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A Note from the Chair (Fall 2012)

Greetings Alumni! As you receive this fall edition of Stright Lines, the semester is almost over. We all hope that those of you living in the areas affected by hurricane Sandy suffered as few damages as possible. Did you know that the word hurricane (and the Spanish huracán) both come from the Maya language? They are derived from the Mayan god for wind and storms Hurakan. I mentioned this in connection with Maya Week at IUP for which the Mathematics Department was a co-sponsor. The first ever Maya Week at IUP this fall gathered experts from the U.S.A. that presented on the Maya culture, Maya calendars, Mayan Arithmetic, Maya Geometry and more. You can find more info at <http://nsm1.nsm.iup.edu/falarcon/mayaweek/index.htm>.

Also, last fall I mentioned that IUP had record enrollments in the last two fall semesters, make that three fall semesters in a row. Fall enrollment this year is a record 15,132 students. We also had a record enrollment in Mathematics courses, we had 4,272 students enrolled in 130 courses this fall. Also this fall, we welcomed a new faculty member, Dr. Charles Lamb who joined the department in August. You can read more about Charles on page 6.

We began last summer to convert the classrooms in Stright Hall from chalkboards to white boards and that first step was completed during the fall semester. By next fall we hope to have interactive SMART projectors that can be used on the whiteboards as a SMART Board or actual SMART Boards installed in every classroom we use. This will make us the first department on campus with these capabilities in every classroom.

While the fall semester has been very active, the spring semester will be one with many noteworthy events. In the first part of April

we will be hosting the Annual Spring Meeting of the Allegheny Mountain Section of the Mathematics Association of America (MAA). We expect to host between 200 and 250 faculty and students from Universities in Western Pennsylvania and West Virginia. In late April we expect to have PTM run the third annual Family Math Night. In May we will be celebrating the 50th Anniversary of the Annual Mathematics Competition the Department has hosted for high school students from the area.

Some other activities that will begin in the spring semester include the exploration of the feasibility of starting a new track in the B.S. in Mathematics that will focus on Financial Mathematics/Actuarial Science. Also continuing in the spring is the conversion of the M.Ed. in Secondary Mathematics Education to an online program. As you can see there are lots of things happening in the department. Visit our website to see what is happening and if you have not yet done so, you can also ask to join our group on Facebook to keep in touch with departmental events and/or connect with other alumni and current students. There are 140 members on that group, help us reach 200 in the spring! Just search on Facebook for IUP Mathematics.

Please receive all the best and the most heartfelt wishes for joy and health from everyone in the Mathematics Department during this holiday season!

~ Francisco Alarcón



About our students: Scholarship Awards

Students Honored at Annual Scholarship Banquet



*Scholarship awardees
from left to right:*

Front row: Michael Myers, Jessica Crawford, Stefany Stofko, Ashleigh Craig, Shanna Grusky, Renee Clouse

Back row: Maranda Evans, Tyler Jack, Theresa Scarnati, Jason Susko

The Mathematics Department awarded scholarships and recognized scholars for the academic year at a banquet on May 4, 2012.

Middle level mathematics education majors **Renee Clouse** from Butler, PA and **Stefany Stofko** from Greensburg were the recipients of the *Dr. Willard W. Hennemann, Jr., Memorial Scholarship*, awarded to an undergraduate or graduate student with a strong commitment to the field of mathematics education at the elementary or middle school level.

The *Arthur G. Morrell Memorial Scholarship* is given to a math major completing the sophomore or junior year at IUP who best reflects the character and interests of Captain Arthur G. Morrell, a 1975 IUP graduate in mathematics education and U.S. Marine pilot who died on a training flight. This year's scholarship was awarded to mathematics major, **Theresa Scarnati** of Erie, PA.

The *Merle Stilwell Scholarship for Mathematics* was presented to **Michael Myers**, secondary mathematics education major from New Castle, PA. (See related story on page 5)

(continued on page 3.)



S-COAM Scholars from left to right: Tyler Jack, Ryan Grove, SaraJane Parsons, April Mitchell (back), Nicole Mountains, Kristen Lester, Aaron Waibel, Theresa Scarnati (back), Dane Alabran (back), Rebecca Beadling (front), John Float, Zachary Seymour (back), Kayla Copeland, Dan O' Hara, David DeMateo

About our students: Scholarship (continued)

The *Mildred M. Reigh Scholarship* honors the memory of Mildred M. Reigh, professor of Mathematics at Indiana University of Pennsylvania from 1963 to 1981. The award is presented to an undergraduate or graduate student with junior standing who exemplifies excellence in or potential for excellence in mathematics teaching at the elementary or secondary level. Secondary mathematics education major **Shanna Grusky** of Derry, PA and middle level mathematics education major, **Jessica Crawford** of Somerset, PA were this year's winners.

