

Notes from the Chair *by Rick Gillman*

Last year's electronic newsletter was very well received, so we've decided to stick with the format. Besides this newsletter, you can check out current news about the department under Headlines on the home page.

There is also a link on the home page to mathematics oriented crossword puzzles. Mrs. Steffen suggested creating them last fall, and they have been a big hit in the building. Approximately twice per semester, we print a poster sized puzzle and hang it on the wall in the lobby with a marking pen. Students then complete the puzzle as they come to and from their classes.

Continuing with our move to electronic communications, we would love to hear from you!!! Please visit our [Alumni Registration](#) site and tell us about yourself and send us a current email address so we can contact you.

And now...on with the news which is pretty exciting this year.

*Permutation Patterns 2009 by Lara Pudwell* This July, I spent a week in Florence, Italy to attend the Seventh International Conference on Permutation Patterns. This combinatorics conference is the annual meeting for mathematicians who work in my graduate research area of permutation patterns. [more...](#)

*Project NExT by Daniel Maxin* The 2009 edition of MathFest in Portland, OR saw the conclusion of the year-long Project NExT fellowship for three junior faculty members in the Department of Mathematics and Computer Science: Sara Crawford, Daniel Maxin and Lara Pudwell. Another member of our Department, Shane Drew, started the program as a new fellow for Project NExT 2009-2010. [more...](#)

*A Sabbatical Year by Greg Hume* I was on sabbatical the past academic year. I was a consultant for a small company that makes a variety of products, most dealing with time and attendance. [more...](#)

*Department Outreach to Middle School Students by Patrick Sullivan* The department is involved in projects involving middle school students. Last year Zsuzsanna Szaniszlo and I supervised the grading of solutions for the Abacus International Math Challenge. [more...](#)

*Undergraduate Research by Sara Crawford* This past year, I advised an undergraduate research team for the first time on a project in applied statistics. Our goal by the end of the year was to conduct a statistical analysis to determine whether or not there was an association between a reduction in teaching load and student evaluation scores provided through end of the semester student surveys, and then to prepare a poster presentation and written summary of our work. [more...](#)

*Programming in Maple by Bill Marion* Two years ago I told you about the Department's tentative move to use the Computer Algebra System (CAS), Maple, in our calculus sequence. Now, all of our closed labs in Calculus I, II and III are run with Maple and some of us calc instructors use Maple on a regular basis in class to demonstrate a number of key ideas where graphical, symbolic or numerical presentations might help the students "see" the concepts better. [more...](#)

*The Indiana Section of the MAA by Ken Luther* Many of you know about the Mathematical Association of America, a national organization for those interested in teaching of, and research in, mathematics at the undergraduate level. The

Department of Mathematics & Computer Science - Valparaiso University  
membership is subdivided into 29 geographical sections – either by state or groups of states. The Indiana Section has been active since 1924. This year – well, from spring 2009 until spring 2010 – I am the Chair of the Indiana Section. [more...](#)

*My New Position in the Department by Dave Hull* I had three significant experiences during this past year: Experience 1. I retired from full-time teaching in May. I now have a new title as bestowed by the University., Senior Research Professor. I am not paid by the University nor do I receive any benefits, such as health insurance. But there are several advantages associated with my position. I am able to keep my office. [more...](#)

*Actuarial Exam Successes by Shane Drew* 2008-2009 was another successful year for our actuarial science program. We began offering 1-credit actuarial exam preparatory courses for our students. We used an independent study format – students met with me once a week to discuss problems from the prior week’s material and to get an overview of the coming week’s material. They then sat for the actuarial exam in November/May. [more...](#)

*Expanding MATHCOUNTS Partnerships by Melissa Desjarlais* Last year I told you about a grant I received to form a partnership with Michigan City middle schools to get students excited about and be successful in mathematics through participation in a mathematics competition. This summer I received another grant, for \$24,000, to expand MATHCOUNTS partnerships in Northwest Indiana. The grant consists of three parts: [more...](#)

*April 2009 Awards by Jerry Wagenblast* On a beautiful Spring evening last April members and spouses of the department were joined by a goodly number of students for the annual conferring of awards and scholarships. Our venue in the new Harre Student Union was the Brown and Gold Room, which afforded us some striking views of the VU campus. [more...](#)

*Social Networks and Computer Science by Jim Caristi* Many of us spend a lot of time on Facebook. Of course, we are mature and smart enough to not spend too much time there. But it’s hard to be a modern person in the early 21<sup>st</sup> century and not have a presence on Facebook, and possibly other social networking sites as well. This summer I had an opportunity to attend a special workshop at Duke University on using social networks in computer science.