

Faculty researchers share their discoveries with community

by Natalie Johnson - Monday, December 03, 2007

<http://www.uwosh.edu/today/175/faculty-researchers-share-their-discoveries-with-community/>

From tabletops to beaches, University of Wisconsin Oshkosh scientists are helping clean up the community through their research projects.

Greg Kleinheinz, an environmental microbiologist, and Colleen McDermott, a pathologist and veterinarian, discussed how their research impacts Wisconsin communities at Reeve Memorial Union last week.

As part of the new Research to Reception Speaker Series, they presented specific examples from their research testing the surface water quality of more than 110 Wisconsin beaches and their investigation into the impact of using placemats to control infection at restaurants, hotels and other public places.

The invitation-only speaker series is hosted by the UW Oshkosh Foundation and Chancellor Richard H. Wells.

Kleinheinz and McDermott have collaborated on projects to better understand the sources of microbial contamination of recreational waters. Their work directly impacts the more than \$12-billion-per-year tourism industry in Wisconsin, as well as the Great Lakes tourism industry.

“We are a partner in the future of northeastern Wisconsin and the state of Wisconsin,” Kleinheinz said. “As a part of this future, we have an obligation as part of our mission to use our resources to assist the people of Wisconsin in any way possible.”

Kleinheinz directs the Industrial and Environmental Microbiology Laboratory, a facility active in a number of outreach, training and research areas. The lab operates with student researchers (graduate and undergraduate) and is fully certified to analyze *E.coli* and total coliforms in water.

The research projects are collaborations with regional health departments, small businesses, local industry and individuals. The lab also has outreach facilities located in Ashland, Eagle River, Oshkosh and Sturgeon Bay. In addition, the lab offers training to local businesses, including food safety and handling, industrial treatment technology, occupational safety and building/construction issues.

McDermott’s lab is particularly interested in detection of pathogens in water, sand and algae. She and her students are working to ascertain if *E. coli* is truly a good indicator of fecal contamination and can be used to determine risk to human health and to develop alternative methods of pathogen detection.

Kleinheinz and McDermott have generated more than \$1.25 million in grant and contract funding in the past four years, and large numbers of academic conference presentations and peer-reviewed publications in scholarly journals, most of them with student co-authors.

Research and community outreach allow students to bridge the gap between academia and real life.

“Academic preparation is critical for students, but understanding of real-world issues and how to apply the academic training also is crucial,” Kleinheinz said. “Understanding things beyond the university helps students further explore concepts and realize the importance of what they learn in a classroom.”

Kleinkeinz and McDermott are honored at the second Research to Reception event for their efforts at the inaugural event.