Pitt State Mathematics Department Newsletter

Special points of interest:

- Alumni win awards
- The number of math majors is currently 39 undergraduate and 12 graduate students.

Inside this issue:

51st Math Relays	2
PSU at KME National	3
Gorillas finalists for national award	3
Pintar Awarded Gold	4
Alumni Visits	4
Picnic Pictures	5
Pre-Images	6
MOKAN pictures	8
Alumna recognized	9
Prof on CTLT Poster	9
Christmas Party	10
Math on Facebook	11
Colloquium Series	11
Colloquia Pics	12
Graduation Pics	13
Awards Banquet	14
KSMAA Meeting	16
KME Pictures	17
Math Honor Day	18
Student recognized	18
Faculty Updates	19
Alumni Highlight	25

Pittsburg State University College of Arts and Sciences

News from the Chair

Welcome to another exciting year! As you read through this year's newsletter I am sure you will be impressed by all of the activities within the department. One major accomplishment was the successful hosting of the Kansas Section Meeting of the Mathematical Association in March. We had nearly 75 students and faculty from across the state in attendance. We were also very proud of the success of our students in the Kansas **Collegiate Math Competition** held in conjunction with the section meeting.

Over the summer, the department went through a significant change. After over 50 years, we have finally replaced the tablet arm desks throughout Yates Hall with new ta-

and functionality. The department is grateful for the support of the Dean and the central administration for making this improvement within the building.

For those of you still wanting to reminisce and remember Yates Hall as it was when you were a student here, we still have the tablet arm desks in 225 and 226. We were simply not able to get an adequate number of students in these classrooms if we replaced the desks with tables. Issue 2019-2020

The major personnel change for the upcoming year is Dr. Leah Childers' leave of absence. She requested a leave for this academic year to pursue the possibility of working full-time as a mathematician for Eureka Math. We wish her the best in this endeavor but would also welcome her return.

As we share the news from within the department, we would love to hear from you as well. 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, we had several alumni return to the department to share their experiences with our students. We would welcome a visit from you as well if you ever happen to be back in Pittsburg.

bles and chairs for the students. This has resulted in a great improvement of student comfort

> Students enjoying the new tables and chairs in Yates 216.



Pitt State Mathematics Department Newsletter

51st Annual PSU Math Relays

GET INVOLVED

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









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

Clockwise from top left:

PSU alumnus David Main getting test administration instructions from Mrs. Terry Martin; high school teachers Chad Hays (Uniontown), Alan Shinn (Uniontown), and Deanne Bloesser (Christian Learning Center, Ft. Scott) waiting for results; students from Chanute enjoying the beautiful spring weather, taking a break between tests and talking strategy; and high school students taking a test.





KME National Convention in Frostburg, MD

Kappa Mu Epsilon, national mathematics honor society, held a National Convention on April 11 - 13, 2019, in Frostburg, Maryland. The tradition of PSU's KME Chapter Kansas Alpha being represented at KME conventions continued with Dr. Leah Childers and Dr. Cynthia Huffman attending.

The PSU chapter of KME, which is called Kansas Alpha, has a long history going back to 1934 when we were the 3rd chapter in the country installed into KME. More than 2000 Pitt State students have been inducted into KME over the years.

Several faculty members have served national offices with KME, starting with J.A.G. Shirk, who was the second National President of KME and also served as Secretary. Dr. Ron G. Smith served as Vice-President (1957-1961) and Dr. Helen Kriegsman was Editor of the Pentagon journal (1965-71). Dr. J.D. Haggard was Historian (1963-1967). Dr. Harold Thomas served as Historian, President-Elect, and President. He received the most prestigious award granted by KME, the George R. Mach Distinguished Service Award, in 1997. Also, Dr. Thomas and Dr. Huffman each served as Regional Directors for 8 years, and Dr. Huffman served as Treasurer (2007-2015). PSU currently has 2 faculty members on the KME Executive Council: Dr. Leah Childers is President-Elect and Dr. Cynthia Huffman is Historian. In addition, Gorilla alumna Vanessa Williams (Truman State University) serves as KME Social Media Director.

The Kansas Alpha Chapter of KME is very grateful to Dr. Thomas for his generous 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 request to join the group. There is a Facebook page for national KME as well.





Dr. Childers during the National Council meeting.



