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# MATH@ANDREWS

Volume 5, Issue 1

S. M. Henson and D. H. Rhoads, Editors

December 2008

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## 2008 Math Graduates

**Thomas Adams** (BS Mathematics Education, Physics minor, Pi Mu Epsilon) is a Math Instructor at Niles Senior High School in Niles, MI, and a Math Instructor at Niles Adult Education Program. When Tom is not teaching, he is spending time with his wife and four kids in Bridgman, MI.

**Danielle Burton** (BA English Literature, BA French Studies, Mathematical Studies, Pi Mu Epsilon, J. N. Andrews Scholar) is currently in Tucson, Arizona, working for the Southwest Conservation Corps as a Technical Trails Crew member. The Crew, which builds and maintains wilderness trails, goes out on 12 day hitches, living in the field and building fresh tread, cutting corridors, repairing disused or old trails, and building rock structures. Next year Danielle will study Mandarin in China and possibly stay in China for a second year teaching English. After that she may go to graduate



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*High school teaching—wilderness trail building—  
grad school in econ, physics—medical physics—  
NASA's Jet Propulsion Laboratory*

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school—but the country and subject are as yet unknown. Danielle says, “Arizona is hot!” She got hyponatremia on November 1 while working in White Canyon near Phoenix in 100 degree heat. But she loves her job!

**Brian Ibanez** (BA Economics, Mathematical Studies, Pi Mu Epsilon, J. N. Andrews Scholar) is still in Berrien Springs; he will graduate in December of 2008. Brian plans to teach a GRE Quantitative Prep course at Andrews this spring for Student Success. He also plans on looking for an internship at a central bank. Brian is currently applying to graduate schools; he plans to do a PhD in economics.

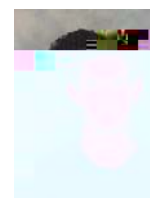


**Laura Nelsen** (BS Mathematics Education, Computer Science minor, Pi Mu Epsilon) is teaching 7-10th grade math and science at Adventist Christian Academy in Charlotte, NC. She plans to do a master's in math. Things are going well and she loves teaching!



**Jeffery Riess** (BS Physics, Mathematical Studies) is working with Global Physics Solutions commissioning Linear Accelerators that are used for treating patients with cancer. He plans to eventually return to graduate school and do a master's in medical physics so that he can work clinically as a medical physicist.

**Nicholas Valles** (BS Mathematics, BS Physics, Pi Mu Epsilon, J. N. Andrews Scholar) is working on a PhD in physics at Cornell University. Currently, he is working as a research assistant for Matthias Liepe in a Superconducting Radio Frequency Group. Right now they are finding the maximum superheating magnetic field for superconducting cavities below their critical temperatures. Nick plans to be a university research professor in accelerator physics. He has some advice for the majors still at Andrews: “Enjoy undergraduate problem sets while you still can, and make sure that you write up your current homeworks clearly and keep them organized. I've been able to save a lot of work by taking that advice and the problems have proved useful already.”



**Danielle Wuchenich** (BS Physics, Mathematical Studies, BA Spanish Studies, Pi Mu Epsilon, J. N. Andrews Scholar) is currently working on the Laser Interferometer Space Antenna (LISA) at NASA's Jet Propulsion Laboratory in

past summer Vanessa took a group of Spanish students to Spain.

**Andrea Moore** (MS Mathematics and Science, 2006) is working on a PhD in Environmental Modeling at Oklahoma State University. The research paper resulting from her master's thesis recently appeared: A. L. Moore et al. 2008. Modeling the daily activities of breeding colonial seabirds: dynamic occupancy patterns in multiple habitat patches. *Mathematical Biosciences and Engineering* 5:831-842.

*Galina and Merlynd Nestell (Mathematics, 1957)*

**Curtis Wiltse** (MS Mathematics, 1972) recently sent us an update. He wrote: "For both years I was in the (masters) program, I taught a calculus class under Dr. Harold T. Jones, from whom I learned much about teaching. After teaching junior high math for a year, I went on to earn an MSPH (Master of Science in Public Health) from Loma Linda University and a PhD from the University of Iowa (both in biostatistics). After working as a statistician in medical research and clinical trials for 30 years, the last 20 being at Eli Lilly and Company in Indianapolis, I am retiring at the end of 2007."

*Math majors, class of 1955, at 50<sup>th</sup> reunion in 2005. From back left: Bruce Zimmerman, Jim Gooch, Bob Wonderly; Ed Specht, Mary Specht. This was the first time in 50 years that the three grads had been together.*

**Bob Wonderly** (Mathematics 1955) recently sent an update. He wrote: "(At the time of my graduation), Evelyn and I were already married and we had a small baby. In the 50-some years since we became parents again, foster parents, then grandparents and now great-grandparents. My career was as a computer specialist and, among other places, I worked at the Universities of Minnesota and North Carolina, plus at AU and

computing.” About Harold Jones, he wrote: “I finally managed to pass the Morse code test for my general class radio operator’s license circa 1993. After that Harold and I had a few short wave QSO’s. As I recall he had the highest class license (two clicks beyond me) because he could do the Morse code so fast. He once told me he would hear whole words at a time. For me it was a struggle to recognize individual letters. Did you know that he was translating Russian mathematical papers into English for republication?”

## 2007-2008 Math Awards

At the end of each academic year the Department holds an awards ceremony at which outstanding students from each mathematics course are honored. In April 2008 we granted 43 awards to 35 people. Math major awardees were **Ben Chase** (Advanced Calculus), **Brian Ibanez** (Discrete Mathematics, Linear Algebra, Calculus III), **Sereres Johnston** (Advanced Calculus), **Daniel Moskala** (Intro to Linear Algebra, Probability Theory, Discrete Mathematics, Linear Algebra), and **Nick Valles** (Advanced Calculus).

