
Union University Mathematics and Computer Science Newsletter

Spring/Summer 2001 ♦ Issue 6

Student Wins Award

Andy Nichols' presentation "In Defense of Euclid" won a "top four" prize at the Thirty-Third Biennial Convention of Kappa Mu Epsilon, held April 5-7, 2001 at Washburn University in Topeka, Kansas. There is no distinction made among the "top four" papers. This is the first such award at the national convention for a Union student; twice during the previous three years a Union student has won a top award at a regional convention. Andy's paper was the result of his senior seminar project, directed by Dr. Bryan Dawson. Dr. Dawson, along with students Breanne Oldham and Nicki McDowell, also attended the convention.

Student Presentations

Two of this year's senior computer science students gave presentations at the Fall Conference of the mid-southeast Regional ACM chapter in Gatlinburg. Tim Newell presented his senior seminar project "Carryover Effects." Scott Johnson presented the research paper "Privacy Matters in the Digital Age."

Students Participate in Programming Contest

The annual regional ACM programming contest was held at Murray State University on November 4, 2000. Mr. Steve Brinton took two Union teams. Our teams placed fourth and sixth in a field of 11 schools, including such



schools as St. Louis University, Rhodes

College, Evansville University, Murray State University, and UT Martin. Our fourth place team (Amy Miller, Tim Newell and Elvis O'Chieng — left-to-right, in picture at left) used the Java language and our sixth place team (Katie Bemis, Steven Krawczyk and Wes Plunk — left-to-right, in picture below) used the C programming language.



First Dr. Joe Tucker Scholarship Awarded

After many years of fund raising and planning, the Dr. Joe Tucker Scholarship has become an endowed scholarship at Union! The awards will initially be rotated between mathematics and computer science students. Juniors and seniors meeting certain requirements, based on both need and merit, are eligible. The first recipient, for the 2001-2002 academic year, is senior mathematics major Patricia Rush. Congratulations!

Student Awards

Other ongoing departmental awards for this year include:

First place in major field achievement test:

Mathematics: Andy Nichols

Computer Science: Brian Glas, Scott Johnson (tie)

Academic Excellence Medals:

Mathematics: Andy Nichols

Computer Science: Brian Glas

First Year Programming Award: Allen Smith

Wolfram Award: Nikki Vassar

Students Present Senior Seminar Projects

Students in both the mathematics and computer science seminars presented their senior seminar projects at separate colloquiums this year. Some students also presented their projects at meetings, as reported elsewhere in this newsletter.

Mathematics presentations and titles were Nicki McDowell, "The Traveling Salesman of the Brooklyn Subway System"; Jamie Mosley, "Balise Pascal: Proving God??? A mathematical Interpretation of Pascal's Wager"; and Andy Nichols, "In Defense of Euclid."

Computer science presentations and titles were Brian Glas, "Virtual Dorm Suite Project"; Scott Johnson, "Jaron Ministries International — Summer Internship"; Steven Krawczyk, "Web Site for the McAfee School of Business Administration"; Tim Newell, "Carryover Effects"; Wes Plunk, "The Englewood Project"; and Shanon Pollmann, "Tamalco Christian Church Website".

All or portions of these projects can be obtained at:

<http://matcscserver.uu.edu/matcsc/student/index.htm>

Brian Glas' virtual dorm tour can be viewed through links on the following web page:

<http://www.uu.edu/student-services/residence-life/description.htm>



Computer Science Lab Completed

The department finally saw the completion of its own lab: 16 machines in specialized desks that allow the room to be used both as a classroom and as a lab.

The departmental lab is also equipped with a projection system for instructor and student presentations.



New Faculty

Jim (James S.) Kirk, a 1980 music graduate of Union, will rejoin his alma mater as Assistant Professor of Computer Science. He has masters degrees in music and in applied linguistics, and after several years of mission work in the far east returned to the University of Louisville where he will receive a Ph.D. in computer science and engineering this summer. With Dr. Kirk, the department will now have two computer science faculty with a terminal degree. Dr. Kirk replaces Mrs. Pat Laffoon, who retired at the end of the spring 2000 semester.

Faculty Resignation

After three years of faithful service, Mr. Steve Brinton resigned this spring, intending to pursue a Ph.D. in computer science. We wish him well wherever the Lord may lead him, and hope that he will rejoin us at some future time. Mr. Terry Evans, who was with the department this year while we searched for a replacement for Mrs. Laffoon, has agreed to stay for one more year while we search for a replacement for Mr. Brinton (or convince Mr. Brinton to return!).

