

MATH DEPARTMENT NAMES STUDENT AWARD RECIPIENTS

Who's Who in the Mathematics Department



Chairperson:
Dexter Whittinghill
(wbittinghill@rowan.edu)



Associate Chair:
Ronald Czochor
(czochor@rowan.edu)



**Graduate Program
Director:**
Ming-Sun Li
(sun@rowan.edu)



**Learning
Community
Director:**
Christopher Simons
(simons@rowan.edu)



The students were treated to a catered luncheon in James Hall. Award recipients included (clockwise from left): Steven Giambrone, Charles Kiersznowski, Alexandra Grote, Melissa Canavan, Adam Fincke, Ashley Shepp, and Brooke Logan.

The Mathematics Department recognized our top students during the annual Awards Luncheon held on April 28, 2014. Numerous students were honored for their participation on the Rowan Math team and for conducting undergraduate research (see related articles).

Brooke Logan was awarded the Scholarship for Outstanding Junior Mathematics Major.

Jennifer Crawford received the John Sooy Award. This scholarship honors an outstanding junior pursuing a double major in mathematics and education.

Nicholas Houghton '14 received the Senior Recognition Award. The faculty selected Nick for this award on the basis of his

mathematical achievements both inside and outside the classroom.

Heather Williams '14 was honored with the James M. Shafer Excellence in Mathematics Medallion Award.



Students received certificates recognizing their accomplishments. Here, Department Chairperson Dexter Whittinghill congratulates Nicholas Houghton.

ROWAN UNIVERSITY MATH TEAM FINISHES AN ACTIVITY-FILLED YEAR

Congratulations to all of the Math Team members who represented Rowan at competitions during the past academic year.

We were represented in the prestigious [William Lowell Putnam Mathematical Competition](#) in December 2013 by *Long (Winston) Cheong, Dante Gates, Steven Giambrone, and Brooke Logan*.

We also fielded two teams in the New Jersey Undergraduate Mathematics competition, which was held in conjunction with the Garden State Undergraduate Math Conference hosted by Rowan University on April 5, 2014. Team 1 was comprised of *Nicholas Houghton, Brooke Logan, and Steven Giambrone*, and Team 2 consisted of *Long (Winston) Cheong, Brad Johnson, and YongXian Wu*. Congratulations to Team 1 for placing 16th and Team 2 for placing 14th out of the 31 participating teams. Special kudos to *Brooke Logan* for placing 12th in the individual competition.

In addition to competing, the Math Team provided invaluable assistance during the MAA-NJ

Section Meeting that was hosted by Rowan University on this same date.

Adam Finke served as a personal assistant “doing anything that needed to be done.”

Parking directors included *Brooke Logan, Steve Giambrone, Adrienne Novak, Brad Johnson, Jennifer Crawford, Keith Ferrante, Charles Kiersznowski, and Alexandra Grote*.

Registration table staffers included *Kelsey Borrell, Stephanie Gomez, Corey Vollmer, and Krista Diodati*.

Also assisting at the meeting were *Matthew Ng, Nick Houghton, Long (Winston) Cheong, and Ashley Shepp*.

Math Team members who volunteered as tutors in the Mathematics Learning Center during this past academic year included *Louisa Abiuso, David*



The traditional Math Team Bowling Night was March 26.

Berlinsky, Eric Carpizo, Long (Winston) Cheong, Alexander Cunningham, Benjamin Daniels, Michael Davies, Donna DiMatteo, Krista Diodati, Nicholas Felker, Adam Fincke, Steven Giambrone, Stephanie Gomez, Nicholas Houghton, Charles Kiersznowski, Brooke Logan, Alexcia Mazabreh, William Neubaus, Matthew Ng, Ikenna Odoemena, Ashley Shepp, Aaron Sorin, Joshua Thomas, Corey Vollmer, Phuong-Trang Vu, Nyesha White, YongXian Wu, Lucy Yao and James Zulker.

Students interested in joining the Math Team should contact one of the newly elected 2014-2015 officers, *Brooke Logan (president), Phuong-Trang Vu (vice president), Stephanie Gomez (senator), Corey Vollmer (treasurer), or Ashley Shepp (secretary)*.



The Math Team celebrated Pi Day on March 14.

