

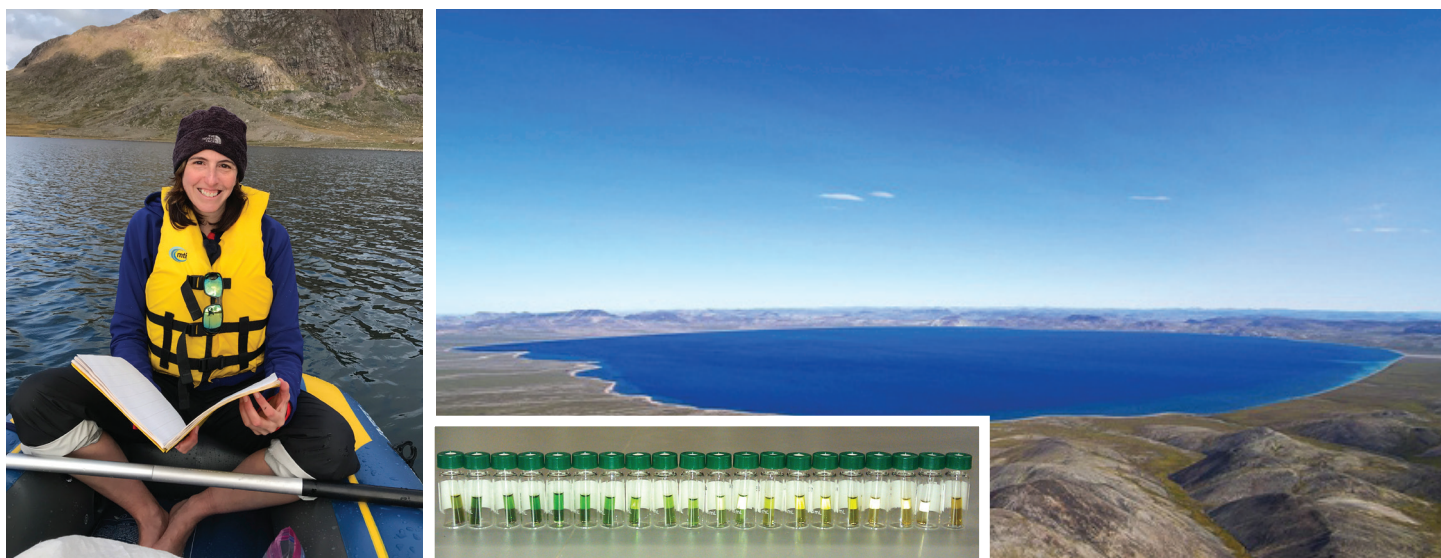
GETTYSBURG COLLEGE **X-SIG** SEMINAR SERIES

CROSS-DISCIPLINARY SCIENCE INSTITUTE

*presents*

# Isla S. Castañeda, PhD

*Associate Professor in the Department of Geological Sciences  
UMass Amherst*



*“Using molecules found in lake mud to examine temperature change in the Siberian Arctic: lessons from the past and future outlook”*

Organic molecules (lipids) preserved in lake or ocean sediments provide information on Earth's past life (plants, microbes, algae, bacteria, etc). This talk will examine ancient molecules from the mud of Lake El'gygytyn, which is located in arctic Siberia, that span the past 3.6 million years. During this interval, Earth's climate has naturally shifted between relatively warm periods (like today) and ice ages when globally temperature were lower and ice sheets expanded to cover much of the land in the northern high latitudes. At Lake El'gygytyn, molecules from plants and bacteria are used to reconstruct past temperature variability. A focus of the talk will be on understanding Arctic climate during naturally occurring past warm periods when conditions were similar to or even warmer than today, and on how the past can be used to inform the future.

MONDAY, FEBRUARY 17, 2020 • 4:00 P.M.  
MCCREARY HALL 115, BOWEN AUDITORIUM

*Light Refreshments*

Support for the X-SIG program is provided by: Dickson Fund; Kolbe Fund; Albaugh Fund in Chemistry; Alberte Fund in Biology; Cormack and Schweizer Funds in Physics. Support for the X-SIG Speaker Series is provided by EPACC, Biology, Chemistry, Computer Science, Environmental Studies, Physics, and Psychology Departments.

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