

# Live Webcast: June 30 |

The <u>Perseverance Rover</u> will launch this summer (July 17 – Aug. 5, 2020) and head to <u>Jezero Crater</u>, where it will land at the foot of a river delta which was clearly a lake at the time microbial life was flourishing on Earth.

The American Museum of Natural History's Director of Astrovisualization, Carter Emmart, will lead us on an exploration of this exciting landing site as we fly over it together using OpenSpace, NASA-supported software. We will see why Jezero Crater was chosen and the features it has to offer for this latest in NASA's series of Mars rovers to investigate past conditions which could have supported life.



# Ask a Scientist

During the live webcast, you will be able to interact with scientists by asking questions (using the chat feature) that relate to NASA's 2020 Mars Mission. See the second page of this flyer for their bios.

View webcast at: <a href="https://youtu.be/PZVnJi9NYZc">https://youtu.be/PZVnJi9NYZc</a>

Provided by:

This live OpenSpace webcast is brought to you by the STAR Library Network's NASA@ My Library program in partnership with the <u>Lunar and Planetary Institute</u>, the <u>American Library Association</u>, and the American Museum of Natural History.













# **The Presenters**

# Carter Emmart (Director of Astrovisualization)

As the Director of Astrovisualization at the American Museum of Natural History, Carter directs the institution's groundbreaking space shows and contributes to the development of an interactive 3D atlas called The Digital Universe and the NASA supported software OpenSpace. He coordinates scientists, programmers and artists to produce scientifically accurate yet visually stunning and immersive space experiences in AMNH's Hayden Planetarium. Over the past two decades, he has directed six shows: "Passport to the Universe," "The Search for Life: Are we Alone," "Cosmic Collisions," "Journey to the Stars," "Dark Universe," and "Worlds Beyond Earth."



# Micah Acinapura (Software Integration Engineer)

Micah will be the program's "pilot," driving us through the virtual world of OpenSpace. Micah works as a Software Integration Engineer on the OpenSpace project at the American Museum of Natural History. He holds a BA in Computer Science from Earlham College and previously worked for more than a decade building interactive digital experiences in the advertising and gaming industries.

# The Scientists

# Dr. Elizabeth Rampe (NASA Johnson Space Center Exploration Mission Scientist)

Dr. Rampe studies Mars geology and mineralogy and is the deputy principal investigator of the CheMin instrument on the Mars Science Laboratory Curiosity rover. By studying minerals found on ancient Mars that were formed by water-rock interactions and similar minerals in analog environments on Earth, she helps characterize early martian environments. Her research on the evolution of the early martian surface has implications concerning its past habitability since some minerals are diagnostic of the environments in which they were formed. Dr. Rampe is also interested in the relationship between human mission operations and science. She supports human analog missions and studies the incorporation of science and scientists into extravehicular activities (EVA).



# Dr. Germán Martínez (LPI Staff Scientist)

Liquid water is a necessary ingredient for life as we know it. Ultraviolet radiation is also linked to biological effects of organisms. To assess the habitability potential and prepare for future crewed missions to Mars, Dr. Martínez studies the water and radiative environment of the Red Planet via data analysis, instrument development, numerical modeling, and laboratory work. He is a member of the Mars Science Laboratory mission, which is measuring the UV radiation at the surface of Mars for the first time, and a Co-Investigator of the Mars 2020 mission, which includes a meteorological station that will measure the surface energy budget on Mars for the first time. Dr. Martínez is also interested in mentoring the new generation of planetary scientist, having advised PhD students and Postdoctoral researchers in the US and in Spain.



#### Dr. Kennda Lynch (LPI Staff Scientist)

Dr. Lynch studies life in extreme environments on Earth as models for understanding habitable environments and searching for signatures of life on other planetary bodies. Prior to obtaining her work in astrobiology, she worked as a systems engineer for the International Space Station Program and as a research engineer for the Astromaterials and Exploration Science directorate.

