

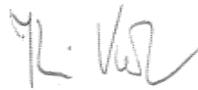
Dear Alumni and Alumnae,

Fall 2013

Greetings from all of us at the Mathematics Department! We hope this letter finds you well. As you doubtlessly noticed, this letter is late. That is what happens when there is too much to do and not enough time to do it.

This has been my first year as chair, and it has sure been a steep learning curve. There have been many changes and exciting developments. Some faculty are leaving, others are joining us. We are continuing to grow. The actuarial program <http://www.westfield.ma.edu/ecke/342/> is becoming more and more popular. Plans for an addition to Wilson and renovation of the existing space are moving closer to reality.

As always, best wishes for you and yours,



### Comings and Goings

This academic year, we are welcoming 31 new students to the department, one of our biggest class to date. We are also joined by two new faculty members on one-year fulltime positions: Dr. Jim Wright is coming to us from Green Mountain College in Vermont. Dr. Jesse Johnson earned his Ph.D. from the University of Notre Dame earlier this year.

Three of our faculty left at the end of the spring semester. Dr. Marcus Jaiclin accepted a position at Mercersburg Academy in Pennsylvania. Mercersburg is a private, coed, college preparatory boarding school with 430 students (18 percent are day), grades 9-12 and postgraduate. Dr. Mary Ann Connors is retiring after 12 years at Westfield State. For her last class, students lined up to give her a standing ovation as she walked to her class room. As you may know, Dr. Connors was the graduate DGCE advisor for our majors, and also the secondary education supervisor. Dr. Ted Welsh has taken over her position as secondary education coordinator. Dr. Larry Griffith also retired. His position was  $\frac{1}{4}$  math; many of you may have taken Math 220 – Discrete Structures with him and will remember his amazing breadth of



Congratulations to our 2013 graduates: Marena Batzarian, Elizabeth Boland, Steven Brinker, Jenna Collins, Emily DeHaro-Otero, Jamie Ekness, Jessica Fothergill, Walter Malec, Ashley McClafin, Michael Millard, Jamie North, Brendan O'Brien, Heather Parker, Marc Pereira, Trevor Perrault, and Michelle Rizzo. The Academic Excellence Award this year goes to Jenna Collins and Jessica Fothergill. Walter Malec received the Professor Sbrega Memorial award.



**Deborah Samwell** has been nominated to receive the “Phenomenal Woman” award from the “Massachusetts Women in Public Higher Education”. Finally someone officially recognized her contributions.

As is tradition, we again had six students give presentations at the annual Hudson River Undergraduate Mathematics Conference HRUMC at Williams College this year.

- Michele Klemaszewski “Singapore Math”
- Jamie Ekness “Doomsday Algorithm: Finding the day of the week an event occurred.”
- Katherine Gonsalves “Using Picture Books To Teach Math To Children With Intensive Special Needs”
- Amy Elcock “Using Children's Literature To Teach Elementary Mathematics”
- Michael Mailloux “Pretty Pictures: Polynomial Progressions and their Primes”
- Eric Rakus “The Cantor Set”

## Changes to the Major

In part based on feedback received from you, we completed a re-design of our major. Students are now required to take 8 instead of 6 300-level courses and complete an additional 6 credits of practicum, internships, independent studies, or more course work. We are adding and reviving courses and enable students to look for appropriate courses outside the department, such as Econometrics or Data Analysis in ENVS. We are working with the Computer Science Dept. to create a certificate in programming. I am also trying to get more students into internships. This reminds me: if any of you are willing and able to host one of our majors in an internship, please contact me [kvorwerk@westfield.ma.edu](mailto:kvorwerk@westfield.ma.edu). Thank you all for your help.

# Math teacher embraced technology

September 16, 2013

By Russ O'Reilly ([roreilly@altoonamirror.com](mailto:roreilly@altoonamirror.com)) , The Altoona Mirror

## Excerpts used with permission

Recently retired college professor Mary Ann (Corbo) Connors led a career that is internationally respected and was built around her passion for using technology as a tool to teach math.

Connors' advocacy for educational technology began during her first year of teaching at Altoona Area. It was the same year when the last of the 15 consecutive unmanned U.S. lunar missions failed again to photograph the moon's terrain, 1964.

"We had a computer installed in the basement of the high school. It had to be in a temperature controlled, enormous room, and it filled the room. There was a faculty meeting that year, and the tech people from G&E invited any teacher to learn. I volunteered with some others. Every day after school we learned everything we could about the computer."



Courtesy photo

Mary Ann (Corbo) Connors, pictured here with students from St. Leo's Catholic grade school in Altoona, led a career that was internationally respected.

Soon after she learned the computer programming language, the 22-year-old teacher introduced it to her algebra students, who would generate solutions to algebra equations by entering instructions into the computer.

"They learned a computer could do only what you instruct it to do, everything has to be perfect," she said.

With a career spanning six decades, Connors devoted her teaching career to using technology to help students develop an appreciation of math.

Connors is an Altoona native and a 1959 graduate of Altoona Catholic High School, now Bishop Guilfyole.