Maranda Evans, a secondary mathematics education major from Cassandra, PA, was the recipient of the *Rebecca A. Stoudt Memorial Scholarship for Mathematics*. The scholarship is given in memory of Dr. Rebecca Stoudt, a faculty member in the mathematics department from 1991-2002.

The *Dr. James Myers Scholarship* was awarded to **Jason Susko**, a middle level mathematics education major from Allentown, PA. The award is presented in memory of Dr. Myers, faculty member in the Mathematics Department, to an outstanding junior elementary or middle level mathematics education major.

Three students were recipients of the *Terry A. Serafini Outstanding Scholars* award. They included **Ashleigh Craig**, a mathematics major from Hollidaysburg, PA; **Tyler Jack**, a secondary mathematics education major from Cadogan, PA; and **Michael Myers** of New Castle, PA, also a secondary mathematics education major. The award is given to a mathematics or secondary mathematics education with financial need who have maintained a grade point average or 3.0 or higher.

Also honored at the dinner were the 2012-2013 Scholarships-Creating Opportunities for Applying Mathematics (S-COAM) scholars. The goal of the S-COAM project at IUP is to increase the overall number of students pursuing degrees in mathematics by establishing a supportive connection of master's students with undergraduates through scholarship cohort activities. The graduate S-COAM scholars in the M.S. in Applied Math program include: **Dane Alabran**, **Joshua Buchheit**, **Kayla Copeland**, **David DeMateo**, **John Float**, **Albert Harrison**, **Kristen Lester**, **William Noel**, **Elijah Rach**, **Alexander Romito**. Undergraduate S-COAM scholars include: **Megan Agosti** (Physics Ed. Major), **Rebecca Beadling** (Bio./Chem major), **Lindsay Bender** (Mathematics major), **Sara Geiger** (Sec. Math Ed. Major), **Ryan Grove** (Physics/App. Math major), **Tyler Jack** (Sec. Math Ed. Major), **Aaron Lenzi** (Physics/Pre-Eng. Major), **Margo MacKenzie** (Mathematics major), **April Mitchell** (Natural Sci./Pre-Phys. Therapy major), **William Moon II** (Chem./Pre-Med. Major), **Nicole Mountain** (Earth/Space Ed./Geology major), **Daniel O'Hara** (Geology/Comp. Sci. major), **SaraJane Parsons** (Mathematics major), **Jessica Pcola** (Sec. Math Ed. major), **Kevin Pomorski**, (Mathematics major), **Theresa Scarnati** (Mathematics major), **Zachary Seymour** (Comp. Sci./Mathematics major), **Julie Stachurski** (Mathematics major), **Matthew Sulkosky** (Mathematics/Comp. Sci. major), **Aaron Waibel** (Comp. Sci./Mathematics major), **Jeremy Yagle** (Mathematics major)

IUP-PTM Sponsors Second Annual "Family Math Night"

The IUP Pre-Service Teacher of Mathematics (IUP-PTM) sponsored their second annual "Family Math Night" on April 20, 2012 for Indiana School District children in grades K-5 and their parents. Under the direction of the PTM officers (pictured at right: **Jessica Crawford** (middle level math ed.), **Heather Hobbins** (sec. math ed.), **Kim Hofstetter** (elem. math concentrate), and **Megan Yezzo** (middle level math ed.), twenty different mathematics activities and games were organized, set up, and manned by members of PTM. Nearly 30 children, parents, administrators, and Math Department faculty attended the event.



At far left, PTM member **Tyler Jack** (sec. math ed.) and at left, PTM member **Renee Clouse** (middle level math ed.) engage children and their parents in activities.

About our alumni

ANNUAL MATH DEPARTMENT ALUMNI BREAKFAST

Highlights from the 2011 Alumni Breakfast



Highlights from the 2012 Alumni Breakfast



How many of these faculty, retired faculty, and alumni do you recognize? We hope to see your face in the photos from the Fall 2013 Mathematics Department Alumni Breakfast!

