

AFTERMATH

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Texas A&M University-Commerce—Mathematics Department Newsletter

Fall 2007

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Whoever despises the high wisdom of mathematics nourishes himself on delusion and will never still the sophistic sciences whose only product is an eternal uproar.

Leonardo da Vinci

Faculty Comings and Goings

Ka Sai Un joins us as Lecturer of Mathematics; more about Ka Sai below. We also welcome back **Tom Faulkenberry** as a Lecturer; Tom has worked with us before, and continues to pursue his doctorate in the Department of Psychology. **Heidi Staebler-Wiseman** is no longer “officially” affiliated with the department—but unofficially we are still in touch with Heidi. She and her husband Ray had a baby girl in the early spring, and this summer all three embarked on an adventure to mainland China, working and traveling. (Heidi also hopes to finish up her PhD in Mathematics Education this academic year.)

Ka Sai is originally from Macau, China. She came to the United States after graduating from high school, and received a bachelor's, two master's (... Educational Technology and College Teaching in Mathematics...), and a doctorate (Supervision, Curriculum and Instruction in Higher Education) from A&M-Commerce (and she also completed the teacher certification program). She also picked up 18 graduate hours in mathematics along the way! Ka Sai had some teaching experience while a graduate assistant, but immediately before joining our department, she served as the coordinator of the developmental mathematics personalized instruction program at Eastfield College in Mesquite. Her research interests include developmental education, instructional technology, teacher education, and preparation of future college faculty members. This summer, Ka Sai's co-authored article “Pre-service teachers' ICT competency in Thailand” was published in *Academic Exchange Quarterly*. Welcome Ka Sai!



The department also welcomes **Bhimal Ghimire** as a new graduate assistant, and welcomes back: **Ahmad Abdallah**, **Cody Fisher**, **Caleb Grisham**, **Jason Moore** and **Renee Townsend**. All teach Intermediate Algebra - Math 131 - and assist with the Math Skills Center and supplemental instruction duties. Adjuncts this year are **Marilyn Massey** in cyberCommerce (teaching an online College Algebra class, albeit with face-to-face testing), and **Shari Beck** and **Brenda Reed** in Corsicana.

Staff Comings and Goings!

Angie Hill joined our department as an Administrative Secretary II in May. Angie has been an employee of Texas A&M University-Commerce for 13 years, beginning in the Registrar's office in 1993, and moving to Residence Life in 1999. Angie left the University last year when an irresistible job opportunity came

up, but perhaps it was too good to be true and Angie is happy to be back on campus. She has been married for 23 years to Bryant, and has two daughters, Mandy and Mallory. Angie and her family live in Wolfe City, where both her husband and her dad were born and raised. Angie notes “Living in the ‘ole family homestead’, raising horses and rodeo, is our life. My dream as a little girl was to live in Wolfe City, marry a W.C. hometown boy, raise a family and raise horses. I believe my dreams have come true!”

Ricia Montgomery left our department in the spring, but we still get to see Ricia from time to time (and get calls and email from her) as she is now working in the office of the Vice President for Academic and Student Affairs as administrative assistant to the Associate VP.

Departmental Grants/Outreach

Vanessa Huse is completing her two recent Teacher Quality Professional Development grants (which totaled \$338,254, and ran for 26 months). She also received a \$25,000 T3 grant for preservice teachers. **Eileen Faulkenberry** also continues working with Teacher Quality Grants. The department is also involved in two other outreach grants. Operation Spark!, an outreach activity to schools in Commerce and Greenville, is in its second year of a 3-year, \$150,000 grant from L3-Communications. The mathematics component includes university students visiting area schools in a cryptography “strand”—including giving prizes to kids if their group can decrypt various messages—and other applications of mathematics will be incorporated this year. Faculty are also involved in the open house for parents, and a Saturday enrichment activity/workshop for high school kids. In addition, the department supported the first year of a generous 3-year, \$1.5M grant to the university for math and science outreach, Project STEEM. The majority of the funds are for project-based learning, and a large chunk go towards an intensive, four-week, summer math and science camp (targeting rural and economically disadvantaged, but high-aptitude, area high schoolers). In June, 26 area kids participated in the Infinity Institute, and about 60 participated in the X-TEEMS academy in July. We also help sponsor enrichment workshops in Mesquite, one Saturday a semester—not just in math! (Other areas have included include art, business, robotics, computer security, and biology, among others. Some of the math activities are also somewhat off-beat, like mathematical tricks that amaze.) If you are a teacher, or live in the area and have a middle or high school student who might benefit from these activities, or just want to know more, let us know!

