

Perseverance Rover and the Search for Past Life on Mars

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For hundreds of years, the idea of an inhabited Mars has captured our imaginations, but our first close-up view of Mars showed it to be a cold, barren desert. For decades, NASA has been exploring Mars with a fleet of spacecraft to understand the role of water in its history and look for areas that in the past could have supported life. This work has paved the way for the Mars 2020 Perseverance Rover, which will search for clues concerning the existence of life itself on Mars in the past and take the first step towards returning samples to Earth for future laboratory study.

Biography: Sarah Milkovich is a planetary geologist and systems engineer at NASA Jet Propulsion Laboratory, where she currently works on the Mars 2020 Perseverance Rover. Sarah specializes in the science operations of robotic spacecraft, bridging the science and engineering teams. In this capacity, she has spent over 15 years exploring Mars and Saturn with a variety of spacecraft. Sarah has won JPL and NASA team awards for her efforts to return the best possible science within spacecraft engineering constraints, as well as for excellence in outreach and public engagement. She holds a B.S. in planetary science from Caltech, and a M.Sc. and Ph.D. from Brown University in planetary geology with studies of ice on Mars and volcanoes on Mercury.