The Department awarded the Edward J. Specht Endowed Scholarship to **Sereres Johnston** and **Eric Shull**. The Harold T. Jones Endowed Scholarship was awarded to **Ben Chase** and **Brian Ibanez**, and the Louis Ulloth Scholarship went to **Kiana Binford**.

*The Michigan Gamma Chapter of Pi Mu Epsilon was chartered at Andrews University in 1970.*

Sixteen members were inducted into the Michigan Gamma Chapter of Pi Mu Epsilon on April 16, 2008 in a ceremony held in the Department. President Tom Adams presided over the meeting and led the initiation ceremony. He was assisted by Eric Shull, Vice President, and Danielle Wuchenich, Secretary-Treasurer.



*Pi Mu Epsilon inductees, 2008*

The new student members are Danielle Burton, Michael Castelbuono, Benjamin Chase, Jackie Diah, Kenneth Fletcher, Benjamin Hamon, Peter Hutauruk, Brian Ibanez, Jason Lee, Daniel Moskala, Emmanuel Scott, and Aaron Seibold. The

new faculty members are George Agoki, Lee Davidson, Ronald Johnson, and William Wolfer.

The newly elected officers for 2008-2009 are Eric Shull, President, and Daniel Moskala, Vice President. Kiana Binford has been appointed Secretary-Treasurer. Dr. Robert Moore continues to serve as faculty advisor, but Dr. Joon Hyuk Kang will be taking the reins as the year progresses.

Department professor Shandelle Henson presented a short talk on continued fractions, and, as April was Mathematics Awareness Month and the theme was the Mathematics of Voting, Department chair Robert Moore presented a conundrum on dividing up the U.S. House of Representatives according to state populations.

## Mary Specht, 1915-2008

Mary Josephine Michel Specht, 92, died March 26, 2008 at the Garden Villa nursing home in Bloomington, Indiana. She was born in Farmington, Washington on August 18, 1915, the youngest of ten children, and married Edward John Specht on December 25, 1938. Surviving are her husband Edward, a son, Frederick, of Bloomington, a daughter Lahna, of South Bend, one grandchild and two great-grandchildren.

Her husband Edward is Professor Emeritus of Mathematics. He served Andrews University from 1947 to 1972 as chair of the Department of Mathematics. He resides in Garden Villa nursing home in Bloomington, Indiana.

## Research Updates

### Recent Publications

**Kang, J. H.** and Lee, J. 2008. The non-existence and existence of positive solution to the cooperation model with general cooperation rates. *Korean Journal of Mathematics* 16 No.3:391-401.

**Kang, J. H.** 2008. A cooperative biological model with combined self-limitation and cooperation terms. *Journal of Computational Mathematics and Optimization* 4 No.2:113-126.

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*Former graduate students Andrea Moore (MS Mathematics and Physical Science) and Smruti Damania (MS Biology) appear as coauthors.*

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**Moore, A. L., Damania, S. P., Henson, S. M., and Hayward, J. L.** 2008. Modeling the daily activities of breeding colonial seabirds: dynamic occupancy patterns in multiple habitat patches. *Mathematical Biosciences and Engineering* 5:831-842.

Stern, H. A. and **Calkins, K. G.** 2008. On mesh-based Ewald methods: Optimal parameters for two

differentiation schemes. *Journal of Chemical Physics*  
128:214106.

## **Recent Presentations**

Shandelle Henson, Colloquium, Department of Mathematics, Furman University, Greenville, SC, November 13, 2008.

Shandelle Henson, Lecture, Cultural Life Program, Furman University, Greenville, SC, November 13, 2008.

Shandelle Henson, AMS Sectional Meeting, Special Session on "Mathematical Biology: Modeling, Analysis, and Simulations", Huntsville, AL, October 24, 2008.

Shandelle Henson, John F. Stout Symposium, Biology Department, Andrews University, Berrien Springs, MI, September 26, 2008.

Shandelle Henson, Lecture, Marine Science Center, Port Townsend, WA, July 17, 2008.

Shandelle Henson, Colloquium, Department of Biological Sciences, Walla Walla University, Walla Walla, WA, May 6, 2008.

Shandelle Henson, AMS National Meeting, Special Session on "Recent Advances in Mathematical Biology, Ecology, and Epidemiology", San Diego, CA, January 6, 2008.

Yun Myung Oh, AMS Sectional Meeting, "Lagrangian H-umbilical submanifold in a quaternion Euclidean space", Claremont, CA, May 4, 2008.

## **Featured Alumnus: David L. Russell**

*In my senior year at Emmanuel Mi*

skates in the college maintenance facility, hardly earning enough to pay for the cafeteria and nowhere near enough to support myself during the academic year to come. It was a crisis; not the last.

Wilson Trickett sent me to interview with Dr. Herwarth F. Halenz, Chair of Chemistry. He was an outwardly gruff Teutonic, not given to idle praise, who came to America just after the First World War—but he had a good heart and, as luck or providence would have it, found himself in the summer of 1957 without a lab assistant. I had done extremely well in the grade 13 chemistry course at OMC taught by Richard Banks and I hoped to get a degree and pursue a career in chemistry. That record, and perhaps Banks' recommendation, landed me the job, which paid much better than fixing roller skates and even better than the College Woodwork.

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*I received the PhD in Mathematics at the University of Minnesota in 1964 and went to Madison, where I spent 22 years, finishing there as Full Professor.*

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I have always been grateful to the memory of Dr. Halenz even though I later disappointed him by switching to mathematics at the end of the first semester of my junior year. I did very