Students participating in Dr. Huffman's workshop, *Maya Geometry: Verification of a Right Angle*

Gorilla Teachers State Finalists for National Award

Two mathematics alumni are 2019 Kansas State Finalists for the Presidential Awards for Excellence in Mathematics and Science Teaching . According to the Kansas State Department of Education, "The Presidential Awards for Excellence in Mathematics and Science Teaching are the nation's highest honor for mathematics and science teaching. They are presented to educators who show a high degree of knowledge, innovation, skill and leadership. Elementary and secondary educators are recognized in alternating years. This year, secondary educators are being recognized. Kansas had seven mathematics nominees and eight science nominees. Each of the state finalists received a \$500 cash award and will now compete for a national finalist title. Two educators from each state, one in the area of mathematics and one in science, may be named national finalists. Each of the national finalists will receive a \$10,000 award. The two Gorilla math state finalists are Ryan Darst, Shawnee Mission West High School, and Luke Henke, Columbus Unified High School.

Page 3

Pitt State Mathematics Department Newsletter

Alumnus Receives Award

Upcoming Events

PSU Fall Break, Oct 10-11, 2019

PSU High School Math Honor Day, Oct 17, 2019

PSU Homecoming, Oct 19, 2019

Joint Mathematics Meetings, Denver, CO, Jan 15-18, 2020

2020 Spring Semester Starts Jan 21, 2020

KSMAA, Benedictine College, Atchison, KS, April 4, 2020

PSU Math Relays, April 7, 2020

KME Regional Convention, Pittsburg State University, TBA

PSU Math Banquet, April 26, 2020 Dr. Adam Pintar was recently awarded a Gold Medal from the National Institute for Standards and Technology (NIST) for his research in statistics. Adam earned two degrees from Pitt State (BS and MS in mathematics) before earning two more degrees from Iowa State (MS and PhD in statistics). He has been a Mathematical Statistician with NIST's Statistical Engineering Division since 2010. Dr. Pintar was featured as the "Alumni Highlight" in the 2011 edition of the PSU Math Department newsletter.



Alumni Return and Speak to Department

During the spring semester, the department was fortunate to have two alumni return to campus and speak about their careers.

First, on March 19, Dr. Emily Walters, PhD and MD, spoke on *Machine Learning in the Operating Room*. Dr. Walters is a Resident Research Scholar in the De-



partment of Anesthesiology and Perioperative Medicine at UCLA. She talked



about research to apply machine learning in the operating room in order to predict hypotension during surgery 15 minutes before its occurrence in order to take pro-active measures and save lives. She also discussed careers in data science and how valuable

her mathematics degree from PSU has been.

Next, on April 18, Andrew Buchholz, visited campus with 2 co-workers from The Research and Analysis Center of the US Army - Fort Leavenworth (TRAC-FLVN). Students were introduced to career positions and paid summer internships with TRAC and other government agencies. Then a sample problem was presented and students brainstormed about



how they would approach it. The picture to the right shows Mr. Buchholz explaining how he and his group handled the scenario when it was given to them this past year.

Page 4

Annual PSU Math Picnic Pictures





















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.)

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 2019 and the 2019-20 academic year we awarded \$32,200 in undergraduate scholarships and \$5,850 in graduate scholarships.



Picture 1: Dr. Yaping Liu presenting at the October 2010 KME meeting.

Picture 2: Dr. Ron G. Smith, Math Department head, from the 1960 Kanza yearbook.

Picture 3: Dr. Don Hight in the 1950 Kanza yearbook, as a freshman at Kansas State Teachers College, Pittsburg.

Picture 4: 2010, Math GA's, Emily Walters, Jason Knight, Christine Wilson, Luke Henke, Timothy Mcvey, Karalyn Gibbs and Erin Kellogg, serenading Dr. Cynthia Huffman for her birthday.

Picture 5: 1993 KME National Convention, Niagara Falls, Dr. Bobby Winters with students—Qian Li, Mitch Richling, Jeri Lott, Barry Smith, Shawn Spickert-Fulton, James Wiske, Eddy Kuo, Thein Maung, and Jef Simamora.

Picture 6: Kappa Mu Epsilon (Math Honor Society) first convention, April 1933, Tahlequah, OK, the PSU Chapter (KS Alpha) was the third KME chapter to be installed and PSU math department head J.A.G. Shirk was the 2nd national president of KME. He is in the upper right back of the group picture.





