Marcia Bjornerud, Ph.D.

**Award:** Research Infrastructure Program; $10000.00

**Title:** Professor, Geoscience

**Project:** Drilling into Possible Impact Cracter in Door County, Wisconsin

**Abstract:** (First Paragraph of Proposal)Impact craters are found on virtually every solid body in the solar system, from planets and moons to asteroids and comets. Crater counting and mapping are essential to estimating thesurface ages of solar system bodies and making inferences about internal and surficial processes that have operated on these bodies. Since the recognition in the 1960s that Earth too has experienced bolide impacts throughout its history, a total of 190 unambiguous impact craters have been documented around the globe (Spray, 2016). Two of these are in Wisconsin: the Rock Elm structure in Pierce County (French et al., 2004; Cavosie et al., 2015) and the Glovers Bluff structure in Waushara County (Read, 1983).

**Biography:** Marcia Bjornerud is Professor of Geology and Environmental Studies at Lawrence University. Dr. Bjornerud’s research focuses on the physics of earthquakes and mountain building, and she combines field-based studies of bedrock geology with quantitative models of rock mechanics. She has done research in high arctic Norway (Svalbard) and Canada (Ellesmere Island), as well as mainland Norway, Scotland, New Zealand, and the Lake Superior region. She received a B.S. in geophysics from the University of Minnesota and her M.S. and Ph.D. in structural geology from the University of Wisconsin-Madison. Prior to teaching at Lawrence, Dr. Bjornerud held a postdoctoral fellowship at the Byrd Polar Research Center at Ohio State University and a faculty position at Miami University in Oxford, Ohio. Bjornerud is a Fellow of the Geological Society of America and has been a Fulbright Senior Scholar at the University of Oslo, Norway and University of Otago, New Zealand. She is the author of a book for popular audiences, Reading the Rocks: The Autobiography of the Earth, and a contributing writer for “Elements,” The New Yorker’s science and technology blog.

**Congressional District**: 8

**Congressional Representative**: Mike Gallagher