributing factor is the Higher Learning Commission's resolve to begin enforcing the expectation that instructors of college courses possess a master's degree. This has motivated many high school teachers to pursue a master's so they can remain gualified to teach dual-credit courses. We welcome these students and the increased vitality they bring to the department.

I hope you enjoy the rest of this newsletter and reading about the happenings within the department. If you have any news about happenings in your life, please feel free to let us know so we can pass the word on to others. As you can see from this newsletter, our retired faculty members are still active and drop in occasionally for a visit. We would welcome a visit from you as well if you ever happen to be back in Pittsburg. We would love to reminisce and to hear what's new in your life.



Mr. Kaemmerling and Dr. Wade Honored

GET INVOLVED

Congratulations to Mr. George Kaemmerling and Dr. Jeremy Wade. They were recently two of ten PSU faculty recognized by the Faculty Athletic Council and Intercollegiate Athletics for continued support and dedication to Pitt State student-athletes.

Want to help students attend conferences? Contact Dr. Tim Flood (tflood@pittstate.edu) for information about supporting student travel.



(Right) Athletic director Jim Johnson congratulating Mr. George Kaemmerling at the presentation of the award during the Feb 13 PSU Women's Basketball Game.

(Below) Mr. Kaemmerling along with other recipients of the award.





Join us on Facebook: Pitt State (Kansas) Math Alumni

Dr. Elwyn Davis Picks up the Ukulele in Retirement

Retired math professor Dr. Elwyn Davis purchased a soprano ukulele while he was on a retirement trip to Hawaii in 2010. Since then he has added to his ukulele collection with the jewel of his collection being a custom-made pineapple-shaped concert size ukulele, made by a college friend. Dr. Davis occasionally

brings one of his ukuleles up to the department to treat everybody. He also started the Pittsburg Ukulele Club and was featured in an article in the Joplin Globe which can be found at <u>http://</u> <u>www.joplinglobe.com/news/local_news/</u> <u>andra-stefanoni-ukulele-club-adds-bit-of</u> <u>-tropics-to-pittsburg/article_1761e267-</u> <u>b4da-52e7-b7ac-7fcd1d295a45.html</u>.



KME Regional Convention in Kearney, NE

Kappa Mu Epsilon, a national mathematics honor society, held a Regional Convention on April 1 and 2, 2016, in Kearney, Nebraska. The tradition of PSU's KME Chapter Kansas Alpha being wellrepresented continued as 3 undergraduate students and 2 faculty attended the convention. Dr. Scott Thuong and undergraduate student Georgette Searan served on the Awards Committee. The group was joined by Gorilla Vanessa Peach Williams, now a faculty member at Truman State University (KME Missouri Eta).

The KME tradition began at PSU when Kansas Alpha was the third chapter to be installed in KME. Re-

KSMAA Meeting

Pitt State mathematics faculty continue to be very active in the Kansas Section of the Mathematical Association of America (KSMAA). Dr. Tim Flood currently holds two offices: Historian and Coordinator of Section Liaisons, Dr. Cynthia Huffman is Public Information Coordinator, Dr. Leah Childers is Secretary, Dr. Jeremy Wade is cocoordinator of the Kansas Collegiate Math Competition, and Dr. Scott Thuong will be replacing Dr. Wade in that position.

The 2016 KSMAA meeting was held on April 8-9 in Hays, KS. Keynote speaker was Stephen Kennedy (Senior Acquisitions Editor of the Mathematical Association of America). Five PSU faculty members and nine students attended the meeting.

tired math faculty, Dr. Harold Thomas, served as KME National Historian, Vice-President, and President. Dr. Thomas won the prestigious KME George Mach Distinguished Service Award in 1997. The Kansas Alpha Chapter of KME is very grateful to Dr. Thomas for his support for student travel to conventions.

Kansas Alpha has a Facebook group called "Pitt State KME Math Honor Society" where information about the monthly local meetings and other events is posted. Feel free to send a Facebook request to join the group. There is a Facebook page for national KME as well.