Pictures from MOKAN (Affiliate of the National Council of Teachers of Mathematics) meetings



Clockwise from upper left: MOKAN President Dr. Scott Thuong, PSU, presenting an interesting problem; MOKAN Vice President Rachael Sachs, Girard High School, making an announcement; MOKAN members at the April meeting; Dr. Elwyn Davis, retired PSU, giving some history of MOKAN; Laura Rawlins, Riverton Middle School, presenting *Apps, Tips, and Tricks for going paperless in the secondary math classroom*.

Alumna is recognized

Dr. Margaret Mohr-Schroeder is an Associate Professor of Mathematics Education in the <u>University of Kentucky</u> <u>Department of STEM Education</u>, where she is also the Associate Dean of Clinical Preparation and Partnerships within the <u>University of Kentucky College of Education</u>. Dr. Mohr-Schroeder enjoys researching pre-service teacher Mathematics Education, Mathematics Knowledge for Teaching, and Assessment.

In the last year, Dr. Mohr-Schroeder has mentored 2 undergraduate research students. When asked about her role as a mentor, she replied, "I love working with undergraduate students! I love the fresh and innocent per-

FACULTY MENTOR OF THE WEEK



spective they bring to a project. Watching them analyze data and discuss the results and their impact gives me a renewed sense of purpose. Further, the lens through which they analyze the data provides a different generational take, which in our work in education, is extremely important! They often times have insights that we would not traditionally think of."

Story from University of Kentucky Research UK Office of Undergraduate Research

Math Professor Gets Poster in CTLT

The PSU Center for Teaching, Learning, and Technology has begun recognizing two faculty members each year with an "eLearning Academy Faculty Spotlight." Dr. Cynthia Huffman, University Professor of Mathe-



matics, and Dr. Mark Johnson, University Professor of Technology and Workforce Learning, were the 3rd and 4th PSU faculty members to be recognized. Dr. Huffman was a member of the Steering Committee that established the eLearning Academy at PSU. The purpose of the eLearning Academy is "to help bring consistency to the design of online and hybrid courses" at PSU. She also currently serves on the Best Practices in Online Learning committee and has developed an Open Educational Resource online course on Women in Mathematics. For several years, she has served on review teams, often as chair, for assessing the design of PSU online courses using the Quality Matters rubric as a guide. The picture shows Dr. Huffman standing next to her Faculty Spotlight Poster in the Center for Teaching, Learning, and Technology.

Page 10

2018 Math Department Christmas Party

























PSU Mathematics on Facebook

If you are a Facebook user, there are two ways that you can stay connected with the PSU Mathematics Department. One way is via a group with a focus on teaching called *Gorilla Math Teachers*. It is a great source of information including teaching ideas and job open-

ings. It also provides a community for asking advice and questions related to teaching. The other way to stay connected is with the *Pitt State (Kansas) Math Alumni* group. Information related to the department and alumni is posted along with interesting mathematical tidbits as well as opportunities and job openings. Both of these groups are closed, so that anything posted is only available to be seen by others in the group. (Can you guess why the Kansas part was added to the name of the alumni group?) New in the past year to the alumni group are scanned pictures from the mid to late 1990's. Many other photographs have been added as well. We would love to have you join either or both groups if you are interested. Just search for the name of the group within Facebook and put in a request to be added to the group.

PSU Mathematics Colloquium Series

The Math Department continues to hold a colloquium series. These lectures give the speakers an opportunity to share their research and the attendees a chance to gain new knowledge. To schedule a colloquium or for more information, contact Dr. Liu at yliu@pittstate.edu. The colloquia for the 2018-2019 academic year are listed below.

- Dr. Cynthia Huffman, PSU, Searching for Ancient Mathematics in Britain, August 28, 2018
- Dr. Cynthia Huffman, PSU, Euler and A Remarkable Example of an Induction Fallacy, November 6, 2018
- Dr. Leah Childers, PSU, Marden's Theorem, November 27, 2018
- Mr. Zack Bowen, PSU, A Bayesian Approach to the Measurement-Error Problem in Linear Regression, Dec. 4, 2018
- Dr. Ananda Jayawardhana, PSU, *How many members with the name Joe should there be in a hundred member service club?*, December 6, 2018
- Mrs. Haley Botts, PSU, Cryptography and Discrete Logs, December 11, 2018
- Dr. Cynthia Huffman, PSU, Lagrange and the Development of Abstract Algebra, February 26, 2019
- Dr. Bobby Winters, PSU, e is Transcendental (and pi is Too--if there is time), March 7, 2019
- Dr. Emily Walters, Resident Research Scholar, Department of Anesthesiology and Perioperative Medicine, University of California, Los Angeles, and PSU Alumna, *Machine Learning in the Operating Room*, March 19, 2019
- Mr. James Beyer, PSU, The Curve Complex, April 23, 2019
- Ms. Georgette Searan, PSU, The Effect of Measurement Errors in Logistic Regression, May 2, 2019
- Ms. Erica Johnson, PSU, A Common Core: The Link Between Primary and Secondary Mathematics and Abstract Algebra, July 2, 2019



