

Montana Tech Public Lecture Series



Presented by:

The Office of
Research

College of
Letters ,
Sciences, &
Professional
Studies

School of Mines &
Engineering

Highlands
College

The Biology
Department

Montana
Bureau of Mines &
Geology

Sigma Xi
Chapter

Contact:

Paige Payne
ppayne@mtech.edu

Montana Tech
1300 W. Park St.
Butte, MT 59701

Fighting Males: The Role of Dual Double-Header Transmission & Cell Sex in Promoting Aggression

Sarah J. Certel, Ph.D.

Associate Professor, University of Montana
Center for Structural and
Functional Neuroscience

Thursday, 14 February 2019
CBB 102 4-5 pm



Dr. Sarah Certel received her undergraduate degree in Biology from Evangel University and her Ph.D. in Genetics from the University of Iowa. She completed two post-doctoral fellowships at Harvard Medical School in the Department of Neurobiology. Dr. Certel joined the University of Montana as an assistant professor in 2009. She is a member of the Division of Biological Sciences and the Center for Structural and Functional Neuroscience.

Aggression is an innate behavior that evolved in the framework of defending or obtaining resources. However, in humans, aggression can be expressed at extreme levels and out of context due to medical, neurologic and or psychiatric disorders including depression. My group's research centers on using genetic tools to understand how aggression is wired into the nervous system. This presentation will first describe the robust aggression of *Drosophila* males and second, describe our results on function of neurons that release two neurotransmitters (dual neurotransmission) on aggression circuitry. Understanding how dual transmission impacts the initiation of aggression may lead to new co-transmission-related therapeutic targets for the treatment of unchecked aggression.