Mathematics Clubs and Other Student Activities

The math clubs have started using the Planetarium for an occasional meeting (having it all to themselves). They also had their usual monthly meetings with faculty and friends giving interesting talks on subjects such as Pigeon-Hole Theory and Mathematical Card Tricks (and other tricks). In April, the math clubs sponsored three students to the MAA conference in Edinburg, TX, where the students were treated to pizza, puzzles, and talks from students and faculty, alike. Also, in June, they took 25 students to the CAMT conference in San Antonio, TX, where students were treated to many exhibitors and a wide variety of talks, from activities to use in a math classroom to how to become a better math teacher. **Pamela Webster** continues as the faculty sponsor of the clubs. We also continue to find students who willingly torture themselves each December on the Putnam Exam. (It's a 6 hour exam, with 12 problems, and the most common score nationally is ZERO.) Here's a sample from last year's Putnam: Consider the curve determined by $x^3 + 3xy + y^3 = 1$. Find all collections of points A, B, C, if any, that lie on the curve and form an equilateral triangle; and find the areas of all such triangles. (It's not that hard, actually.)

The Math Skills Center and Developmental Math Update

The MSC continues to serve A&M-Commerce, in several ways. Tutors continue to assist students with problems from arithmetic to Calculus (and sometimes beyond). The students continue to come in for traditional, face-to-face tutoring, but are also interested in using our computers. Many students come in for help with Geometer's Sketchpad, *Mathematica*, and online homework through My Math Lab. We are also continuing use of "Supplemental Instruction" (SI) lab periods in Intermediate Algebra classes. SI generally entails students meeting before class for an hour with an undergraduate SI leader. SI leaders don't teach, nor tutor; rather, they facilitate discussion on note-taking and problem-solving strategies, and prompt students with math problems. Students often go to the board to present their work in front of their peers. Overall, SI helps students develop skills so that they can be successful in their math classes in general. The MSC and developmental math—and our outreach grants—have come to employ many A&M-Commerce students, and we're happy to give them the opportunity to help others and earn some much-needed income along the way.

More Faculty and Staff-Related Updates

Stuart Anderson was busy last fall visiting high school and community college campuses. He was glad to see former students who have teaching positions in these places. He also gave presentations at Region X workshops and the Texas Section MAA meeting. He also attended national meetings in New Orleans, LA and San Jose, CA – Stuart was elected Governor of the Texas Section of the MAA earlier this year. **Bill Aslan** is in his 41st year of teaching in Commerce (having started in the summer of 1967 – which Bill points out is two years *before* Dr. Keith McFarland, our university President, who is stepping down in May). **Hasan Coskun**'s paper "An elliptic BC_n Bailey Lemma, multiple Rogers-Ramanujan identities and Euler's pentagonal number theorems" was accepted for publication in the *Transactions of the AMS* and he has recently submitted several others, as well as an NSF grant proposal. Hasan organized the departmental colloquia last year—see our website for details of the lectures. **Charles Dorsett** recently had his 86th, 87th, and 88th publications: "New Characterizations Of Separation Axioms," "Extremely Disconnectedness And Convergence" and "Submaximal Spaces and Maximal Covering Properties"; and "New Characterizations of Normal and Strongly Normal Spaces" was accepted by the *Journal of the Indian Academy of Mathematics*. **Eileen Faulkenberry** (and Tom) have been collaborating on a few projects over the past year: working with