Issue 2019-2020

Page 12











Colloquia Pictures

Pictures of some of the colloquia speakers.Top row: Zack Bowen, Haley BottsSecond row: James Beyer, Dr. Bobby WintersThird row: Georgette Searan, Dr. Emily Walters

Page 13

Graduation Pics (December 2018 and May 2019)



TOP: Haley Botts, Cole Hurley, Jordan Bailey, Dr. Scott Thuong, Dr. Cynthia Huffman, Dr. Tim Flood, Dr. Ananda Jayawardhana; BELOW: Dr. Jayawardhana, Michael Deguerre, Dr. Coltharp, Ben Coltharp, Rylie Bertels, Jessica Hardy, James Beyer, Dr. Childers, Georgette Searan, Sydney Dent, Dr. Thuong, Dr. Huffman, Dr. Flood, Peyton Burlingame





Mathematics Banquet continued—Students accepting recognition



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 three offices: Chair, Historian, and Coordinator of Section Liaisons, Dr. Cynthia Huffman is Public Information Coordinator, Webmaster, and Newsletter Editor, and Dr. Scott Thuong is co-coordinator of the Kansas Collegiate Math Competition. In addition, the outgoing Chair of KSMAA is a Gorilla math alumna, Beth Edmonds of Johnson County Community College.

The 2019 KSMAA meeting was held at PSU on March 29-30. Keynote speaker was Dr. Curtis Cooper (retired from the University of Central Missouri). Six PSU faculty members and nine students attended the meeting. Two teams of PSU students competed in the Kansas Collegiate Math Competition, held in conjunction with the KSMAA meeting, and for the first time ever, one of the PSU teams tied for first place! Way to go, Gorillas!

2019 PSU KSMAA Presentations:

- ◊ Dr. Cynthia Huffman, Euler's "Memorabile" Induction Fallacy Example
- ◊ Maha Aljofei, Al-Khwarizmi



Dr. Tim Flood welcoming attendees to the 2019 KSMAA meeting.



PSU students Meghan Jackson and Morgan Singletary ready for the student contest.



Dr. Scott Thuong announcing the student contest winners.



Levi Humbard with the first place placque.



Dr. Huffman after her camera was "stolen" at lunch.



Pitt State exchange student Mingshi Yao and Rylee Dennis at lunch.



PSU graduate student Maha Aljofei ready to give her History of Math presentation on Al-Khwarizmi.

Pictures from KME meetings











- 2130 Paul Chambers
- 2131 Heather Culbertson
- 2132 Alex Hernandez
- 2133 Danielle Mouer
- 2134 Seth Snider
- 1135 Caleb Thompson

















New Initiates

2136 Cali Byrn
2137 Sarah Case
2138 Andrew Chesney
2139 Tyler Clark
2140 Rylee Dennis
2141 Sloan Geddry
2142 Skyler Hausback
2143 Morgan Panovich
2144 Morgan Singletary

Page 17

PSU Math Honor Day

The 19th annual PSU Math Honor Day was held on October 18, 2018. Nearly 100 students and teachers from 10 high schools were treated to presentations by PSU faculty, a planetarium show, and a luncheon. The featured lunch speaker was Mr. Richard Miller, CEO of Millers Professional Imaging and MPIX, who discussed the use of mathematics in the business world.

Christen Jackson (Girard HS, PSU alum) was recognized as the 2018 Outstanding Veteran Secondary Math Teacher while Michelle Crook (Topeka HS) received the Outstanding Novice Teacher award.







Many of the high school teachers are PSU alumni, four of whom are pictured here.

From lower left around clockwise: Christen Jackson (Girard), Dale Brauer (Pleasanton), Luke Henke (Columbus), Bailey Payne (Parsons)





Photo Credits: Haley Botts, PSU Math Graduate Teaching Assistant



Congratulations to the Fall

2018 Secondary Teacher of Promise, Madison Freeman. "Award recipients are nominated by faculty and are chosen based on their potential to make a difference in the classroom." Madison was recognized at the Fall 2018 PSU Student Teacher Recognition ceremony and graduated in December 2018 with a Bachelor of Science in Education with a major in Mathematics.