STUDENTS INDUCTED INTO THE NEW JERSEY XI CHAPTER OF PI MU EPSILON



New members of the New Jersey Xi Chapter of Pi Mu Epsilon include (front row, from left to right): Long (Winston) Cbeong, Carolann Zavorskas, Krista Diodati, Alyssa Gautieri, Breijba Anderson, Katherine Emmerling, Adrianna Macaro, Alexandra Grote, Brooke Logan, Phuong-Trang Vu; (middle row, from left to right): Melissa Canavan, Jordan Clarke, Kaitlyn Philipson, Chelsea Vander Pyl, Ryan West, Nicole Santoro, Eric Hoffman, Nicholas Dennis; (back row, from left to right): Karlie Rudden, Tisa-Nicole Riccardi, Charles Kiersznowski, Amanda Dixon, and James Zulker.

We proudly inducted 35 students into the New Jersey Xi chapter of [Pi Mu Epsilon](#) (PME) at Rowan University on April 24, 2014. PME, the National Honorary Mathematics Society, is dedicated to promoting mathematics and recognizing students who successfully pursue mathematical understanding.

Our new inductees include *Breijba Anderson, Joshua Bell, Nicholas Bolton, Stephanie Brunarski, Melissa Canavan, Long (Winston) Cbeong, Jordan Clarke, Nicholas Dennis, Krista Diodati, Amanda Dixon, Katherine Emmerling, Dante Gates, Alyssa Gautieri, Alexandra Grote, Joshua Haegle, Julianne Hall, Elizabeth Hartkopt, Eric Hoffmann, Amber Howarth, Brad Johnson, Charles Kiersznowski, Brooke Logan, Adrianna Macaro, Kathleen MacIntosh, Kaitlyn Philipson, Tisa-Nicole Riccardi, Rank Roupoli, Karlie Rudden, Nicole Santoro,*

Chelsea Vander Pyl, Mark Ventrella, Phuong-Trang Vu, Ryan West, Carolann Zavorskas and James Zulker.

PME membership qualifications include the following:

- Undergraduate students who have completed at least the equivalent of two semesters of calculus and two additional courses in mathematics, at or above the calculus level, all of which lead to the fulfillment of the requirements for a major in the mathematical sciences. In addition, such students must have maintained a grade point average equivalent to that of at least 3.0 on a 4 point scale, both for all courses that lead to fulfillment of requirements for a major in the mathematical sciences, and also for all courses that lead

to fulfillment of requirements for an undergraduate degree.

- Graduate students whose mathematical work is at least equivalent to that required of qualified undergraduates, and who have maintained at least a B average in mathematics during their last school year prior to their election.
- Members of the faculty in mathematics or related subjects.
- Any persons who have achieved distinction in a mathematical science.

Contact the faculty advisor, Marcus Wright (wright@rowan.edu), for more information about our PME chapter.

ALUMNI NEWS

Matthew Oster '07 earned a Ph.D. in Operations Research from Rutgers University in March 2014. He is currently a postdoctoral fellow at Pacific Northwest National Labs in the Applied Statistics and Computational Modeling group under the National Security Directorate.

Andrew Robertson '07 graduated with a Ph.D. in Physics from the University of Maryland in 2011. He is currently working at the U.S. Naval Research Laboratory.

Bernard Parisi '08*14 will be entering the Mathematics Education Ph.D. program at the University of Delaware in Fall 2014.

Andrew Hodges '11 graduated from Columbia University in 2012 with a Master's degree in Atmospheric Science and a concentration in Astrophysics. After modeling lunar natural disasters at NASA in 2012, he has been employed as an analyst for revenue and volume forecasting at Consolidated Edison since 2013.

FACULTY NEWS

Larry Howe retired in February 2014 after 41 years of service, and **Khaled Amer** will be retiring as of September 2014 with 31 years of service. Both Larry and Khaled were conferred Professor Emeritus status by the Board of Trustees in April 2014.

Laura Schultz gave a talk entitled, "Investigating the Gender Wage Gap with Randomization Tests," at the Spring MAA-NJ meeting hosted by Rowan University in April 2014. Laura was also named "2013 Hobo of the Year" by Pitman's Original Hobo Band for her contributions on flute and piccolo.

