## GRAND JUNCTION GEOLOGICAL SOCIETY

www.gjgs.org

## **OCTOBER MEETING**

WEDNESDAY, OCTOBER 17, 2018

Joint meeting with the CMU Geology Students
7:30 PM

Saccomanno Lecture Hall

(In the Wubben-Science Building)

Greg B. Arehart

Professor

Department of Geological Sciences and Engineering
University of Nevada - Reno

Will Speak On

"The new gold rush: Carlin-type deposits in the Great Basin and beyond"

**Guests Are Always Welcome** 

**Abstract on Next Page** 

## The new gold rush: Carlin-type deposits in the Great Basin and beyond

Greg B. Arehart
Professor
Department of Geological Sciences and Engineering
University of Nevada - Reno

October 17, 2018

Carlin-type gold deposits are the most important gold source in the US, and provide approximately 10% of world gold supply. Because of the very fine-grained nature of gold in these deposits, they have only fairly recently (~40 years ago) been recognized and exploited. Intense research over the past 40 years has led to a much better understanding of the geologic processes that have resulted in these important deposits. In the Great Basin, they appear to reflect a confluence of geologic events including passive margin sedimentation, compressional and extensional tectonics, magmatism, and mineral surface geochemistry. However, there are still controversial aspects of the deposits and much remains to be understood with regard to their origin and, in particular, their global distribution.

(This talk will present an overview of Carlin-type deposits from the microscale to the macroscale.)