Dr. Leah Childers

Having the opportunity to interact with our students is always the highlight of my year. In addition to my courses, I had the privilege of directing two masters projects this year. James Beyer did his project on creating a survey paper on "the curve complex" (a topic near and dear to me) and produced a paper that will be useful to researchers for years to come. Erica Johnson's project showed the link between primary and secondary mathematics and abstract algebra. She did a wonderful job showing how the abstract concepts in advanced algebra are in the K-12 curriculum.

My role as KME president elect was in full swing as I organized the national convention in Frostburg, MD. It was wonderful to see all the hard work done by students and I am honored to create a platform where they can showcase their work.

Last December, I started working part time with Eureka Math (a K-12 math curriculum) as a mathematician. I was charged with checking the mathematical accuracy of their curriculum, making sure it fully addressed the standards, and is mathematically coherent. This has been a huge area of professional growth for me as I have applied my mathematical expertise to K-12 mathematics and thought deeply about many ideas I took for granted. This next school year I am taking a leave from PSU to continue my work with Eureka Math. Ensuring that teachers have the highest quality curriculum available is so important, and I'm excited to be a part of this project.

Lastly, but definitely not least, my girls—it truly is a delight to watch them learn and grow. Elyse (6) finished kindergarten and is a reader! Bridget (4) entertains us with imaginative stories and is always eager



to share her thoughts. And Jennifer (1.5) is working hard to keep up with her sisters while "doing it herself."

Pictured to the left: Dr. Childers and two undergraduate students, Rylie Bertels and Sloan Geddry, at the 21st annual Nebraska Conference for Undergraduate Women in Mathematics at the University of Nebraska in Lincoln, Nebraska. The conference was held January 25-27, 2019. According to the conference website, "NCUWM's overall goal is to arm participants with knowledge, self-confidence and a network of peers to help them become successful mathematicians. We do this by providing role models, insider knowledge and an opportunity to present original research."



Dr. Karla Childs

This year I received a PSU service pin to honor 25 years of service to PSU. Where did the time go? In addition to teaching, I continued the research that I began during my sabbatical last year. Together with Dr. Hayley Milbourne from San Diego State University, we presented our research at the 22nd Annual Conference on Research on Undergraduate Mathematics Education in Oklahoma City, OK in March, 2019. As always, I love working with the Graduate Teaching Assistants in the Math Department. They are exceptional young adults with so much excitement for learning and for the future. I also found out that some of them are pretty good at ping pong too!

The big news is that I became a grandmother to a beautiful baby girl, Vivian Margaret, born to my son, Tyler, and daughter-in-law, Caitlin, on June 23, 2019! Stop by my office anytime and I'll show you just a few pic-tures of Vivian!



Mrs. Terry Martin

We will hold the 52nd Annual Pitt State Math Relays on Tuesday April 7, 2020.

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



Mr. David Newcomb

It has been 12 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 I, 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.

Last year was especially exciting. Not only did my wife and I attend the PSU Half-Century Reunion, but we also celebrated our fiftieth wedding anniversary.

My wife and I continued some of our usual summer activities. We completed a few projects around the home, including putting new shingles on the chicken house, moving and splitting wood from the Langdon Lane storm and doing some dirt work by the pond. Carol and I are in the process of installing halo headlights in the family Jeep. We helped at our son-in-law's Tailwind Cyclists bicycle shop. We took care of a nice garden with green beans, potatoes, tomatoes, okra, and squash. There are still a few cantaloupes and water-melons that are doing well. We did feed several raccoons and deer this year; we're pretty sure they loved the corn. We attended a family reunion at Marval Resort near Gore, Oklahoma and will be attending another at Deer Grove RV Park in El Dorado, Kansas. We got in several bicycle rides around the area. We will be helping with the 2019 Gorilla Century over Labor Day weekend.

I hope everyone has a wonderful 2019/2020 academic year at Pitt State.