Umashanger Thayasivam received tenure effective 2014-2015. Uma is P.I. for a \$40,000 grant from Bristol-Myers Squibb entitled, "Using Statistical and Machine Learning Techniques for Analysis of Pharmaceutical Data," and he is also Co-P.I. with Vasil Hnatyshin from the Computer Science Department for a \$10,000 Rowan University seed funding grant entitled, "Data Mining Techniques to Network Security and Forensics."

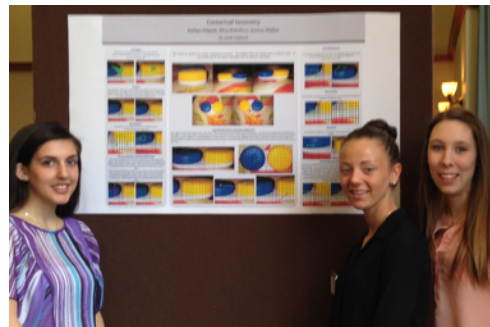
STUDENT NEWS

Daniel Bittner, Long (Winston) Cheong, and **Dante Gates** presented a poster at the 2014 Rowan STEM Symposium entitled, "Converging on the Area of the Mandelbrot Set" for which they were honored with the College of Science and Mathematics STEM Excellence in Research Award. They were mentored by **Hieu Nguyen**.



Freshman **Alexander Drumm** (pictured above left with **Chris Simons**) won Dr. Simons' math problem contest in Fall 2013.

Phuong-Trang Vu and **Nora Buggy** presented a poster entitled, "Recursive Relations of Restricted Partitions," at the 2014 Rowan STEM Symposium. Their faculty research advisor was **Abdulkadir Hassen**.

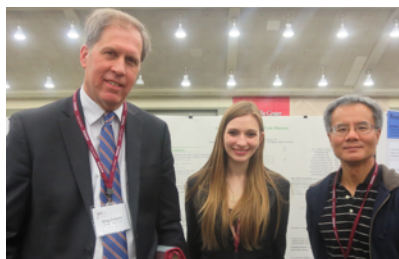


Alisa Ridolfino '14, Jessica Walker '14, and **Kaitlyn Filipiak '14** (pictured above from left to right) gave a presentation entitled, "Conceptual Geometry," at the 17th Annual Rowan STEM Student Research Symposium in April 2014. Their faculty mentor was **Janet Caldwell**.

Got News?

Please send any photos or news items to the newsletter editor (schultzl@rowan.edu) for inclusion in the next issue of *Vectors*. Photos from the department breakfast reception and commencement as well as any updates from graduating seniors are especially welcome.

STUDENT NEWS, CONTINUED



Brooke Logan (shown above with Greg Coxson of the Naval Research Laboratory and Hieu Nguyen) gave a presentation in the MAA Student Poster Session at the 2014 Joint Mathematics Meetings in Baltimore. She also gave a student talk at the 2014 Garden State Undergraduate Mathematics Conference and a poster presentation with **Hieu Nguyen** entitled, "Symmetry

Groups and Constructions of Complementary Code Matrices," at the 2014 Rowan STEM Symposium. Brooke will be participating in the 2014 Summer@ICERM undergraduate research program at Brown University for eight weeks this summer.

Graduate student **James Rosado** gave a poster presentation with his faculty research mentor **Tom Osler** at the 2014 Rowan STEM Symposium entitled, "Some Definite Integrals from Fourier Series."

Graduate student **Sky Waterpeace '05** and his faculty mentor **Tom Osler** presented a poster entitled, "Vieta's Product for Pi from the Archimedean

Algorithm," at the 2014 Rowan STEM symposium.

Upcoming Events

August 2-7, 2014

Joint Statistical Meetings in Boston, MA

August 6-9, 2014

MAA MathFest in Portland, OR

September 2, 2014

Start of Fall 2014 classes

October 13, 2014

Spring 2015 course registration begins

November 1, 2014

Fall MAA-NJ Meeting at St. Peter's University (Abstract Deadline: September 4, 2014)

January 10-13, 2015

Joint Mathematics Meetings in San Antonio, TX (Abstract Deadline: September 16, 2014)

CONGRATULATIONS TO FALL 2013 UNDERGRADUATE DEANS' LIST HONOREES

The following students majoring in Mathematics were named to the Undergraduate Dean's List in Fall 2013 in recognition of achieving a GPA of 3.45 or higher for at least 12 credit hours. Those students whose names are in boldface type were also named President's Scholars of Excellence for achieving a perfect 4.0 GPA in Fall 2013.