2016 Faculty Presentations:

- Scott Van Thuong, Geogebra Applets for Ancient Indian Rope Geometry
- ◊ Bobby Winters, Newton and Kepler: Together Again

2016 Student Presentations:

- Mark Nichols, The Fibonacci Sequence, Its Derivatives, and Their Application in Nature
- ◊ Ian Dungan, Math Makes the Movies
- Rachael Sachs, Wallpaper Groups of the Baby Taj Mahal
- Sam Hardy, History of the Quadratic Formula





Dr. Scott Thuong, Landis Duff, Rance Schoenhals, Ms. Vanessa Williams, Dr. Cynthia Huffman, and Georgette Searan, at a 2016 KME Regional Convention in Kearney, NE.





Graduate student Sam Hardy presenting at the 2016 KSMAA meeting.



The Pitt State group at KSMAA2016.

Page 3

Pitt State Mathematics Department Newsletter

Page 4

Alumna Presents at National Joint Math Meetings

Upcoming Events

PSU Homecoming, Oct 8, 2016

PSU Fall Break, Oct 13-14, 2016

KATM, Maize, KS, Oct 14, 2016

Joint Mathematics Meetings, Atlanta, GA, Jan 4-7, 2017

2017 Spring Semester Starts Jan 17, 2017

KSMAA, Lawrence, April 28-29, 2017

KME National Convention, TBA

PSU Math Relays, April 4, 2017 The largest annual mathematics conference, the Joint Mathematics Meeting or JMM, during which several mathematics professional organizations, including the American Mathematical Society and the Mathematical Association of America meet,



occurs each January. Typically several PSU professors are in attendance and/or speaking at JMM. The 2016 JMM was held in Seattle, WA, with over 6,200 attendees, and Professor Huffman was joined by former PSU graduate student Srividhya Balaji from Chennai, Tamil Nadu, India. Sri, who is also a professional singer of Carnatic music (classical music of Southern India), spoke on "Exploration of Quotient Spaces and Group Actions with Application to Visualizing Music." Sri's presentation was based on her Masters research under the direction of Dr. Scott Thuong. In particular, she looked at connections between topology and Carnatic music.

Professors Participate in Study Abroad Trips

Two mathematics professors participated in PSU Study



Abroad trips this past year. Dr. Cynthia Huffman accompanied the Honors College on a two-week European trip that included Switzerland, Italy, the French Riviera, and France. She was able to gather some information



for the History of Math course. Dr.

Yaping Liu participated in the annual PSU trip to South Korea. PSU has three sister

schools in Korea which help subsidize this amazing annual trip for PSU students, employees, alumni, and friends.







Pre-Images

The next two pages contain a collection of pictures from the "archives". How many can you name and date? (Answers at bottom of next page.)



3

Thanks for the Support!

A big thanks for donations made to PSU in support of the Math **Department and its** programs. These generous gifts have been used to support travel by students and faculty to conferences, as well as student scholarships. For summer 2016 and the 2016-17 academic year we awarded \$44,000 in undergraduate scholarships and \$39,085 in graduate scholarships.

2

4







1

Picture 1: Picture of Mathematics Department Honor Banquet in 2004. Pictured include Scott Cichon and his parents, Dr. Hazel Coltharp, Karen Davis, Jean and Dr. Bobby Winters, Dr. Gary and Fran McGrath, Dr. Yaping Liu, Mrs. Terry Martin, Sara Davis and Ben Davis.

Picture 2: Dr. Gary McGrath at his retirement party in 2009.

Picture 3.: Math Department Chair Dr. Helen Kriegsman, 1971 Kanza yearbook photo.

Picture 4: 1941 Yearbook picture of Mathematics Department. Standing: L.E. Curfman, Frank C. German, W.H. Hill. Seated: R.W. Hart, J.A.G. Shirk—Head of Dept., R.G. Smith.

Picture 5: The Mathematics Club picture from the 1925 yearbook. Officers for the first semester were Harry Zimmerman (President), Nellie Amrein (Vice-President), Ina Dix (Sec.-Treas.), Violet Dahlstrom (Seargeant), Percis Fulton (Reporter). Officers for the second semester were Ina Dix (President), Hildred Clark (Vice-President), Albert Bourland (Sec.-Treas.), Lavon Cranston (eargeant), Doris Rush (Reporter). The purpose of the organization was "to promote an interest in the science of mathematics, and to better prepare ourselves as mathematical leaders."