Dr. Hazel Coltharp

It's not that I don't read all of the Math Department Newsletters, but by the time they come out, I'm usually way behind in grading, planning, etc., then I'm usually up against my own contribution for the next newsletter, so I don't usually take time. But, this year, on a drive to St. Louis with my husband for one of his meetings, I decided to download the previous years' editions (wow Dr. Childers, and most recently, Dr. Huffman, your talents extend well beyond mathematics, but we all knew that already!). Think of it as "binge-reading" the newsletters. Some things I noticed – we, as a department, are a family – our families (personal) are often involved, either as students, or at social events, and certainly seem to be mentioned in our updates, and faculty families have a strong connection dating back decades and generations. There is a wonderful consistency of support of our department faculty and staff, to the success of our students. Many traditions continue, of which others will speak, but one that I have always enjoyed and admired, was the quality, collegiality, and number of females in the

department. We all had a wonderful legacy with Dr. Kriegsman and Mrs. Annabelle Loy serving as faculty in the past, but to continue the legacy, we have a core of committed females in the department – Drs. Childers and Childs (always fun to see if students really know which one they have as an instructor given the similarities in surnames), Drs. Huffman and Coltharp, who not only overlapped in their undergraduate/masters' time at PSU (although, Dr. Huffman is quite a bit younger), but also shared being Roos at different stages, at UMKC, and Mrs. Martin, who, although she is a KU alum, also is a Gorilla alum, and Mrs. Suzanne Lindsay, who really runs the department and who herself is a PSU grad. The females have shared over 25 years of PSU family events and personal life milestones, often at their weekly "girls lunch" (we were kind of "girls" when it started) on Wednesdays at the Mall Deli. We aren't exclusionary and welcome any males who have the same lunch schedule. Somehow our chairmen, beginning with Dr. Davis, and continuing with Dr. Flood, manage to keep that time slot of MWF at noon, free of classes.

Looking back through the years, it's clear that PSU's impact on area secondary math departments continues to be significant. We had eleven BSEd students graduate during the past academic year. We appreciate school districts contacting us and taking the time to find out, in depth, about their future candidates beyond the on-line surveys that I'm asked to complete, and while efficient, really aren't always well-designed for entry-level teaching candidates. Our Gorillas are off to KCK, Wichita, Parsons, Fredonia, Minneola, Bronaugh, Tahlequah, and Carl Junction, and our new emphasis area of Middle School Math continues to be a popular addition to those certifying.

I noticed, in my binge reading, that Dr. Liu mentioned being happy to report that he was done contributing, \$, to the education/ tuition world, as his youngest had graduated from college a few years ago. I am similarly happy to report the same and am EC-STATIC to report the end of FAFSA filing. I know, you think that it should have been easier for me than the hundreds of thousands who have done it every year since it's inception, but I think I used the phrase "I hate FAFSA" for my reminder phrase every single year! Our youngest, Benjamin, was thrilled to sign a teaching contract to teach at his alma mater, Carl Junction High School, beginning this fall. He will be teaching right next to one of his mentors, Rich Neria, who is also one of my former students (gosh I'm feeling old). Benjamin is joining other Gorilla Math teachers, Sherry Sharp (one of my first Techniques' students), Jennifer Malan, and Paige Stainbrook – why do I think my ears might burn with complaining about different tasks from their shared Techniques' teacher? He was lucky enough to intern and then student teach at Webb City High School this past academic year, splitting his time between two wonderful cooperating teachers - Randall Hays, a former PSU Math Department veteran math teacher honoree, and Janelle (Sperry) Smith, who has a strong Math family/Gorilla connection as Mr. Sperry's daughter and Ms. Mlee Sperry's sister. And before you assume anything about placements, that's handled by the Office of Teacher Education! Benjamin has also gotten a jump start on his master's, in school administration, which is following in his dad's footsteps. My daughter, Jean, continues to enjoy teaching for MSSU, and furthered her experiences by teaching Upward Bound math classes for Crowder College this summer. She enjoyed being able to officially put "Dr. Coltharp" on her syllabi as she graduated at UMKC last year and successfully defended her dissertation. It was a "mom moment" to loan her my cap & gown, until she purchased her own, for the graduation ceremony. My husband, Glenn, has continued to enjoy his time at Crowder College, and they seem to enjoy and appreciate him as they selected him as their President, after a nationwide search last fall. Let's just say that I'm still a Gorilla, but have started adding a lot of "Crowder blue"/ Roughrider items to my wardrobe! I am still trying to keep up with technology and am still relying heavily on my students (mostly bugging my own children). It seems that the use of Smartboards is waning, so we're trying to move to more tablet/iPad based projected instructional style. This has required me to search out ways to be more mobile in the classroom and to use "proximity" more with my iPad, and how to use my Google Drive! We've added Apple TVs (yes, I know some of you have been there for years, but we're always learning from you!) in several of Yates' classrooms this summer. Please continue to contribute on Facebook (Gorilla Math Teachers) – I know it's now the official "old person's" social media, but it is a great way of seeing pictures of all of you and keeping up with your lives – personal and professional! I already can hear my kids saying this went on way too long, but it's like Christmas updates – I enjoy reading others', so that's my measuring stick; plus, I'm a Boomer, not of the succinct text/Twitter generations!