David Achinstein, Timothy Albanese, Brigitte Alessandrini, Christopher Bailey, **Adrienne Barrett**, Melanie Beebe, **Samantha Belsky**, Alicia Boncardo, **Annelise Buono**, **Melissa Canavan**, Long (Winston) Cheong, Nicole Chermak, Mitchell Ciecierski, Emily Coates, **Ariel Comer**, **Jason Cornog**, Jennifer Crawford, Nicholas Daniello, Sarah Dawoud, Michael DeMayo, Nicholas Dennis, Krista Diodati, James Dixon, Rachel Drake, Alexander Drumm, Zacharie Ellsworth, Katherine Emmerling, Adam Fincke, Douglas Foglein, Anthony Foremny, **Gary Gandolfi**, **Riley Gartland**, Dante Gates, Alyssa Gautieri, Brian Gensel, Steven Giambone, Norman Gibson, Stephanie Gomez, Meribeth Grimaldi, Alexandra Grote, Joshua Haegele, **Julianne Hall**, Sean Halloran, Jun He, **Jillian Hixon**, Amber

Howarth, Nicholas Kides, **Charles Kiersznowski**, **John Kumpf**, Alana LaMorte, Corey LeVan, Jessica Leonard, **Brooke Logan**, Adrianna Macaro, Kathleen Macintosh, **Dena Mahoney**, Katherine Martin, **Stephanie Martin**, Shannon Miskey, Daniel Offenbacher, Anthony Osinski, Ashley Payne, Kaitlyn Philipson, Jaime Pitman, Jacqueline Prior, Antonio Pugliese, Ryan Rainey, Anne Rebecca, **Daniel Reeve**, Robert Reilly, Tisa-Nicole Riccardi, Alisa Ridolfino, **Harrison Riskie**, Karlie Rudden, Meg Ruesch, Frank Ruopoli, Meghan Ryan, Nicole Santoro, Robert Scalley, Todd Schug, Jessica Simber, Jessica Smolenski, **Jennifer Stief**, Rebecca Swift, Sherman Szeto, Stephanie Van Twuyver, **Mark Ventrella**, **Corey Vollmer**, Jessica Walker, Erin Warantz, Courtney Waring, Keith Watkins, Annemarie Webb, Heather Williams, **Michael Wong**, **Kristina Yoroshko**, Mary Youch, and Carolann Zavorskas.