Student Presentations

- Five senior mathematics education majors (BS Math Ed. '12), presented the session "Hands-On Mathematics for the Middle School" at the sixtieth annual Pennsylvania Council of Teachers of Mathematics meeting in State College, PA, in November 2011 with **Dr. Janet Walker**. Each student presented a hands-on activity for teaching middle school mathematics. The students presenting with Dr. Walker were: **Brandon Kochinsky**, from Nicktown, PA, **Megan Labant**, from Indiana, PA, **Antoinette Moeslein**, from Pittsburgh, PA, **Derek Morf**, from Annandale, NJ, and **Brianne Thomas**, from Homer City, PA.
- A number of secondary mathematics education majors (BS Math Ed. '12) also presented posters at the PCTM Conference in November 2011. They include: **Jordan Alsop**, **John Chelednik**, and **Sarah Fyock**: *Using Smart Pens in the Mathematics Classroom*; **Lee Bigelow** and **Rachel Marion**: *Using GeoGebra to Prove the Pythagorean Theorem*; **Brianne Thomas** and **Brandon Kochinsky**: *Exploring Linear Functions with Excel*; **Leah Wallock** and **Jessica Barker**: *Estimating Measurements with Smart Board Tools*; and **Michelle Crise** and **Danielle Egley**: *Using Geogebra to Explore Calculus*
- **SaraJane Parsons** (BS Math '12) (along with a non-IUP student) was awarded an outstanding poster award at the joint meetings of the Mathematical Association of America and the American Mathematics Society in Boston in 2012. Her poster was entitled, "Smartphone Sensors and Detecting Road Anomalies." SaraJane also was accepted and participated in a REU at Grand Valley State U. in the summer of 2011. She and another students won a significant cash prize for successfully solving the City of Boston's challenge to develop an algorithm to detect potholes using smartphone data.

About our faculty: Retired Faculty News

The Merle Stilwell Scholarship for Mathematics Established



A scholarship in honor of retired faculty member **Dr. Merle Stilwell** has been established. The scholarship was established by **Bob Strouse (B.S. '70)** of DuBois, PA in Stilwell's honor, through a combination of a personal donation and a match from Bob's employer Illinois Tool Works. Bob was also a member of the IUP football team that played in the 1968 Boardwalk Bowl. Bob remembered Dr. Stilwell as "The professor in the Math Department that students could go to for help, no matter who you were, he took care of all the students."

Bob Strouse invites fellow alumni who were inspired by Merle to contribute to the scholarship fund. If interested, you can contact the Foundation for IUP at 724-357-3184.

Condolences

We are sad to report that **Ida Arms**, faculty member in the Mathematics Department from 1959 to 1987, passed away in August 2012.

RETIREMENTS

Congratulations to **Dr. John Henry Steelman** who retired in December 2011 after 26 years of service to the Mathematics Department. We wish him a well-deserved and relaxing retirement.

Alumni News

- **Jennifer Franco Vásquez (BS Mathematics '01)**



Jennifer Franco Vásquez was recently recognized as a Distinguished Young Alumni for the College of Natural Sciences and Mathematics. After IUP she received her M.A. in Mathematics (2003) and Ph.D. in Mathematics (2007) from Indiana University Bloomington. While at Bloomington she received the Rothrock Teaching Award for Associate Instructors in 2005 the Inspiring Leadership Award in 2006 and was a Project NeXT National Fellow in 2007-08.

Jennifer has been at the University of Scranton since fall of 2007 where she is an Associate Professor in the Mathematics Department. She has five research publications in print and two more under review. She has been the organizer of the Integration Bee since 2007, and has organized many other activities to encourage young women to pursue a career in Mathematics and the STEM disciplines. Jennifer is married to Dr. René E. Vásquez. They have one son Ernie. Pictured with Jennifer is IUP President Driscoll and Rep. Dave Reed, also a Math Dept. Alumnus.

- **Jason Grusky (BS Math Ed. '05)** is currently a high school math teacher at Punxsutawney Area High School and a proud member of the Punxsutawney Groundhog Club Inner Circle. He is one of the 15 "top hat guys" that conduct the yearly holiday on February 2nd with Punxsutawney Phil.



About our Faculty

Math Department Welcomes New Faculty Member

The Mathematics Department welcomes **Dr. Charles Lamb**, who joins us from the University of Kansas.

Charles comes to IUP after finishing his Ph.D. work in spatially discrete differential equations. His research plans include additional studies of spatial discrete models as well as examining biological phenomena of interest.

While born and raised in the Sunflower State, it is a total coincidence that he so thoroughly enjoys roasted sunflower seeds. He currently owns two dogs adopted from the Humane Society, and he has been known to appreciate both fine wood craftsmanship and print design. Lastly, he has no known ancestral ties to the British essayist of the same name.



