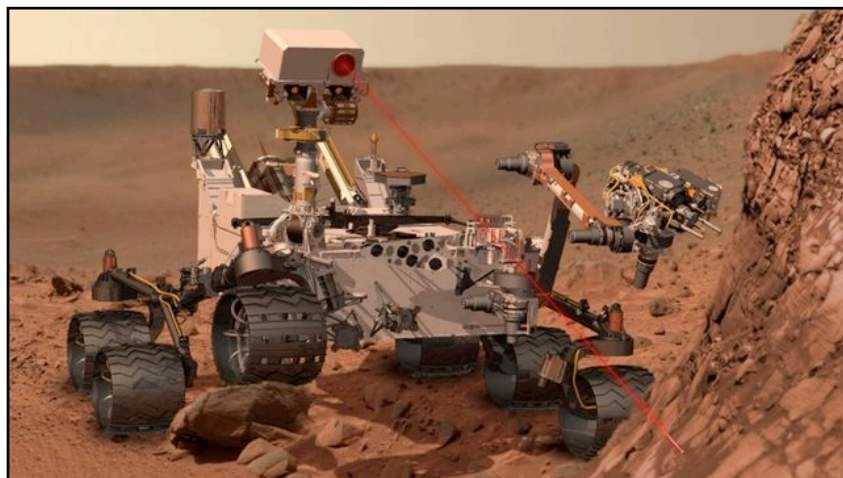


Curiosity on Mars: Characterization of a Habitable Environment

Thursday, April 11th 1-2 PM Peters Business room 194

*parking permit available for off campus participants - call 559-278-3086 for parking code



The Mars Science Laboratory rover "Curiosity" has been exploring Gale Crater, Mars, since August 2012. Since that time, we have monitored radiation and weather, taken tens of thousands of images, made hundreds of elemental analyses, and characterized the mineralogy and volatiles in two solid samples. In that process, we identified a mudstone that accumulated at the distal end of an alluvial fan in neutral water. I will talk about the latest released results from the mission, with an emphasis on results that reveal an ancient environment that could have hosted life.



Dr. Dawn Sumner's driving research questions center around understanding microbial evolution, particularly developing ways to constrain the early evolution of life on earth. She and her students study both modern communities and ancient microbialites to characterize microbe-environment interactions and the processes that govern community morphology. They also use stratigraphy and sedimentology to constrain depositional environments and water chemistry on early Earth and Mars. KeckCAVES 3D visualization and software development are integrated into many of her group's Astrobiology projects. See:

www.youtube.com/sumnerd