Pitt State Mathematics Department Newsletter

Math in Paraguay

This past spring marked the 10th anniversary of the PSU in Paraguay program. Dr. Bobby Winters is the director of this program, in which faculty members teach PSU general education

courses in Asuncion, Paraguay. In addition to Dr. Winters, several math faculty have taught in Paraguay, including Dr. McGrath, Dr. Dobrowolski, and Dr. Huffman. More information on the PSU in Paraguay program, including a video of the 10th anniversary celebration can be found at http://www.pittstate.edu/office/ graduate/pittsburg-state-university-in-paraguay-program.dot. The top picture is Dr. Winters speaking at the anniversary celebration. The two side pictures are students from Dr. Huffman's 2015 Paraguay class.

PSU Mathematics Colloquium Series

For many years now, the Math Department has sponsored a colloquium series. Dr.

Yaping Liu is in charge of scheduling the colloquia. The following were the colloquia for the 2015-2016 school year. To schedule a colloquium or for more information, contact Dr. Liu at yliu@pittstate.edu.

PSU PARAGUAY 10TH ANNIVERSARY CELEBRATION

Pittsburg State University

Pittsburg

irg

sity

urg

sity

Pittsburg

State

Pittsburg

State University

ttsburg

ersity

Pittsburg

State University

- Dr. Cynthia Huffman & Dr. Scott Thuong, PSU: Geogebra Applets for Ancient Indian Rope Geometry, October 22, 2015.
- Dr. Bobby Winters, PSU: Newton and Kepler: Together Again, January 26, 2016. •
- Dr. Cynthia Huffman, PSU: Original Sources for Teaching Mathematics, February 23, 2016. •
- Rachael Sachs, PSU: Crystallographic Groups of the Baby Taj Mahal, April 21, 2016. •
- Sam Hardy, PSU: A History of Quadratic, Cubic, and Quartic Equations, April 26, 2016. ٠
- Joe Bullock, PSU: Topics in Algebraic Topology, April 28, 2016. ٠
- Ian Dungan, PSU: The Curious Case of Coded Communications, June 28, 2016

Graduation Pics (December 2015 and May 2016)











Graduate Student Shares Research



Graduate student Rachael Sachs found interesting mathematics while doing summer mission work in India. Rachael visited the tomb of I'timād-ud-Daulah, a Mughal mausoleum in the city of Agra, and took pictures of the symmetry patterns throughout the structure. Her research , *Wallpaper Groups and the Baby Taj Mahal*, was presented at the PSU Graduate Research Colloquium in April. Her research was also submitted to the James B.M. Schick Midwest Quarterly Graduate Studies Best Essay contest and was recognized as a top contender. In addition, her paper was accepted for publication and is expected to be published in the Winter 2017 edition of the *Midwest Quarterly*.

Math at the PSU Graduate and Research Banquet

Top and around clockwise: Ashlee Hashman and her husband, Will Zimmerman and his mother, Rachael Sachs and her husband, and Sam Hardy and his grandparents.

Awards given were:

- Excellence in Research—Rachael Sachs
- Excellence in Scholarship—Dalal Almutairi
- Excellence in Teaching—Ashlee Hashman & Will Zimmerman
- Excellence in Professional Service—Sam Hardy





Alumni Present to Students



Dusty Peterson spoke to students about being an actuary.

Alumnus Derek Holmes speaks at PSU High School Math Honor Day.





PSU CAS 2016 Excellence in Teaching Award

Congratulations to Dr. Cynthia Huffman for receiving the 2016 PSU College of Arts & Sciences Excellence in Teaching Award. This was the second time that Dr. Huffman has received this award. Past winners of the award also include other department members: Dr. Ananda Jayawardhana, Dr. Karla Childs, and Dr. Hazel Coltharp.

KME Pictures

Dr. Scott Thuong getting help from student Georgette Searan in presenting MathMagic at a local KME meeting.





April 2016 Kappa Mu Epsilon meeting.

2015 Math Dept Christmas Party



Dr. Jeremy Wade, Georgette Searan, Dr. Harold Thomas, and Dr. Yaping & Lirong Liu.



David & Carol Newcomb, former math chair Dr. Helen Kriegsman, and PSU President Dr. Steve Scott.