Mathematics Department Faculty and IUP President Celebrate National Bow Tie Day in August



Participating in the National Bow Tie Day were: Front (l. to r.): Edel Reilly, Yu Ju Kuo, Jason McCarty, Mary Lou Metz, Kristen Lester, Kimberly Burch, and Francisco Alarcon. Back (l. to r.): Gary Stoudt, Dan Radelet, John Chrispell, John Lattanzio, Greg Wisloski, President Mike Driscoll, John Baker, Ed Donley, Tim Flowers, Yong Colen, and Charles Lamb.

FACULTY AWARDS, PUBLICATIONS, AND PRESENTATIONS

- **Dr. Francisco Alarcón, Dr. Mary Lou Metz, and Dr. Edel Reilly** presented “Preparing Smart Teachers to Teach with SMART Technology” at the National Council of Teachers of Mathematics (NCTM) annual conference in Philadelphia on April 26, 2012
- **Dr. John Lattanzio and Quan Zheng (M.S. '10)** published “Generalized Matrix Graphs and Completely Independent Critical Cliques in any Dimension” in *Discussiones Mathematicae Graph Theory*.
- **Dr. John Chrispell and Dr. Ed Donley** from the Mathematics Department have been accepted as participants in the International Conference for High Performance Computing, Networking, Storage, and Analysis (SC12) to be held on Monday, November, 12, 2012, as part of the conference’s High Performance Computing Educators Program in Salt Lake City, Utah.
- **Dr. Yong Colen and Dr. Channa Navaratna** along with **Jung Colen (M.Ed. '11)** published “Power Indices and U.S. Presidential Elections” in the NCTM journal, *The Mathematics Teacher*.
- Seven faculty members presented sessions at the 2012 PCTM Annual Conference in Camp Hill in October. They include **Drs. Yong Colen, Larry Feldman, Mary Lou Metz, Channa Navaratna, Edel Reilly, Margaret Stempien, and Janet Walker**.
- **Dr. Mary Lou Metz** was awarded the “Outstanding Contribution to Mathematics Education Award” from the PA Council of Teachers of Mathematics in Oct. '12.
- **Dr. Yong Colen** coauthored two chapters in the book *Mathematics Education in Korea: Curricular and Teaching and Learning Practices*. This monograph is the seventh volume of *Series on Mathematics Education*, published by World Scientific.
- **Dr. Francisco E. Alarcón** is a co-recipient with Dr. Lydia Rodríguez of the Foreign Language Department of the 2011-12 Teaching Excellence Award for Distance Education from the Teaching Excellence Center at IUP for the course The Mayas: Culture Literature and Numbers. The online course demonstrates exemplary online pedagogy and instructional design.

Thirty eight students receive degrees in mathematics at May 2012 graduation



B. S. in Education, Secondary Mathematics

Jordan Lee Alsop
 Lee Rachel Bigelow
 Rebecca Lee Braymer
 John Timothy Chelednik
 Danielle Marie Egley
 Dean Joseph Farabaugh
 Tiffany Austin Fry
 Sarah Dawn Fyock
 Sarah Elizabeth Geiger
 Brandon William Kochinsky
 Kelly Dorsey Kramer
 Megan Anne Labant
 Rachael Lauren Marion
 Antoinette Marie Moeslein
 Derek René Morf
 Jessica Lynn Pcola
 John Gerald Sokol
 Brianne Nichole Thomas
 Leah Marie Wallock

Bachelor of Science , Applied Mathematics

Stephanie Ann Williams
 Craig Thomas Glatfelter
 Ryan Reed Grove

Bachelor of Science Mathematics

Lindsay JoNell Bender
 Michelle Nicole Crise
 SaraJane Emily Parsons
 Billy Ray Wilson

Master of Science, Mathematics

Dane S. Alabran
 Christopher L. DeLeo
 David J. DeMato
 Albert Franklin Harrison
 Kristen M. Lester
 Matthew Dean Love
 Loic Niragire
 William Allen Noel
 Darryl D. Walker

Master of Education, Elementary Mathematics

Tricia Brady (August)
 Lindsay Harnish (August)
 Megan Marie Ringler (August)



**Congratulations to these students who are now the newest members of the
 IUP Mathematics Department Alumni!**

Mathematics Department

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www.iup.edu/math

Welcome to the Fall 2012 edition of

Stright Lines

the IUP Mathematics Department Alumni Newsletter