teachers on quantitative literacy (via statistics and probability) through a Teacher Quality Grant, and developing some alternative psychometric measures of elementary preservice teacher knowledge. Both also have collaborated on raising a wonderful baby daughter, who already counts (albeit in French...) **Tom Faulkenberry** has been steadily working on finishing the PhD in Cognitive Psychology at A&M-Commerce. He spent a semester in the Psychology department teaching Intro Psychology and Statistical Methods. Tom notes that while it was nice to see things from a different perspective he's certainly glad to be back home in the math department. His dissertation topic is broadly defined as mathematical cognition, but it has a focus on working memory. **Laurene Fausett** is now in a tenure-track position. Her fifth and latest book (*Applied Numerical Analysis Using Matlab*, 2nd edition), was published by Prentice Hall (2008) (including a 2nd International Edition). Laurene and her husband Don (and their dogs Charlie Brown and Dory) enjoyed the summer in Wyoming working on an old cabin they are renovating. **Vanessa Huse** was busy with grants, publishing articles, speaking and traveling (and teaching classes in Corsicana). "How does your Mathematical Garden Grow" appeared in NCTM's *Mathematics Teaching in Middle School*; "Using Virtual Manipulatives in the Teaching of Mathematics for Preservice Teachers" appeared in the Texas Computer Educators Association (TCEA) *Technology Research Symposium* Vol 1; and "Using Virtual Manipulatives in the Teaching of Mathematics for Preservice Teachers" appeared in the *International Conference on Technology in Mathematics Teaching Proceedings*. Vanessa also spoke at the TCEA Technology Research Symposium in Austin, and at the International Conference on Technology in Mathematics Teaching in the Czech Republic this past July. (And two articles mentioned in the last newsletter have now been published: one that she and **Brenda Reed** coauthored, "Techno-zoo", appeared in NCTM's Online Journal for School Mathematics; the article that she and **Shari Beck** coauthored, "A Virtual Spin on the Teaching of Probability," appeared in NCTM's Teaching Children Mathematics.) **Yelin Ou** is also now in a tenure-track position. Yelin has been enjoying his life in Commerce. As he puts it, "An apple a day keep the doctor away; teaching and some theorems a day make me feel great and bring me my monthly pay!" He is continuing his research work on the differential geometry of harmonic maps and morphisms. Cooperating with colleagues in USA, France, and China, he had one paper published in 2007, two submitted, and three in preparation. **Lymeda Singleton** continued serving as a math consultant to area school districts. She presented "TI-73 for Novices" and "Beginning TI-83" calculator workshops in June at Region 10 Educational Service Center in a collaborative conference "Teachers Teaching with Technology" between Region 10 and Texas Instruments, and presented "Integrating in the Classroom with Popcorn and Chocolate" and "Transforming Math Class with Tangrams" at the Conference for the Advancement of Mathematics Teaching, June, San Antonio. Her first granddaughter was born in May, and a daughter was married in July. **Nikolay Sirakov** supervised several undergraduate students in research in image processing, submitted several grant proposals including to NSF, and attended (and gave lectures at) several IEEE conferences last fall and spring. His article "Automatic concavity's area calculation using active contours and increasing flow" was published in an IEEE journal. **Pamela Webster** continues to direct the Math Skills Center, and coordinate the Intermediate Algebra program, including training GAs and working with Supplemental Instructors. Related to this work, Pamela was asked to speak about "Developmental Mathematics and a Tutor Center" at the TCCTA conference in Houston last Fall. In April, Pamela presented information on our developmental math program at the Texas Section MAA meeting, along with Heather Burkham. The two of them are working on two different articles (hopefully) to be published by the end of the year. Pamela also presented at the T³ conference in Richardson, concerning transformations of functions in an Algebra classroom. Pam continues to enjoy horseback riding. **Rick Kreminski's computer** continues to do as it's told and, well, compute. This summer, it found a nice surprise to a simple question: Where is "c"?

(...as in, Where is the “c” that appears in the Mean Value Theorem, or more generally in the error term in Taylor’s theorem with remainder?). Rick’s computer also wrote up a unified explanation of some calculus concepts like the chain rule for functions from \mathbf{R} to \mathbf{R} or \mathbf{C} to \mathbf{C} . (Rick still spends most of his spare time pondering bankruptcy, evidence, and international human rights law. He also began serving as President of the Texas Association of Academic Administrators in the Mathematical Sciences . His family experienced a strange sensation when son Chris apparently finished up in Architecture at UT, but is suffering separation anxiety ever since daughter Amelia went off to college.)

Alumni Updates

Please drop us a line to let us know how you’re doing! **Jonna Wallace (Spiller)** is mathematics department chair at Bonham HS (having finished 14 years of teaching there). **Holly Stovall** is a TA for first-year statistics at SMU (while pursuing a PhD in statistics there). [And we have had a (recent) record number of Master’s graduates this past year; besides Holly, **Jeremy Gaime**, **Shannon Kratzmeyer**, **Jodi Laroe**, and **Krishna Yarlagadda** each graduated with their Master’s degrees and said good bye.) **Hoyle Julian** served the department as Alumni Ambassador this year (and continues to be very active for a retired guy). **Brandon Combs** and his wife had a new addition, a baby girl, during the summer. Brandon is with Humana doing actuarial work. **Lesla Wasson** (Moseley) let us know that her Bachelor’s in math has opened many doors for her since graduation in 1996, and is very happy at L3 Communications in Greenville. **Mary Lyons** is starting her 5th year as principal at Kemp HS. **Connie Yarema** is in the math department at Abilene Christian, and this summer spent 2 weeks in Japan, then moved on to China, on behalf of ACU.

