

Fresh Ph. D.s Amongst Alumni: Math not a stale subject for our majors

In the past year we've heard from four of our alumni from the 1990's who earned Master's degrees at UML, went on to earn doctorates in mathematics or mathematics education, and have launched their professional careers. Here are updates on all of them, in their own words.

Tom Boucher (M. S. in 1998, Ph. D. from Texas A & M in 2003) I'll be officially graduating in December 2003, but I've defended and the dissertation is with the Thesis Office now. My research involved deriving conditions under which threshold autoregressive nonlinear times series possess a particular form of ergodicity known as V-uniform ergodicity. I accepted a position as a postdoctoral fellow in the Department of Statistics here at Virginia Tech and plan on being here for a couple years beefing up my vita before seeking a tenured position. All is well here. I can be reached at the Virginia Tech Department of Statistics.

Donna Dietz (M. S. in 1995 from UML, Ph. D. from RPI in 2002) My area of research is currently Computer Aided Geometric Design, a combination of Analytic Geometry and Numerical Analysis. My thesis question was how to design 2D convex cubic spiral spline segments without the long computational overhead of calculating the roots of the derivative of the curvature of the cubic. The solution involved some geometric analysis of what was actually making the problem difficult, and the numerical creation of tables of solution ranges for various regions of the problem.

I have accepted a position at Mansfield University as a tenure track professor at the assistant level. My homepage is at <http://www.mansfield.edu/~ddietz>

Maureen (Doyle) Neumann (M. S. in 1995 from UML) I graduated from the University of Washington in 2001. The title of my dissertation was: "The Subjects and Agents of Change: Teachers Navigating the Role of Leader and Learner"

I am working at the University of Vermont, Education Department in Mathematics Education. I believe it is important to develop teachers who have a depth of understanding in their mathematical content knowledge and in their pedagogical content knowledge in order to enhance student learning in grades K-5. I am also interested in understanding how mathematics teacher leaders navigate a role of leader and learner, how they work to inform their fellow teachers thinking about teaching mathematics, and how successful professional development and teacher leadership exist in the complicated context and culture of schools.

John Burke (M. S. in 1995 from UML) I was a mechanical engineering major at University of Lowell when I started. I found that lab work was not my thing and differential equations (taught by Professor Stephen Pennell) stole me away into mathematics. I could not believe how interesting this subject was (and still is) to me. I transferred into math, and I have not looked back since.

I had a very bad academic (but fantastic social!) junior year. I knew that I wanted to go on to graduate school so I decided to take some graduate level courses to show 'em I could. And I did, mostly with Professor James Graham-Eagle (Kiwi). Thank goodness I did take those classes. I'm sure with strong letters of recommendation and good grades in those grad level courses, UMass Lowell gave me the break I needed.

While in grad school at Lowell, I couldn't learn enough, and I wanted to go on. Without Lowell I would not have been accepted to Arizona State University. I would not be doing research in dynamical systems, singular and randomly perturbed theory, and cellular biochemical modeling. I have just accepted a postdoc position at MIT working with Doug Lauffenburger (see <http://web.mit.edu/cbe/dallab/index.html>). I will be modeling and analyzing the apoptosis signal transduction pathway, and investigating how these pathways act as perturbations to the cell cycle and metabolic pathway. Best of all I will be working with doctoral students who will be verifying these models experimentally.