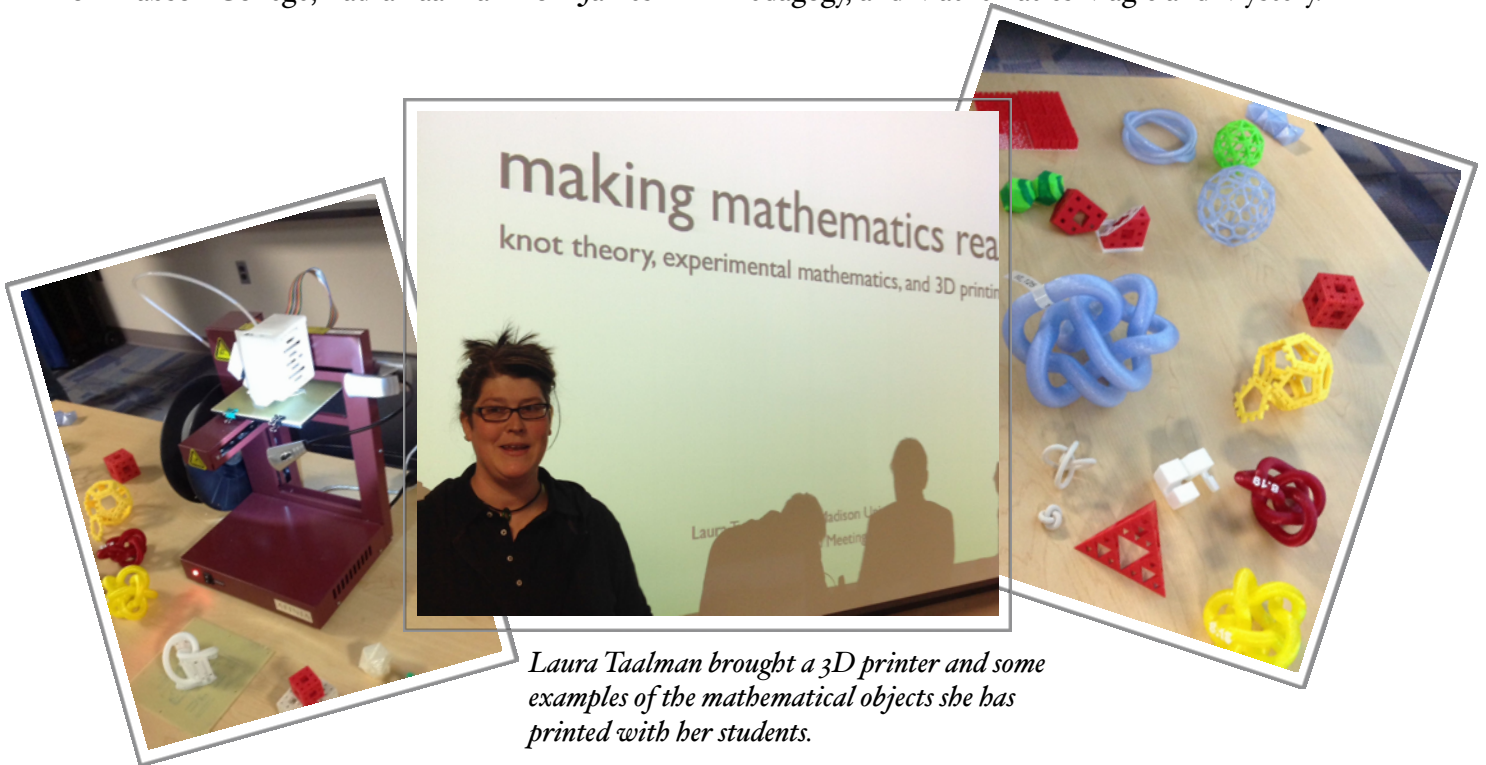
HIGHLIGHTS FROM THE MAA-NJ SECTION MEETING HOSTED BY ROWAN

Olcay Ilicasu spearheaded the successful MAA-NJ meeting held in conjunction with the Garden State Undergraduate Mathematics Conference at Rowan on April 5, 2014. In addition to the numerous math team members who assisted during the meeting (see page 2), local hosting committee members included *Abdul Hassen Hieu Nguyen, Umashanger Thayasivam, Jay Schiffman, Ron Czochoz, Dex Whittinghill, Ik Jae Lee, Laura Schultz, Marcus Wright, Jim Zeng, and Catharine Dickerson.*

Featured keynote speakers included Rick Cleary from Babson College, Laura Taalman from James

Madison University, and Frank Morgan from Williams College. Rick Cleary spoke about some non-standard applications of mathematics and statistics to sports and also led a workshop on teaching a math and sports course. Laura Taalman gave a talk entitled, "Making Mathematics Real: Knot Theory, Experimental Mathematics, and 3D Printing." Frank Morgan talked about optimal pentagonal tilings.

Contributed paper session topics included History of Mathematics, Statistics Practice and Pedagogy, and Mathematics Magic and Mystery.



Laura Taalman brought a 3D printer and some examples of the mathematical objects she has printed with her students.

Alumni Spotlight: Gene Newman '68



Gene graduated from Glassboro State College in 1968 with a degree in Mathematics Education. He went on to a 33-year teaching career, starting at Oakcrest High School in 1968 and moving to Abesgami High School in 1972. In addition to teaching, he coached soccer and cross country at Abesgami and later coached cross country and track at Richard Stockton College, where he was named NJAC Coach of the Year for indoor track during the 2001-2002 season. He retired and moved to Green Valley, AZ in 2002. He became the Certifier for Arizona in 2002 and was named Chair of the Road Running Technical Council (RRTC) in 2006. He also serves as Course Registrar for the RRTC. As a certifier, he measures the length of road race courses to confirm that they are accurately measured. Gene and his wife Carole have two sons, David and Michael, and four grandsons.