Her career blossomed from teaching third grade at St. Leo's School in Altoona while an undergraduate at Seton Hill in the early 1960s to teaching mathematics at Altoona Area Senior High School, then at the U.S. Department of Defense Dependent High School in Hanau, Germany. Perhaps the highlight of her career was that she was among the first group of civilian women mathematics professors to teach at West Point in 1997.

"I went where God led me," she said over the phone from her home in Massachusetts. She approached her professional life the way she approaches math, one step at a time.

In May, Connors retired from Westfield State University, Mass. as a professor of mathematics and coordinator of the mathematics teacher preparation program

coordinator.

"I dedicated my life to helping students like mathematics," she said on the phone from her Massachusetts home. "Mathematics are the foundation to everything. Knowledge of fractals [a concept of modeling structures with numbers] has advanced everything from movies to human health," she said.

And calculus - "Without calculus we would not have advanced to the moon."

Connors has contributed to a variety of national publications and has presented at many conferences and seminars from the local to international level.

Since her May retirement, she has been honored by her undergraduate school, Seton Hill University, as an alumni leader.

"Dr. Connors has influenced and educated countless students in her six-decade career in mathematics education," a Seton Hill press release stated.

After her first two years teaching at Altoona Area, Connors continued her own education, earning a science grant to pursue a masters at Notre Dame. She was among the first group of laywomen to earn a master's degree in mathematics from the University of Notre Dame in 1967.

She went on to receive a doctorate in education from the University of Massachusetts Amherst in 1995. Connors' passion for communicating the importance of mathematics to students is manifest in her doctorate dissertation titled "An Analysis of Student Achievement and Attitudes by Gender in Computer-Integrated and Non-Computer-Integrated First Year Mainstream College Calculus Courses."

In the mid-1990s, about the time she began teaching at West Point, calculators emerged that illustrated practical applications of the complex math concepts.

Over the phone, she spoke enthusiastically of seeing students able to comprehend Newton's law of cooling, for example, with the help of devices attached to graphic calculators.

"Visualization gave students so much insight. I wanted to do everything I could to help. Many students fear calculus, but it's all understanding it one step at a time," she said.

She carried her respected reputation in the academic world with her to West Point in 1997, said Col. Jerry Kobylski.

"We didn't have computers back then to help us visualize math concepts like we do today. We did have the calculators. Her knowledge and ability with programming the calculator was tremendous. She was instrumental in bringing out new methods of visualizing math concepts in our programs."

While at West Point, Connors continued to do presentations at other universities and people would say, "Where are you from? West Point, oh, where is that?" It was great having a faculty member with such accomplishments outside of West Point," Kobylski said.

She taught at West Point until 2001.

"She came in with no military background, but in no time she was one of our leaders. She fully immersed herself in cadet life, meeting with them outside of class. She was an incredible team player. She burned the midnight oil if she had something to do to help students. That was her persona, always helping others."

Connors has been married to her husband, Edward Connors, for 43 years. They have two grown children, James and Kathleen. The husband and wife care for Connors' 92-year-old mother Josie (Carnicella) Corbo, a native of Altoona, who lives with them in Massachusetts. Connors' late father Dominick Corbo of Altoona, retired as a machinist inspector from the Pennsylvania Rail Road Juniata Shops and also was a professional barber.

The Mathematics Department is proud to announce the formation of the Massachusetts Iota Chapter of the Pi Mu Epsilon (PME) National Mathematics Honor Society at Westfield State University. Seniors Walter Malec and Jessica Fothergill (President and Vice President of our Math Club) began lobbying for the formation of our chapter in the spring of 2012. The application to form a new chapter was unanimously approved by the board of PME this spring.

The celebration of our new chapter took place March 22, 2013. First, an inaugural lecture was delivered by Dr. Richard Holford (father of WSU's own Professor Vanessa Diana). Dr. Holford, a retired applied mathematician, spoke on his life and work as an applied mathematician.

Following a reception attended by family, friends, and guests, the first members were inducted into our new chapter by Dr. Brigitte Servatius, board member of PME and Professor of Mathematics at WPI. These charter members included thirty two juniors and seniors students chosen based on their GPA, two alumni currently teaching at WSU, and the twelve faculty members of the Mathematics Department. While most of the student inductees are math majors, several elementary education/mathematics concentration seniors were also invited to join. Congratulations to all of our wonderful and mathematically talented students!!



More pictures are here:

[http://westfieldstateimages.smugmug.com/Events/Pi-Mu-Epsilon-Induction-2013/28740330\\_Km7btV#!i=2439416285&k=w4FmmGS](http://westfieldstateimages.smugmug.com/Events/Pi-Mu-Epsilon-Induction-2013/28740330_Km7btV#!i=2439416285&k=w4FmmGS)

Dr.s Fleron, von Renesse, Ecke, and Hotchkiss received a National Science Foundation Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics Type 2 grant in the amount of \$550,000. Their grant is entitled "Discovering the Art of Mathematics: Inquiry Based Learning in Mathematics for Liberal Arts. The project has a newly designed webpage, where you can find out about the project's history, find out about workshops, browse through materials, and sign up for a newsletter. <http://www.artofmathematics.org/>.