Mathematics Curriculum Changes

The mathematics degree program has recently been strengthened. Changes include requiring all students to take Linear Algebra (not just those getting a teaching certificate) as well as requiring all students to take either Introduction to Analysis or Abstract Algebra.

The Stork Comes Again

Dr. Matt Lunsford and his wife Deanna are the proud parents of their third child, Emma Noelle Lunsford, born December 20, 2000. Emma was welcomed by her older sister Cara and her older brother Thomas. Congratulations!

Mr. Richard Dehn and his wife Kathie are the proud grandparents of their seventh grandchild, Elizabeth Grace Wallace, born February 28, 2001. Congratulations!

Faculty Publications

Dr. Bryan Dawson's article "Twentieth Century Student Scholarship: Student Papers in *The Pentagon*" was published in the Spring 2001 issue of *The Pentagon* (the official journal of Kappa Mu Epsilon). Dr. Dawson is a former editor of the journal. The paper grew out of a banquet address given by Dr. Dawson at a regional KME convention last year. Dr. Dawson also published proposed problem 549 in the same issue of *The Pentagon*.

Dr. Bryan Dawson's article "The Senior Seminar in Mathematics at Union University" has been accepted for publication by the journal PRIMUS, and should appear in the September or December issue.

Dr. Matt Lunsford's doctoral research has been included in the recent American Mathematical Society publication *Modules over non-Noetherian Domains* (Volume 84 of the Mathematical Surveys and Monographs Series) by L. Fuchs and L. Salce. This research originally appeared in the mathematics journal *Rendiconti del Seminario Matematico* as "A Note in Indecomposable Modules over Valuation Domains."

Sattler Foundation Grant

Received

Mr. Dwayne Jennings assisted in a successful grant proposal to the Sattler Foundation. Our department received eight professional copies of the latest version of *Mathematica* at a retail value of \$7,160.

Faculty Receive Internal Grants

Dr. Matt Lunsford received a Pew Summer Research Grant for a project entitled "The Ideas of Evariste Galois." Dr. Lunsford plans to review the memoirs of Evariste Galois (1811–1832) and to explore how his ideas might be used to enhance the pedagogy of a first course in abstract algebra.

Dr. Bryan Dawson and Dr. Troy Riggs were awarded a Teagle Faculty-Faculty Research Grant in order to collaborate on a project involving the mathematics of perceptions of highway speeds.

Dr. Troy Riggs was awarded a Teagle Integration of Faith and Learning Conference Grant to attend the 2001 Association of Christians in the Mathematical Sciences Conference, in Grand Rapids, MI, May 30 to June 2. Dr. Lunsford also attended the conference.

Dr. Jan Wilms received two Teagle grants this year. One was to attend the Syllabus Conference on Technology in Education, in Santa Clara, CA, July 24–26, 2000. The other was to attend the 18th Annual Academic Chairperson Conference in Orlando.

Mathematics Faculty Attend and Present Talks at Meetings

Dr. Bryan Dawson presented "The Senior Seminar in Mathematics at Union University" at the annual Joint Mathematics Meetings in New Orleans, which were held January 10–13, 2001. Mr. Don Richard also attended a short course at the meetings.

Dr. Matt Lunsford, Dr. Troy Riggs, Mr. Dwayne Jennings and his wife Mrs.

Becky Jennings all attended the 80th annual meeting of the Southeastern Section of the Mathematical Association of America in Montgomery, AL, March 30–31, 2001. Dr. Lunsford gave a talk on “Using History in Undergraduate Mathematics Courses” at the Project NExT workshop at the conference. Drs. Lunsford and Riggs organized the undergraduate poster session for the meeting. Dr. Riggs also participated in the short course “Introductory Statistics.”

Mr. Richard Dehn attended the Tennessee Mathematics Teachers’ Association 49th annual conference in Nashville, April 27–28, 2001.

Dr. Chris Hail attended the “2000 Tennessee Regional Mathematics and Science Summit IV — Sharing Visions: Education to Careers Program,” in Knoxville, August 28–29, 2000.

Mr. Dwayne Jennings attended the MathML International Conference in Champaign, IL, in October 2000. The conference discussed the Mathematical Markup Language.