Dr. Tim & Chris Flood



Fran & Dr. Gary McGrath

Page 12

Math Honor Banquet pictures



















Math Honor Banquet pictures continued







Dr. Leah Childers

Three years ago when I left PSU, I never dreamed I would have the opportunity to return. You see, I left PSU not because I was unhappy but because after three years there had been no opening in history for my husband. We got married thinking we were going to both be high school teachers and then we kept going to school, over and over again. Our dreams changed as we learned more and we both realized that teaching at the collegiate level was what we were supposed to do, although in widely different disciplines. We supported each other through years of graduate school and then came the search for jobs! This was the hard part! I loved my job at PSU, but my husband was still looking for a job at the level he desired. When we were given the op-

portunity to both teach at Benedictine College in Atchison, KS we couldn't turn it down. It was hard to leave though—in three short years we had become gorillas! I never dreamed that we would ever get to return...it would take a miracle...two jobs in our areas available at the same time and both departments would have to want to hire us! The chances were just so slim. That's why today, I pinch myself, hardly believing it is true! Two jobs became available at the same time and we are overjoyed to be back in Pittsburg.

The highlight of the three years I've been away is by far my two daughters: Elyse (3) and Bridget (1). It is a joy watching them discover the world, ask questions—sometimes too many, and live each day with enthusiasm. Elyse loves seeing "Gus" around town and playing outside...oh and she counts to 15, writes her name, and can "read" Goodnight Moon. On a professional level I have had the opportunity to teach a wide variety of classes, take students to conferences, mentor students considering graduate school, and perhaps my favorite, supervise countless undergraduate research projects. I've also wrapped up some research projects including a book chapter about mapping class groups.



Dr. Karla Childs

It's been another very active year for me. As always, I love working with the Graduate Teaching Assistants and our Math Learning Community students in Freshman Experience. They are exceptional young adults with so much excitement for learning and for the future.

October 15th was the 16th annual Math Honor Day at PSU. I feel honored to coordinate a day that rewards excellent secondary math teachers as well as students excelling in math from this area. This year's Outstanding Math Teachers were: Alisha Jones (Bronaugh), Roger Gossen (Kremlin-Hillsdale) and Cherryl Delacruz

(Highland Park). Check out the permanent plaque in the Math Department complex that lists the names of all winners!

This year I had the opportunity to travel "coast to coast" to learn and share current research and practice findings with the community of other mathematics educators. In January, I went to the twentieth annual AMTE Conference in Irvine, California and during June I traveled to Bangor, Maine to participate in the first MAA CoMInDS Summer Workshop.

On a personal note, I made several visits to see my kids in LA and during spring break I was lucky enough to hike the beautiful Grand Canyon with family.



Dr. Hazel Coltharp

Common Core/No Common Core! Two years ago CC looked like a foregone conclusion . . . now, well, depends on where you're living! No matter what's in the news – Common Core, STEM, ?, there's no escaping that quality Gorilla Math Teachers are making the difference in middle school and high school math classrooms. Even though I can't say that "one of my children may be in one of my student's classes" (and it may be quite a while until I can use the 'grandchildren' card), I feel very encouraged and hopeful because of the quality of our graduates!

As I've noted in all of the past newsletters, we continue to be a major supplier of area secondary math teachers. . . this past year, we had 13 candidates certifying for

either middle level or high school math, and all of them have jobs for next year; this also includes two graduate students who finished their master's degrees and were hired at Joplin and Carl Junction school districts. Other lucky school districts include Blue Valley, Gardner-Edgerton, Cherryvale, Basehor-Linwood, Neosho, Herington, Clarksville (TN), and our own PSU Math Department (Dr. Childs just loves our BSEd graduate teaching assistants!). We're still trying to keep up with technology – classroom set of iPads ready for checkout on a daily basis in addition to the iPads that candidates have been using during their last year are helping. I have to admit, though, that I now have more memory on my phone than I do on our latest iPads, so I'm recording, during observations, with my phone – feeling quite up-to-date and techie! As a department, we've been examining our data and the latest cut score for the Praxis content score (which increased significantly when it went totally on-line) and are considering changing our BSEd major to a major with 2 *emphasis* possibilities – *secondary* (the familiar 6-12) and *middle lev-el*. By making sure that all of our candidates have a field experience at the middle school level, a candidate could switch their emphasis as late as graduation paperwork deadline, from secondary to middle lev-el. We're also excited to have Dr. Leah Childers return to the department and to the BSEd ranks – we will admit that we like Emporia State grads and can learn something from them too J!

