



***2009 IOTA SIGMA PI AGNES FAY MORGAN RESEARCH AWARD  
Professor Helen Blackwell, University of Wisconsin – Madison***

Dr. Helen Blackwell is the **2009 recipient of the Agnes Fay Morgan Award**. This annual award is given for research achievement in chemistry or biochemistry. The nominee must be a woman chemist or biochemist, not over forty years of age at the time of her nomination.

Dr. Blackwell was born in Cleveland, Ohio in 1972 and attended Oberlin College for her undergraduate studies, graduating with highest honors in chemistry in 1994. She pursued her graduate studies in organic chemistry at the California Institute of Technology as a National Science Foundation predoctoral fellow with Professor Robert Grubbs. Dr. Blackwell received her Ph.D. in 1999 and then spent three years as Jane Coffin Childs Memorial Fund postdoctoral fellow in the lab of Professor Stuart Schreiber at Harvard University. In 2002, she returned to the Midwest and joined the faculty of the University of Wisconsin-Madison as an Assistant Professor of Chemistry. She was promoted to Associate Professor with tenure in 2008.

Dr. Blackwell has established a research program at the very interface of organic chemistry and bacteriology. Her broad goal is to understand the role chemical signals in host-bacterial interactions and infectious disease. Over the past seven years, she has developed a range of synthetic compounds that allow her to intercept a key cell-cell signaling pathway in bacteria called “quorum sensing.” This pathway is essential in bacterial host colonization, and her compounds represent powerful tools both to study quorum sensing at the fundamental level and to develop new therapeutic strategies to treat bacterial infection. Her research has been enabled by the development of several novel synthetic and biological screening methods that expedite the discovery of active compounds. Dr. Blackwell doesn’t do this alone! Instead, she leads a dedicated team of

~15 undergraduates, graduate students, and postdoctoral fellows in the pursuit of this research program.

Helen and her research team have received numerous awards for their interdisciplinary research. She is the recipient of a Shaw Scientist Award of the Greater Milwaukee Foundation (2004), a National Science Foundation CAREER Award (2005), a Research Corporation Cottrell Scholar Award (2005), a Burroughs Wellcome Fund Investigator in the Pathogenesis of Infectious Disease Award (2006), a Dupont Young Professor Award (2007), a Camille-Dreyfus Teacher-Scholar Award (2007), and a 3M Non-Tenured Faculty Award (2007). She was also selected as a MIT Technology Review "Top 35 Innovator under the Age of 35 in the US" (2005), an Alfred P. Sloan Foundation Fellow (2006), and as one of Popular Science's "Brilliant 10" (2007). Her research has been covered recently in the popular press, including "The New York Times," "The Economist," "Scientific American," and "Forbes."

When she is outside of the Chemistry building, Dr. Blackwell greatly enjoys travel, the outdoors, good food, and playing with her 4-month old daughter. She lives in Middleton, WI with her husband David Lynn (Professor of Chemical and Biological Engineering at UW-Madison) and their daughter, Hannah.