

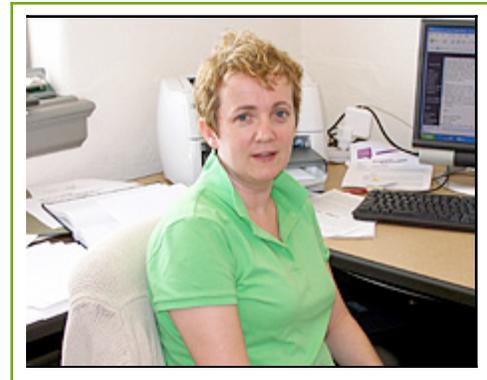
In The Spotlight: New Faculty Members (2006)

November 2006 -- This academic year, the Department of Biological Sciences welcomed three new faculty members: Drs. Fidelma Boyd, John Hoyer, and Ken van Golen. "We are very excited to have these three outstanding investigators in the department and know their presence will have a big impact on our students and faculty," said Dr. Daniel Carson, Chairperson of the department. "Dr. Boyd is a top-notch microbiologist who brings an exciting program in the study of the mechanisms whereby bacteria share genes. Her work addresses novel aspects of genetics as well as microbial virulence and human disease. Dr. Hoyer joins us after a long, highly successful career studying basic mechanisms of biomineralization, a process critical to both normal and pathological processes. He is a well-established, highly regarded investigator who expands existing departmental expertise in bone and kidney biology. Dr. van Golen's laboratory studies the role that intracellular signaling proteins play in controlling cell migration and invasion. His work complements the growing strengths of the department in the fields of cancer biology and tissue morphogenesis."

E. Fidelma Boyd, Ph.D.

Previously a tenured Lecturer with the Department of Microbiology at the National University of Ireland at Cork, [Dr. Boyd](#) came to UD, "because of its strong academic background and commitment to research." When asked to describe her work, she explains:

"My research interests include understanding how and why certain isolates of a particular bacterial species make us ill while others do not. The ubiquitous aquatic species *Vibrio* is of particular interest. I have a number of research projects investigating the emergence of human pathogenic isolates of *V. cholerae*, the causative agent of cholera, *V. parahaemolyticus*, an important seafood borne pathogen and *V. vulnificus*, an organism that can cause septicemia and wound infection with very high mortality rates."



Outside of work, Dr. Boyd enjoys hiking, running, and traveling. Her first and middle names, Ethna and Fidelma, come from the first two female Irish Saints.

John R. Hoyer, M.D.

Before coming here, [Dr. Hoyer](#) was at the University of Pennsylvania School of Medicine where he was a Professor of Pediatrics and Medicine for over 22 years. What attracted him to UD were the shared research interests with some of the faculty members in Biological Sciences and other departments. He also said the focus of his research has become much more basic than when he was practicing medicine, so moving from a School of Medicine to a basic science department made sense for him. Here's how he describes his research:



"My research investigates the way that proteins and smaller molecules influence the process of the mineralization of calcium salts. I got into this area of research while studying how proteins help protect against kidney stone formation (most stones are made of calcium crystals). I work closely with George Nancollas, a Professor of Chemistry at SUNY Buffalo and Jim DeYoreo, a theoretical physicist at the Lawrence Livermore National Laboratory, in our joint studies of crystallization. One of my

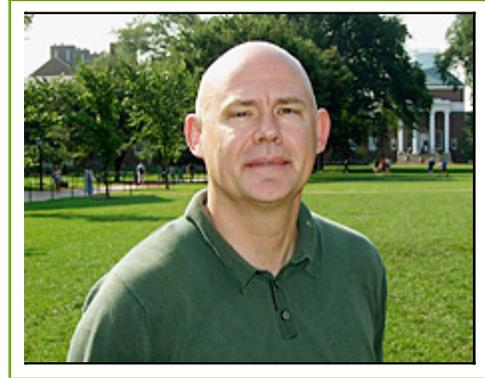
roles within this investigative group is to translate the language of theoretical physics and chemistry into a form that can be understood by biologists. This is a formidable, but exciting challenge."

Dr. Hoyer's wife, Libby, is a Clinical Geneticist, and they have two sons (both of whom are currently in college). In his free time, he enjoys reading, chamber and orchestral music, woodworking, canoeing and sailing. He has spent his entire adult life in an academic setting with the exception of two years when he was a U.S. Army Medical Officer in Japan.

Kenneth van Golen, Ph.D.

Dr. van Golen was an Assistant Professor of Internal Medicine at the University of Michigan before coming to UD. He said what drew him to the department here was, "the level and quality of research being performed here along with a smaller and more collaborative department." He explains his research by stating:

"My research is focused on how a group of molecules, the Rho GTPases, make cancer cells invade the body. The long term goal is to design strategies to interfere with these molecules or other related molecules found in their pathway to prevent cancer spread."



Dr. van Golen and his wife, Cynthia (also a Ph.D. and a researcher), have four children that range in age from three to ten. He likes to hunt, fish, go camping, and brew beer in his free time. In fact, his skills as a hunter were beneficial during his years as a graduate student in Texas, where he supplemented his stipend working as a duck and goose hunting guide.