Personally, I mentioned that I no longer had children at the K-12 level as my son, Benjamin, has completed his first year as a future Gorilla Math Teacher at Pitt. He also survived having his mom for one of the three required classes from her, and survived Calc II (thank you to Mrs. Martin for having a kind grading scale!). My daughter, Jean, is still enjoying teaching math at MSSU; she and I talk "shop" since we both teach the elementary math content and have enjoyed going to conferences together. Although, many of her classes are on-line, which is good for her – she is much faster on a cell phone than I am! She's also within a year of finishing the classwork for her doctorate at UMKC. My husband, Glenn, is



still Vice President of Academic Affairs at Crowder, but very much involved, at the state level, with Missouri teacher preparation. I love keeping up with all of you; if you're not on Facebook (and joined Gorilla Math Teachers), please update via email – you know the convention for Pitt email (or can always find it on the web page) – <u>hcoltharp@pittstate.edu</u>. I love the interaction between competent, committed, and caring secondary math teachers on Facebook discussions – I really enjoy learning from others (including my former students)! I hope all of you are happy and healthy and spreading the gospel of mathematics!

Graduate students Ashlee Hashman and Rachael Sachs with awards they received at the 2016 Graduate and Research Award Banquet.



Dr. Tadek Dobrowolski

This has been a very quiet academic year for me. I was fortunate to acquire a very good College Algebra w/Review section in both semesters, especially in Fall Semester 2015. Many students passed Basic Skills testing on the first day the exam was given. Those students were quite dedicated to succeed. This was apparent when they sat as close to the board as possible – typically the seats in the back are crowded but that wasn't the case this time. I also enjoyed teaching the trig sections. I made each of the students present a Pythagorean Triple so that we could collect k-triples, which were independent of

each other, where k was the cardinality of the students in a given section.

About my international trips: doing research in Warsaw, Poland and attending the 1st Pan Pacific International Conference, Zhangzhou, China.

It is now a tradition that I spend Christmas break in Warsaw, Poland, doing joint research with my colleagues at Warsaw University, University of Cardinal Wyszynski, and the Mathematical Institute at the Polish Academy and Sciences. I have collaborators in those three institutions and while there we met daily for 8-10 hours exchanging math ideas, which were either a result of our discussions or thoughts made while at home. Actually, the meeting place is the Mathematical Institute located in the center of the city. In the middle of the day (2:00 pm) we have an official coffee break, which also concentrates on math and lasts up to 45 min. Before Christmas, each institution prepares a Christmas Vigil, which is similar to the American Christmas party. Each institution has special funds set aside for this and prepares a real party with lots of different foods (no meat!), wine, and desserts. For the last few years I was unable to attend Christmas parties at PSU but instead I attended 3 Christmas parties each year in Warsaw!

China is like a new, interesting and different chapter in one's life. It is a world of motorcycles – Chinese personal cars; a world of smartphones – every teenager and college student walks the streets reading at least two smartphones at the same time! It is a world of skyscraper forests— the place to live. There are lots of people everywhere and families with just one child. Everyone talks very quickly and loudly. Everyone is reading books, computers and smartphones with eyes practically touching the papers/screens. The conference I attended there was great and had twice as many helpers (college students) as participants, forming human halls so that the participants could walk those halls from one lecturing room to another, from one building to another, from lecturing building to cafeteria distanced a mile apart. At the airports, I noticed border security would close the passport control area within seconds if an incident occurs (that was what I witnessed upon my arrival to Xiamen airport). I also witnessed Chinese curiosity about white people, and children terrified when they saw a white person. Finally, I encountered problems in communicating with the Chinese; they used their smartphones to translate my English into Chinese. Then they would put their Chinese answer into the smartphone which translated it into English, and then they show the screen with the answer to me. We had lots of funny experiences with that! The funniest, most random experience I had while there was me trying to exchange dollars into yens in a maternity hospital! The building looked like a bank! One more: their balconies are like our closets; there they keep their clothes. It was definitely a different and interesting experience to visit China!