CONGRATULATIONS TO THE CLASS OF 2014

We welcome the following students to the ranks of Rowan Mathematics Department alumni. Honors as of April 2014 are designated in parentheses as follows: *summa cum laude* (cumulative GPA between 3.85 and 4.00), *magna cum laude* (3.65 - 3.849 GPA), and *cum laude* (3.45 - 3.649 GPA). The list of candidates included below was provided by the Registrar's Office in April 2014 and also includes students who received their degrees in August 2013 or November 2013.

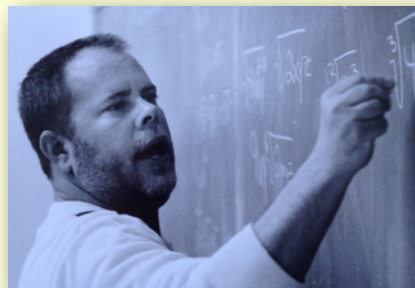
The following students are candidates for the **Master of Arts (M.A.) degree in Mathematics**: Benjamin R. Daniels, Dorvid Durant, Richard Stewart Greenfield, Elizabeth Anne Houwen, Bernard J. Parisi, and Christopher Robert Urban Jr.

Candidates for the **Bachelor of Science (B.S.) degree in Mathematics** include: Douglas Leslie Foglein (cum laude), and Karlie Marie Rudden (magna cum laude).

Rounding out our graduates are the following candidates for the **Bachelor of Arts (B.A.) degree in Mathematics**: Anthony M. Alberici (magna cum laude), Breijha Lin Anderson, Samantha Catherine Belsky, Ethan Robert Bobo, Samuel Downing Boss (magna cum laude), Katherine Mary Boyle, Jason Larry Brown, Annelise Buono (magna cum laude), Danielle Marie Burgo, Maya Kenyetta Cato, Jamie Marie Cattell (cum laude), Emily Kristine Coates (magna cum laude), Ariel Brooke Comer (cum laude), Lindsey Anne Cooker, Jacquelyn Mary Delgado, Laura Lynn Dingler (magna cum laude), Kelsey Claire Donovan (magna cum laude), Lisa Durazzo, Nicole Marie Engle, Drew William Favat, Kaitlyn Amber Filipiak (cum laude), Anthony Joseph Foremny (cum laude), Gary Edward Gandolfi (cum laude), Steven Salvatore Giambone (cum laude), Alexandra Consuelo Grote, Amanda Gurchick (cum laude), Joshua Glen Haegele (cum laude), Joshua S. Hahn, Julianne Elizabeth Hall (cum laude), Gina Marie Hartman (cum laude), Jillian Leigh Hixon (magna cum laude), Nicholas Richard Houghton (magna cum laude), Sasha K. Ivanic, Marissa Marie Johnston (magna cum laude), Jamie Beth Lang, Anthony G. Lelionis II, Felicia Loren Lott (cum laude), Gary Jerome Lowden, Dena R. Mahoney (magna cum laude), Samantha M. Maloney (magna cum laude), Katherine Joan Martin (cum laude), Stephanie Alyssa Martin, Samantha Lynn Minnella, Michael Samuel Moore, Omar Joaquin Munoz,

Andrea Arlene Myers, Adrianne S. Novak, Ramond Kurtis Okuda, Anthony J. Osinski Jr., Amy Lynn Pekarcbik, Kaitlyn Nicole Philipson (cum laude), Stephen Glenn Picone (cum laude), Jaime Danielle Pitman (cum laude), Daniel Stephen Reeve, Robert Anthony Reilly, Alisa Marie Ridolfino (magna cum laude), Harrison William Riskie (cum laude), Dennis Pelaez Robles, Frank Ruopoli (magna cum laude), Lindsey Nicole Russo, Jared S. Ruutikainen, Alexander L. Rybyinski, Jean Mary Saint Elien, Bobby Scalley, Todd Joseph Schug, Jessica N. Smolenski (cum laude), Francisco Soto Jr., Ashley E. Spigelman, Cynthia Lee Sternotti, Taylor Morgan Sternotti, Jennifer Lynn Stief (magna cum laude), Victoria Ashley Sucharski, Rebecca Anne Swift, Crystal E. Uhl, Chelsea Erin Vander Pyl (cum laude), Jessica Lynne Walker (cum laude), Erin Marie Warantz (magna cum laude), Jessaca Rose Wilford, Heather Elizabeth Williams (summa cum laude), Michael Steven Wong (magna cum laude), Renee Danielle Wright (cum laude), Kristina Jeanne Yoroshko (magna cum laude), and Michael Patrick Zomberg.