Mr. Dwayne Jennings attended the National Science Foundation Chautauqua on “Software in the Science and Mathematics Classroom: Mathematica,” May 20–22, 2001, in Memphis. Mr. Richard Dehn was also selected to attend, but was unable to do so due to his wife’s health.

Computer Science Faculty Attend Meetings and Take Courses

Dr. Jan Wilms gave two presentations at the CCCU2000 Conference on Technology held at Azusa Pacific University, June 20–23, 2000.

Dr. Jan Wilms attended the Wideband Gigabit Networking conference in Memphis, September 20, 2000. He also attended EduCause in Nashville, October 10–13, 2000, and the Gateway/Buena Vista University conference on Wireless technology in Sioux City, IA, February 20–21, 2001.

Ms. Stephanie Edge attended a Course Technology Conference on Office XP in Atlanta, March 9, 2001.

VISIT

www.uu.edu/academics/coas/mathcsc

Faculty Give Colloquium Talks at Union

This year’s colloquium series was organized by Dr. Troy Riggs. Several faculty participated. Presenters included Dr. Jan Wilms, “RealPresenter;” Dr. Matt Lunsford; Dr. Chris Hail, “Constructivism;” Dr. Troy Riggs on actuarial education; Mr. Don Richard on liberal arts mathematics courses; and Dr. Bryan Dawson, “Round Robin Scheduling.”

Faculty Lead GO Trips

Dr. Chris Hail and Mr. Steve Brinton led students on GO Trips over spring break this year. Dr. Hail’s group ministered in Hilton Head, SC while Mr. Brinton’s group ministered in Irving, TX. These events took a tremendous investment of time on the part of the leaders, but the impact is eternal.

Other Faculty News

Mr. Don Richard continued his role as statistician for Union athletic teams, and as statistician and/or scorekeeper for the NAIA Women’s national tournament in Jackson.

Dr. Chris Hail is still serving as Chaplain for the West Tenn Diamond Jaxx, the AA affiliate of the Chicago Cubs. Dr. Hail also taught the book of Romans for eight weeks to the men’s discipleship group on campus.

Alumni News

Beverly Lewis (math, ’00) was teaching at North Side High School in Jackson this year when a student began choking on a french fry. Beverly performed the Heimlich maneuver on the student, saving her life. God’s hand was evident in that Beverly was not feeling well and had attempted to get a substitute for that day, but could not, and thus came to

work.

Mrs. Isinell McClanahan Newbill (math, ’42) wrote a nice letter in response to the last newsletter. Among other things, she states “I have always been proud that my work at Union stood up against some keen competition in a few graduate classes at the University of Chicago. ... My math background at Union has served me well and I continue to encourage students to come there.” She said she has taught math at all levels, including Air Force classes at Union during World War II, and that she continues to tutor students that need help. Mrs. Newbill resides in Jackson.

Plans of graduating seniors include Scott Johnson (CS), pursuing a M.Div. at Southern Seminary. Jamie Mosley (math) also plans to attend the seminary. Andrew Nichols (math) will attend graduate school (Mississippi). Three CS graduates will be entering the workforce: Shannon Pollman, Southwestern Bell Communications; Brian Glas, FedEx; and Steven Krawczyk, Lernout & Houspie.

KME News

Speakers at KME meetings this year included alumni Melissa Culpepper (November) and Lori Davis Evans (initiation banquet, April) and Dr. Bryan Dawson (March). Seven students were initiated during a banquet at Barnhill’s Country Buffet on April 19. A back-to-school pizza party in September and year’s-end cookout at the home of Dr. Jan Wilms in May provided nice bookends to the year’s activities.

ACM News

ACM activities this year included a fall field trip to Methodist LeBonheur Hospital and talks by Darrell Vaught of Jackson Community College; Tim Newell, “Java Client Server”; Mr. Steve Brinton, “Tickle Programming Language”; and Tim Newell, “C# Programming Language.” The Wycliffe Bible Translators also gave a fascinating and inspiring presentation entitled “Computers in the Mission Field.”

Alumni News Wanted!

Please tell us what you are doing! We
would love to hear from our alumni, and

would like to print what you are doing so
that your friends can keep up with you.
Contact your favorite professor or email

Dr. Dawson at bdawson@uu.edu.