Have a nice 2016/17 academic year!



Dr. Cynthia Huffman

Math is cool and plays a major role in our lives! And it's exciting to learn and teach mathematics. Last fall I was on sabbatical and my sabbatical project was to research influential European mathematical books from the 15th through 18th centuries and to create materials for teachers to include history of math information in lessons. I was awarded a research fellowship for the Linda Hall Library in Kansas City and spent six weeks at the library working in their world renowned rare book room. I took about 8,000 pictures and looked at nearly 100 books. It was such an incredible experience! If you're interested, you can watch my fellow lecture at https://wimeo.com/142256343. Since then I've been work-

ing on some research articles based on information that I learned. I also have lots of ideas for student projects based on using original sources.

Speaking of using original sources, I was happy to learn that I was selected to participated in a multi-year NSF grant project called TRIUMPHS (Transforming Instruction in Undergraduate Mathematics via Primary Historical Sources). I'll be attending a workshop in the fall and then classroom testing materials. It ties in nicely with my sabbatical project, so I hope to also be designing some materials for the project, as well.

I continue to split my work time among teaching, scholarly activity, and service. Teaching is my favorite part and I try to make learning mathematics fun and relevant for my students. It was a great thrill to be awarded the PSU College of Arts & Sciences Excellence in Teaching Award in the spring. I love my job and working with such wonderful students and colleagues!

I was fortunate to be able to participate in the PSU in Paraguay program again and to teach a course in Paraguay last fall. It was a great learning experience to live in another country for three weeks. The experience definitely makes me more empathetic to international students who are studying away from home and familiar surroundings, especially in a country in which people speak a language other than your native tongue.

Service-wise I continue as the public information officer/webmaster/newsletter editor for the Kansas Section of the Mathematical Association of America. I am continuing my second term as a member of the Board of

Editors for the MAA Classroom Resource Materials series, and have been asked to serve an unprecedented third term. Typically we are sent a book manuscript to review every four to six weeks. It takes a lot of time, but I feel it is a privilege to serve on a national board, plus it is an important job to decide what gets published and what does not, and to guarantee the quality of materials published by the MAA. In addition, I have found some of the manuscripts very interesting and have learned a lot of new things that can then be passed on to benefit PSU students in the classroom. This summer I was asked to become an Associate Editor for the online MAA journal *Convergence*, which publishes articles connecting teaching and history of math. Closer to home, I am a member of the Steering Committee of PSU's eLearning Academy, whose mission is to provide professional development to PSU faculty for designing quality online courses, and I have been serving as an online course reviewer for PSU, reviewing several courses each year.

I love hearing what all of you are doing, whether it be through Facebook, LinkedIn, or some other means. (In case you didn't know, there is a Facebook group called "Pitt State (Kansas) Math Alumni".) It is wonderful to hear how well so many of our alumni are doing in their careers and personal lives. Please continue to keep in touch and to stop by the department anytime you are in town. Once a Gorilla, always a Gorilla!



Retired department chair, Dr. Helen Kriegsman, celebrated her 92nd birthday.



Dr. Ananda Jayawardhana

During the spring semester, I spent a sabbatical at the University of Kansas Medical Center (KUMC). I learned Bayesian statistics and programing during the sabbatical. I have prepared a manuscript with a KUMC faculty member which is ready to be sent for publication. I will be teaching a course for (KUMC) this fall. I published a paper titled "Lower Tolerance Bounds in Accelerated Life Testing for the Weibull Distribution." Another paper I submitted with a group of nursing researchers is in the final review for publication.

I attended the Biostatistics Symposium at KU and a short course during the symposium. I attended the Joint Statistics Meeting (JSM) in Chicago and presented a paper on flipping a class. At the JSM, I met our former students Charles Harrison who earned a MS in statistics and now works for a company in San Diego and Shiruo Liu who is in a PhD statistics program at San Antonio, TX. Our former students Dr. Ning-Ning Wang and Dr. Sungwook (Peter) Kim have faculty positions now.