Inspired by email from **Shannon Solis**, who could not attend our brunch but wanted to help fund a textbook for a needy student, we announced at the last brunch that we planned to set up a special book project—the Pay-It-Forward Book Microloan Project—wholly funded by private donations. (Here’s how it works: we discretely offer two kinds of “loans”, namely one for nonmajors and one for majors, for particularly needy students. For math majors, we loan out money for them to buy the text, with the expectation that, someday, they’ll repay it; we imprint the book with a special stamp that reminds the student it’s part of this special loan program.) Alumni, please keep in touch!

Previously Retired Faculty

Lela and **Archie Brock** celebrated their 50th wedding anniversary in September (hosted by daughters Jennifer, Janet, and Janie). Frieda and **Howard Lambert** recently returned from visiting in the north, including son Kirby and his wife in Helena, Montana. According to **John Heath**, Betty and **Dale Bedgood** went to the Greek Isles. **Vance Underhill** took a river cruise in Europe last spring. **John Davenport** lives in Rockwall, and comes back to visit often. He has enjoyed travelling and visiting family (mostly kids and grandkids) in Georgia, Maryland (briefly visiting Italo Simonelli), Oklahoma, and Rowlett. **Jack Lamb** was seen at the spring Texas section MAA meeting in Edinburg, and apparently is still known as “Flash Lamb”. Mildred is busy helping with Margaret’s and Brenda’s kids. Jack maintains web sites for Methodist Church and other groups in Belton, Tx.

Dates to remember: The annual joint meetings of the MAA and AMS are January 6-9th, 2008 in San Diego. The annual meeting of the Texas Section of the MAA will be at Tarleton State University in Stephenville, April 3-5. (www.maa.org).

Foundation and Scholarship News

We are most thankful for friends of the department who over the years have helped countless students with their mathematical careers. Current (Fall 2007) recipients are:

- Joshua Patterson —**Rachel Lafferty Excellence** honoree
- Flavius Kortik—**Hoyle & Ann Oglesby Julian Scholarship**
- Mark Ellermann, and Zackery Mikeska —**Rachel Lafferty Scholars**
- Jake Furnish—**Northeast Texas Community College Scholarshi**
- Flavius Kortik—**John and Elaine Yznaga Scholarship)**
- Flavius Kortik—**Dale & Betty Bedgood Scholarship)**

The **Dennis Grantham Graduate Math Scholarship**, the **W.W. “Bub” Taylor Scholarship**, the **Bill, Gloria and James Aslan Scholarship** and the **Cecil Wright Mathematics Scholarship** will be used for helping students in the spring and summer.

If you wish to make contributions to any of these funds, you may call the Department at 903.886.5157 or the A&M-Commerce Foundation at 903.886.5712

Let Us Hear From You

We would like to hear from all of our former students. Whether you used slide rules or calculators in the classroom, attended ET or A&M-Commerce, we are interested in what has happened in your life since you left campus. If you have a story about a favorite professor, we would like to hear that too. Please fill out the form below and return it to the Math Department so your information can be included in the next *Aftermath Newsletter*.

Name: _____

Address (for our files): _____

City, State & Zip: _____

Degree: _____ Year Graduated: _____

Email address: _____

Please list any career changes, achievements, awards, or personal news that you would like to share:

Send to the: **Mathematics Department**
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or via email to Richard_Kreminski@tamu-commerce.edu

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Homecoming Brunch

The nineteenth annual Mathematics Homecoming Student/Alumni Brunch (formerly Breakfast) will be held at 10:30 a.m., Saturday, October 20, 2007 in the Bluebonnet room of the Sam Rayburn Memorial Student Center. **Please send in your reservations by October 17, 2007.** The cost is FREE(!) to alumni, special friends of the math department, and their guests – but only if we know ahead of time (for catering purposes).

Name: _____

Address (for our files): _____

City, State & Zip: _____

Email address: _____

Please reserve _____ places at the Homecoming Breakfast on October 20.

Please return to:

Mathematics Department
Texas A&M University-Commerce
P.O. Box 3011
Commerce, TX 75429-3011

or via email to Richard_Kreminski@tamu-commerce.edu