

UWO geologists study mysteries of past, present

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<http://www.uwosh.edu/today/2307/uwo-geologists-study-mysteries-of-past-present/>

University of Wisconsin Oshkosh scientists use geologic research techniques not only to dig into modern environmental issues, but also to study the impact of environmental change on earth's distant past.

Geologists Maureen Muldoon and Daniel Lehrmann recently presented their research findings during a Research to Reception Speaker Series event at Reeve Memorial Union.

In its third year, the invitation-only speaker series, hosted by Chancellor Richard H. Wells and the UW Oshkosh Foundation, highlights the contributions that UW Oshkosh faculty and academic staff make beyond the classroom through their creative and scholarly activities.

"We have a dedicated group of community friends and patrons who follow the UW Oshkosh faculty's research and accomplishments with great interest," said Foundation President Arthur H. Rathjen. "Likewise, our faculty members appreciate having a platform to share their efforts and engage a wider audience in discussion of current issues and public policy."

At the Research to Reception event, Muldoon discussed the flow of groundwater in Door County's fractured bedrock aquifers and how agricultural practices can be used to mitigate groundwater contamination.

After earning a master's degree in geology from UW-Madison in 1987, Muldoon served as a geologist with the Wisconsin Geological and Natural History Survey in Madison, studying of groundwater in Door County. Research for her doctorate at UW-Madison in 1998 also concerned the pattern of groundwater flow in dolomite bedrock.

Since joining UW Oshkosh's faculty in 1998, Muldoon has expanded this research through a series of projects, most recently studying similar hydrogeologic settings in Door County and the counties immediately south of Door County.

Lehrmann's presentation detailed evidence from his research in south China indicating that carbon dioxide buildup in the earth's atmosphere and oceans led to the greatest extinction in the history of life. His 1993 doctoral research at the University of Kansas involved rocks from China that recorded the mass extinction at the end of the Paleozoic Era. He also studied rocks in Turkey and Japan that record this event.

Before joining UW Oshkosh in 1996, Lehrmann worked for three years for Exxon Production Research. His expertise has led to collaborations with scientists at other institutions, including the Massachusetts Institute of Technology and Stanford University.

The next Research to Reception event, planned for April 2010, will showcase current research in the UW

Oshkosh's College of Education and Human Services.