Bioengineering Graduate Students Win NSF Fellowships

Two graduate students in the Department of Bioengineering have received fellowships from the National Science Foundation (NSF) to pursue doctoral degrees. These were awarded under the Graduate Research Supplements to Broaden Participation Program of the Directorate of Engineering of NSF. This program was recently initiated to promote increased participation of new Ph.D. students in all fields of engineering research with particular emphasis on individuals from underrepresented groups. The awards are renewable up to three years and are provided as supplements to current research grants of faculty.

Darcy Wagner joined the department in Fall 2007 after completing her BS degree in mechanical engineering at Gonzaga University in Spring 2007. She was part of the first group of students recruited into the new Biomedical Engineering PhD Program between the Colleges of Engineering and Medicine at UT. She has strong interests in field of implants and tissue engineering and joined the research group of Professor Sarit Bhaduri of the MIME Department, specializing in dental implants.

Darcy will be working on Professor Bhaduri's NSF funded project titled "Processing and Evaluation of HA Nanocomposites". The research involves the development of the ceramic material hydroxyapatite (HA) for dental cements. It also involves surface modification of the materials to facilitate mineralization and cell growth.

Julie Matheny graduated from Ohio University with a BS degree in biology in 1997. She has been a biology instructor at Lourdes College and recently decided to pursue a doctoral degree in the Department of Bioengineering. She was admitted into the graduate program in the department in Fall 2008 and she will formally join the Biomedical Engineering PhD Program in Spring 2009. Julie's research interests are in medical applications of materials and she has joined the research group of Professor Lesley Berhan of the MIME Department whose interests are in the areas of auxetic materials and nanomaterials. Julie will work on Professor Berhan's NSF funded project titled "Toward Negative Poisson's Ratio Composites – Numerical and Experimental Study". The research involves developing medical applications for auxetic materials, which have the unique shape response to external forces.

Darcy Wagner and Julie Matheny are examples of outstanding graduate students who have been recruited to the Department of Bioengineering recently. The department offers both M.S. and Ph.D. degrees. In Fall 2008 there are 44 students enrolled in the department, equally divided between Masters and Doctoral students.