Dr. Cynthia Huffman

Reflecting back on another great academic year, it is so rewarding to see students succeeding! We are so proud of our students and alumni, especially when they work hard and have a positive impact on the world. Some examples of a few of these exceptional Gorillas are mentioned throughout the newsletter.

I continue to split my work time among teaching, scholarly activity, and service. Teaching is my favorite and I try to make learning mathematics fun and relevant for my students. As usual, I teach a wide variety of courses from general education to graduate level. Typically that includes 4 preparations, along with pro gratis extras—honors projects, masters problems, independent studies, and writing to learn courses. For various reasons, in the

spring, all 4 of my classes had at least one student needing to take the course online. So, I spent a lot of time answering questions via email and creating videos that were then available as a learning tool for all students in the courses.

For scholarly activity this year, I continued a project from my last sabbatical, writing articles about "Math Treasures at the Linda Hall Library" for the online journal *Convergence*. <u>http://www.maa.org/press/periodicals/</u> <u>convergence/mathematical-treasures-at-the-linda-hall-library</u>. My third Euler translation project (from Latin to English) was submitted for peer review to the Euler Archive. I also worked on a Latin translation of marginalia in a 16th century book for the Linda Hall Library. The number of professional presentations that I have given has now surpassed 300. Number 302, *Matrices and CGI*, for an Algebra II class at Pittsburg High School, was especially fun! I also participated in 2 study tours—one to Spain to see examples of wallpaper groups in the Alhambra and a mapping expedition to Easter Island.

Service-wise at the state level, I continue as the public information officer/webmaster/newsletter editor for the Kansas Section of the Mathematical Association of America. At the national level, I am now the Chief Editor of the Board of Editors for the MAA Classroom Resource Materials book series (after serving as an Associate Editor for 8 years), the National Historian for Kappa Mu Epsilon, a reviewer for the Euler Archive, and the Secretary/ Treasurer/Newsletter Editor for the MAA Special Interest Group on History of Math. Closer to home, I am a member of the PSU Higher Learning Commission committee, an eLearning Academy online course reviewer, and a member of the Online Teaching Certificate task force to assist non-tenure track and adjunct faculty in teaching quality online courses. In recognition of my service to online teaching at PSU, I can now claim to be a "poster girl." (A poster was put up in the PSU Center for Teaching, Learning, & Technology recognizing me with an eLearning Academy faculty spotlight. I was already a "cover girl" with a picture in a PSU shirt on the cover of the Dec 2013/Jan 2014 MAA *Focus*. http://digitaleditions.walsworthprintgroup.com/ publication/?i=187509#{%22issue_id%22:187509,%22page%22:0}) I also was the recipient of the 2018-2019 PSU College of Arts & Sciences Excellence in Service Award.

I sure enjoy 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!



Dr. Huffman (left) at an area high school talking about Matrices and CGI and (right) at PSU Math Honor Day leading a mathematics lesson at an "Egyptian scribal school."





Dr. Ananda Jayawardhana

I am continuing to teach my courses at PSU and at KU Medical Center. I attended several conferences over the last 12 months. Once again, I coordinated the local statistics poster competition this year. I am still serving as the President of the national statistics honorary society Mu Sigma Rho. I participated in grading AP Statistics exams in June and met two of our former students serving as graders. I started serving a three year term as a member of the American Statistical Association Committee on Archives and Historical Materials. I am still serving on the statewide planning committee of the Kansas Board of Regents' conference on diversity, Tilford Conference.

Pictured below from the Joplin Globe newspaper: Dr. Jayawardhana and student statistics poster winners from Thomas Jefferson High School in Joplin, MO.



PSU, visited the students Thursday to present the awards. arned awards at the 51ª Annual COTINATION IMAGIN



Dr. Yaping Liu

The most significant change in my life during the past year is that I became a grandfather. I feel old now but I also feel very happy. This year my wife and I are making multiple trips to the east coast to see our kids and granddaughter.

I enjoyed teaching a topics class last fall on advanced differential equations. I spent a lot of time developing the lecture notes and making them available to the students digitally. Next time if I teach the same class, it should be a lot easier for me to prepare. Besides this class, I had my regular teaching loads and usual service responsibilities during the last two semesters. Regarding research, I have one joint paper accepted by

the 2019 ASEE Annual Conference & Exposition.

