

## Bushel honored with career achievement award

By Shannon Whirledge

NIEHS researcher Pierre Bushel, Ph.D., was honored at the Massachusetts State House on April 23 with the Distinguished Alumni Award from the University of Massachusetts (UMass) at Amherst for his substantial influence in the field of toxicogenomics. The Distinguished Alumni Award is the most prestigious award conferred by the UMass Amherst Alumni Association upon its alumni, faculty, and friends, and is presented to those who have translated their UMass Amherst experience into distinguished achievement in their field of study.

### Going back to where it started

Bushel began his career in bioinformatics and toxicogenomics with a bachelor's degree in zoology from UMass Amherst. "You can't predict the path your undergraduate degree will take you," Bushel said. In addition to biology coursework, Bushel was mentored by several professors in the school's highly regarded chemistry department. During his undergraduate studies, Bushel reinforced the principles he learned in the classroom through laboratory instruction on actual research projects. "A firm foundation in both the physical and biological sciences and a knack for experimental procedures," Bushel said, crediting these as major contributing factors in his success.

Bushel explained that the Distinguished Alumni Award caught him by surprise. In addition to the great honor, Bushel learned that [Brian O'Connor, Ph.D.](#), professor emeritus of biology at UMass Amherst and Bushel's undergraduate advisor, would host his visit. The opportunity to thank the people who set him on his path to achievement underscored the unique nature of this award for Bushel.

### Putting bioinformatics to good use

After leaving UMass Amherst, Bushel earned a master's degree in molecular and cellular biology from Long Island University-Brooklyn and a doctorate in bioinformatics from North Carolina State University. In 2000, Bushel joined NIEHS as a biologist and is now a staff scientist in the Biostatistics and Computational Biology Branch. He also leads the institute's microarray and genome informatics efforts.

At NIEHS, Bushel has been awarded the Merit Award four times and received the National Institutes of Health (NIH) Director's Award in 2002 for his role in conceptualizing and implementing the NIEHS Toxicogenomics Research Consortium. His research using bioinformatics and computational biology to investigate the biological effects of toxicants led to a collaboration that may help better predict toxicity of anticancer therapies (see [story](#)).

(Shannon Whirledge, Ph.D., is a Research Fellow in the NIEHS Laboratory of Signal Transduction.)



*Bushel, right, with Andrew MacDougall, president of the UMass-Amherst Alumni Association. In addition to his scientific accomplishments, Bushel has enhanced the NIEHS community by mentoring students in the NIEHS Scholars Connect Program, the NIH Summer Internship Program, and as an external advisor for Ph.D. students. (Photo courtesy of Thom Kendall)*

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