I am serving as the Vice President of the national statistics honorary society Mu Sigma Rho. I am the chair of the American Statistical Association Council of Chapters Governing Board this year. I coordinated the local statistics poster competition. I am a co-chair of the Tilford Conference on Diversity and Multiculturalism to be held in Pittsburg on October 24-25, 2016.

I continue to teach the same courses but this summer I taught a business statistics course for the Kelce College of Business. I plan to add more Bayesian methods to my future classes.



Mr. George Kaemmerling

It seems like summer break went faster than usual this year. Because of weather conditions we started our garden on the last day of February. We planted brussel sprouts, cabbage, and broccoli. The latter produced an abundant crop. We also had a good onion crop. Tomatoes were affected by blossom end rot.

This past academic year I attended many games to show support for our student athletics. It is wonderful that our women's sports continue to become more competitive. I attended the welcoming home of the national champion PSU women's track team. I received an award from the PSU Athletic Council for my support of softball studentathletics.

Team Threads created some new PSU shirts for me to wear this year. I unveiled them at the WCWS division I softball tournament in Oklahoma City in June. Three fans took pictures of two of the shirts. Wearing the shirts there gave us some exposure to fans from all over the nation.

I completed several home improvement projects this summer. My list is getting shorter.

I look forward to another successful school year.



Dr. Yaping Liu

In the past year, the most memorable event in my life was a two-week trip to South Korea. My family and I were part of a PSU delegation to South Korea in May. Together with a few faculty members and over a dozen students, we visited three sister universities, had many exciting field trips, and tasted all kinds of local food. But what my daughter had enjoyed the most were shopping trips to a few popular markets in Seoul and a visit to Everland, one of the largest theme parks in Asia.

Besides teaching a class and other duties, most of my time in the summer is spent on a program to develop laboratory exercises for students in the newly implemented class

Engineering Calculus II. This is an interdisciplinary effort and supported by a PSU summer teaching innovation grant. I'm working with two faculty members from Technology to develop two parallel series of projects, one for students in Mechanical Engineering Technology and the other for students in Electronics Engineering Technology. The open source mathematical software SageMath is used to perform the mathematical operations involved in the projects. These projects serve as examples for real world applications of the relevant mathematical techniques. Students will learn how to use SageMath to solve realistic and meaningful problems in their field of study. I have learned a lot myself in the process.

I'm having a lot of service responsibilities. For many years I have been serving as the Colloquium Coordinator of the Math Department (organizing colloquium talks), the Graduate Coordinator (responsible for preparing and administering Master's Comprehensive Exams), co-faculty advisor of the PSU Actuarial Society, faculty advisor of the PSU Chinese Culture Club, Supervisor of the Actuarial Exam Test Center at Pittsburg (making arrangement and serving as the proctor for students taking the exam MLC), and others. It's my pleasure to be able to serve the students and the university.

As the departmental graduate coordinator, I'll again report on the number of master's students we have produced. This number varies year to year. Since summer 2015, seven graduate students have successfully finished their classes and research, passed the master's comprehensive exams, and received their master's degree.

That's all for now. Talk to you next year, if not earlier



Mrs. Terry Martin

The 49th annual Pittstate Math Relays is scheduled for April 4, 2017. We consistently have over 50 schools with approximately 900-1000 students participating.

I also continue to serve as faculty advisor for Campus Christians and as a board member for Countryside Christian School.

> Retired mathematics professor Harold Thomas, his wife Alice, and other Gorillas enjoyed Pitt State Day at a Royals game in Kansas City.





Mr. David Newcomb

The 2017 spring semester will mark 10 years that I have been a full-time instructor in the Mathematics Department at Pittsburg State University. It continues to be a challenging and fulfilling experience. Preparing for the variety of courses that I teach (Quantitative Reasoning, Mathematics for Elementary Education, Calculus I, and Mathematics Education Seminar) keeps me extremely busy. But it is a good busy. In addition, the nature of the variety of students is always interesting. The students are the heart of PSU and they keep everything and everyone active.

This summer my wife and I continued some of our standard activities. We completed a few projects around the home. We went on a few camping trips. We took care of a nice garden with green beans, potatoes, tomatoes, peppers, okra, and squash. There are still a few cantaloupes and watermelons that are doing well. We attended a family reunion in Ponca City, Oklahoma. We got in several bicycle rides around the area. We will be helping with the 2016 Gorilla Century over Labor Day weekend.