Adjunct Spotlight: Shawn Rutter '08



Shawn has taught as an adjunct instructor at Rowan University since 2010. Although he primarily teaches developmental mathematics, he has also taught College Algebra, Structures of Mathematics, and Contemporary Math. Shawn graduated from Rowan University in 2008 with a bachelor's degree in Mathematics, and he earned a Master's degree from Drexel University in 2010. He will be assuming the role of Developmental Mathematics coordinator at Rowan College at Gloucester County in Fall 2014. Shawn is currently enrolled in the Educational Leadership doctoral program at Rowan University and expects to complete his degree by 2017.

2013-2014 MATHEMATICS DEPARTMENT COLLOQUIUM SERIES

Jay Schiffman coordinated another successful Mathematics Department Colloquium series. As summarized in the table below, presentations were given by department faculty, undergraduate and graduate students, and invited guest speakers. Anyone interested in giving a colloquium presentation during the 2014-2015 academic year should contact Jay Schiffman (schiffman@rowan.edu).

Date	Speaker	Title of Presentation
9-18-13	Professor Jay L. Schiffman, Rowan University Mathematics Department	<i>Some Delightful Interconnections Existing Between Pythagorean Triples and Recursive Sequences</i>
9-25-13	Professor Karen Heinz, Rowan University Mathematics Department and Thomas E. Shown, Monongahela Middle School, Deptford, NJ	<i>Using Triangular Numbers as "Steps" when Constructing Quadratic and Cubic Sequences</i>
10-01-13	Professor Tom Osler, Rowan University Mathematics Department	<i>The Mystery of Merten's Theorem</i>
10-16-13	Sky Waterpeace, Graduate Student, Rowan University Mathematics Department	<i>How Vieta Found his Famous Product for Pi</i>
10-30-13	Sky Waterpeace, Graduate Student, Rowan University Mathematics Department	<i>Deriving Vieta's Product for Pi from Archimedes' Recursive Algorithm</i>
11-13-13	Dr. Leszek Sczaniecki, Lockheed Martin, Moorestown, NJ	<i>On Computing Geodetic Coordinates</i>
11-14-13	Nora Buggy and Phuong-Trang Vu, Undergraduate Students, Rowan University Mathematics Department	<i>Partition Functions and Recursive Relations</i>
11-20-13	Daniel Bittner and Long (Winston) Cheong, Undergraduate Students, Rowan University Computer Science and Mathematics Departments	<i>Converging on the Area of the Mandelbrot Set</i>
11-20-13	Brooke Logan, Undergraduate Student, Rowan University Mathematics Department	<i>Scanning for Complementary Code Matrices</i>
2-03-14	Professor Tom Osler, Rowan University Mathematics Department	<i>Two Tangent and Cotangent Formulas with Applications to Heron's Formula</i>
2-17-14	Professor Jay L. Schiffman, Rowan University Mathematics Department	<i>Home Prime Reversals – A Variation on the Home Prime Conjecture</i>
2-24-14	Professor Tony Breitzman, Rowan University Mathematics Department	<i>Progress in The Twin Prime Conjecture</i>
3-31-14	Professor Hieu Nguyen, Rowan University Mathematics Department	<i>The Prouhet-Thue-Morse Sequence and Doppler Tolerant Waveforms in Radar</i>
4-11-14	Dr. Chris Rorres, Lecturer in Epidemiology, University of Pennsylvania (Dean's Distinguished Lecture Series)	<i>Archimedes and the Quest for the Theory of Everything</i>
4-14-14	James Rosado, Graduate Student, Mathematics Department	<i>Some Definite Integrals from Fourier Series</i>
4-21-14	Professor Paul C. Pasles, Villanova University (Mathematics Awareness Month – Mathematics, Magic and Mystery)	<i>Magically Magical Mathematics</i>