This year we have an average number of graduate students in the math department. From August 2018 to July 2019, seven graduate students have successfully finished their research and passed the master's comprehensive exams. Interestingly, this is the average in all three popular measures: over the past 16 years, the mean (rounded to whole number), the median, and the mode of graduate students all are 7.



Dr. Scott Thuong

Along with my usual courses, I had the opportunity to teach topology in the spring, which is always a pleasure. This has been my third year coordinating the Kansas Collegiate Math Competition along with Mat Johnson of KU. This year the competition was held here in Pittsburg, and a Pitt State team made history by capturing first place, tying with a KU team! I will be continuing as competition coordinator so if you have any problem suggestions please send them to me!

While I did not attend the KME national meeting this year, PSU will be hosting the 2020 KME regional meeting, and I am currently working on organizing it.

On a personal note, I am now the "dog dad" of two puppies: Vienna, a lemon basset hound, and Myra, a golden retriever/Leonberger mix; however, she is not golden at all and in fact has a jet black coat. The name "Vienna" is the result of a good amount of brainstorming with the "dog mom," and we feel it's pretty close to the ideal when it comes to a basset hound name! I've also been playing a lot of table tennis at the student center, so if anyone wants to play, I'm always down for a challenge!

Have a great 2019-2020 academic year!



Dr. Bobby Winters

Dr. Bobby Winters is managing to keep himself busy and stay out of trouble as he continues as Associate Dean of the College of Arts and Sciences. Currently he is Director of PSU in Paraguay; Acting Chair of the Department of Physics; Acting Chair of the Department of Chemistry; and Director of the Polymer Chemistry Initiative. In his spare time he is continuing to learn Python.

Retired professor in a meme

Retired mathematics professor Bryan Sperry made the news in 2015 for making a touchdown at a University of Kansas football alumni game at the age of 89. A veteran of WWII, Mr. Sperry had lettered at football at both K-State and KU in the 1940s. The meme, shown on the right, is included on a webpage of the best Jason Witten memes. Jason Witten is a tight end for the NFL Dallas Cowboys and a sports broadcaster.

Leaked photo of Jason Witten practicing for the 2019-2020 season



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

The featured Gorilla in this edition of the math department newsletter is Wanda Lawson. Wanda just recently retired as a Senior Cryptologic Mathematician with the National Security Agency. Her hometown is Pittsburg, KS, where her mother (Ethel) and brother (Roger) reside. Upon retirement from NSA, Wanda moved to Titusville, FL. She has a daughter, Emily Lauren Taylor, a grandson (Josh), and a granddaughter (Brooke). Her daughter and son-in-law (James) and grandchildren currently live in Maryland.

Wanda started working at the National Security Agency in 1985 as a mathematician, after earning her BS in Mathematics (1984) and MS in Mathematics (1985) from Pitt State. In 1989, she received her certification as a Cryptanalyst. While working at the NSA, she received several classified awards. One that can be mentioned is the Joint Meritorious Unit Award, which she was awarded in 1997. In 1998, she was recognized as a PSU Outstanding Alumni. Wanda retired from the National Security Agency as a Senior Cryptologic Mathematician in 2018.

Wanda wrote, "It's hard to believe that it's been 34 years since I attended PSU. I still have family in Pittsburg so I get to see the campus often. After

Wanda Lawson in 2019 (left) and in the KME group picture from the 1984 Kanza yearbook (right).



getting my BS in 1984, I really wasn't ready to enter the workforce so I stuck around another year to get my MS degree. I admit that it's one time that procrastination was a good thing. By having an MS degree, I was able to start my job at the National Security Agency at a pay grade higher than I would have with just a BS degree. The professors at PSU were instrumental in giving me a well rounded mathematics education. This was essential in the classes I was immediately thrust into at my new job. I saw others in these classes from much larger and more 'prestigious' universities struggling because they did not seem to have the same foundation I was given. There were lots of occasions during classes when the 'light bulb' would go off and I was able to see what I learned at PSU in real world situations. I remember once thinking 'that's what Dr. McGrath was talking about.' (He taught my Numerical Analysis class.) My mathematics education at PSU gave me the opportunity to do something that I love and serve my country for over 30 years. I have no doubt that students in the math program today are receiving the same exceptional education I received all those years ago."

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

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Page 25