I hope everyone has a wonderful 2016/2017 academic year at PSU.



Dr. Scott Thuong

This year I've had the opportunity to teach a wide variety of courses. In addition to Elementary Statistics, Calculus I, and Topology, I've taught Introduction to Mathematical Thought, Discrete Structures, and Analysis I. We had a large group of students in Analysis I this summer – 14! Most were area teachers working on their master's degrees, and they were a joy to teach. I also directed a couple of departmental honors projects and Mr. Joe Bullock's master's research project on algebraic topology.

A paper that I submitted last year, "The bounding problem for infrasolvmanifolds," was published in the journal Topology and it's Applications, and I just

submitted another article "Metrics on 4-dimensional unimodular Lie groups." Also, Dr. Huffman and I are thinking about a sequel to our MAA Convergence article "Ancient Indian Rope Geometry in the Classroom".

I've begun to co-sponsor the KME/Math Club meetings with Dr. Flood. Thanks to all those who volunteered to give talks at our monthly meetings! In April, Dr. Huffman and I took 3 students to the North Central KME Regional conference held at the University of Nebraska – Kearney. Starting this year, I will cocoordinate the Kansas Collegiate Math Competition with Dr. Mat Johnson at KU. Also starting this year, I will be serving as department webmaster.

I wish everyone a wonderful 2016-2017 academic year!



Dr. Bobby Winters

I continue to serve as Associate Dean of the College of Arts and Sciences. I will still be teaching three classes a year in the Department of Mathematics, but the bulk of my time is spent in Grubbs Hall rather than Yates. I've been able to do a little more math this past year in learning the mathematics of predicting the position of objects orbiting the sun.

Alumni Highlight Where we "brag" on one of our former students!

The alumnus highlighted in this edition of the PSU Mathematics Department Newsletter is Coach Russ Jewett. Originally from Olathe, Kansas, Coach Jewett received a Bachelor of Science with a double major of Mathematics and Computer Science from PSU in 1983, and then earned a Master's degree in Physical Education.

Russ is currently the Head Men's and Women's Track & Field and Cross Country Coach, as well as Senior Associate Athletics Director at Pittsburg State University. The awards Coach Jewett has received include being named MIAA Coach of the Year a record total of 35 times (among cross country, indoor track, and outdoor track). National awards include NCAA Division II National Women's Indoor Track Coach of the Year - 1995, and most recently, NCAA Division II National Outdoor Women's Track Coach of the Year - 2016. When asked if he uses math and/or problem solving skills in his job, Russ answered, "In figuring true distances run when athletes run wide on a curve in a race; In calculating split times for distance runners in races; In calculating optimal paces for runners based on their estimated oxygen uptake values or on race pace; To predict race pace ability from training results; To optimize the length of the curves and straights when helping to design our new indoor track; In laying out



PSU Mathematics Alumnus and award winning cross country and track and field coach, Russ Jewett.

throwing sectors; In coaching field events (angles of takeoff, landing); In designing spreadsheets to track scholarship allocations, budgeting, etc. Our sport is all about numbers!"

Coach Jewett shared the following advice for students, "I love my job and working at Pitt State ... 90% of the time, it doesn't feel like a job or work (I didn't use math to arrive at that number). Advice for students - prioritize your academic work, AND get involved in campus clubs, teams or organizations. A balanced experience better prepares you for life after college. My experience at Pitt State as a student and as a coach has been amazing. I was extremely blessed to have great professors when I was a student, and I'm blessed to be able to work with so many outstanding people not only in the Athletic Department but all over campus."

Mathematics Department Pittsburg State University College of Arts and Sciences

224 Yates Hall Pittsburg State University 1701 S. Broadway Pittsburg, KS 66762

Phone: 620-235-4400 Fax: 620-235-4429 E-mail: tflood@pittstate.edu http:// www.pittstate.edu/ department/math/



The PSU Mathematics Newsletter is published once a year. The newsletters are archived on the department webpage at http://www.pittstate.edu/department/math/

If you have anything to be included in the newsletter, please send it to cjhuffman@pittstate.edu

Join us on Facebook:



Pitt State (Kansas) Math Alumni

Page 21