

Martians wanted: Apply here now for NASA's simulated yearlong Mars mission

February 16 2024, by Roxana Bardan



Credit: Unsplash/CC0 Public Domain

NASA is seeking applicants to participate in its next simulated one-year Mars surface mission to help inform the agency's plans for human exploration of the Red Planet. The second of three planned ground-



based missions called <u>CHAPEA</u> (Crew Health and Performance Exploration Analog) is scheduled to kick off in spring 2025.

Each CHAPEA mission involves a four-person volunteer crew living and working inside a 1,700-square-foot, 3D-printed habitat based at NASA's Johnson Space Center in Houston. The habitat, called the Mars Dune Alpha, simulates the challenges of a mission on Mars, including resource limitations, equipment failures, communication delays, and other environmental stressors. Crew tasks include simulated spacewalks, robotic operations, habitat maintenance, exercise, and crop growth.

NASA is looking for healthy, motivated U.S. citizens or permanent residents who are non-smokers, 30-55 years old, and proficient in English for effective communication between crewmates and <u>mission</u> <u>control</u>. Applicants should have a strong desire for unique, rewarding adventures and an interest in contributing to NASA's work to prepare for the first human journey to Mars.

The deadline for applicants is Tuesday, April 2.

Crew selection will follow additional standard NASA criteria for astronaut candidate applicants. A master's degree in a STEM field such as engineering, mathematics, or biological, physical, or computer science from an accredited institution with at least two years of professional STEM experience or a minimum of one thousand hours piloting an aircraft is required.

Candidates who have completed two years of work toward a <u>doctoral</u> <u>program</u> in science, technology, engineering, and mathematics, completed a medical degree, or a test pilot program will also be considered. With four years of professional experience, applicants who have completed military officer training or a bachelor of science degree in a STEM field may be considered.



Compensation for participating in the mission is available. More information will be provided during the candidate screening process.

As NASA works to establish a long-term presence for <u>scientific</u> <u>discovery</u> and exploration on the moon through the Artemis campaign, CHAPEA missions provide important scientific data to validate systems and develop solutions for future missions to the Red Planet. With the first CHAPEA crew more than halfway through their yearlong mission, NASA is using research gained through the simulated missions to help inform <u>crew</u> health and performance support during Mars expeditions.

Under NASA's Artemis campaign, the agency will establish the foundation for long-term scientific exploration on the moon, land the first woman, first person of color, and its first international partner astronaut on the lunar surface, and prepare for human expeditions to Mars for the benefit of all.

More information: Signup page: chapea.nasa.gov/

Provided by NASA

Citation: Martians wanted: Apply here now for NASA's simulated yearlong Mars mission (2024, February 16) retrieved 27 April 2024 from <u>https://phys.org/news/2024-02-martians-nasa-simulated-yearlong-mars.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.