

Science Focus

NOT JUST ANOTHER MICKEY MOUSE PLANET

Why there's no
OVERPOPULATION CRISIS

How chocolate
BOOSTS BRAIN HEALTH

Should we rethink
SHOCK THERAPY?

**THE NEW
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SPECIAL
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THE HUNT FOR **PLANET 9**

How we'll find the most mysterious
object in our Solar System

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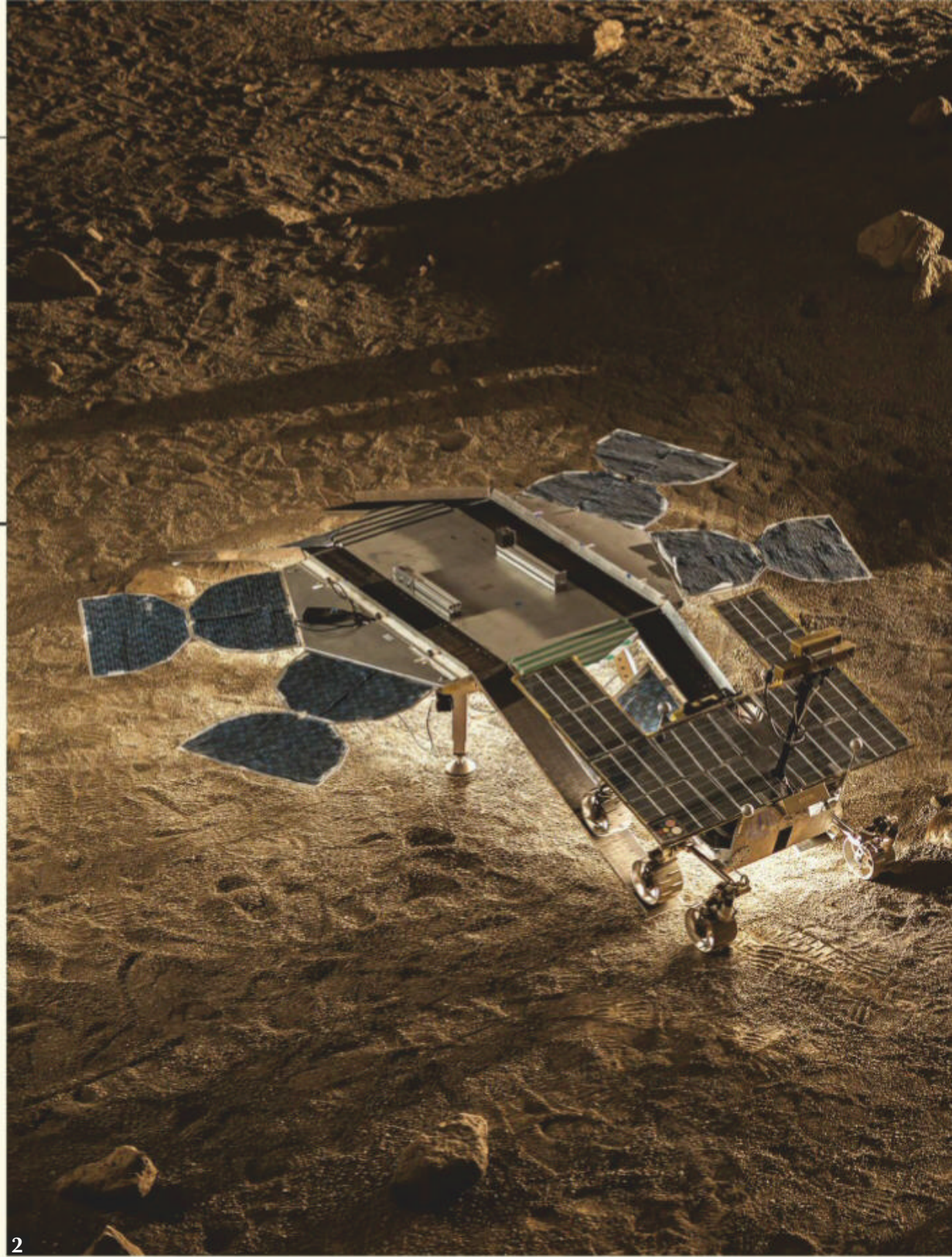


Turin, Italy

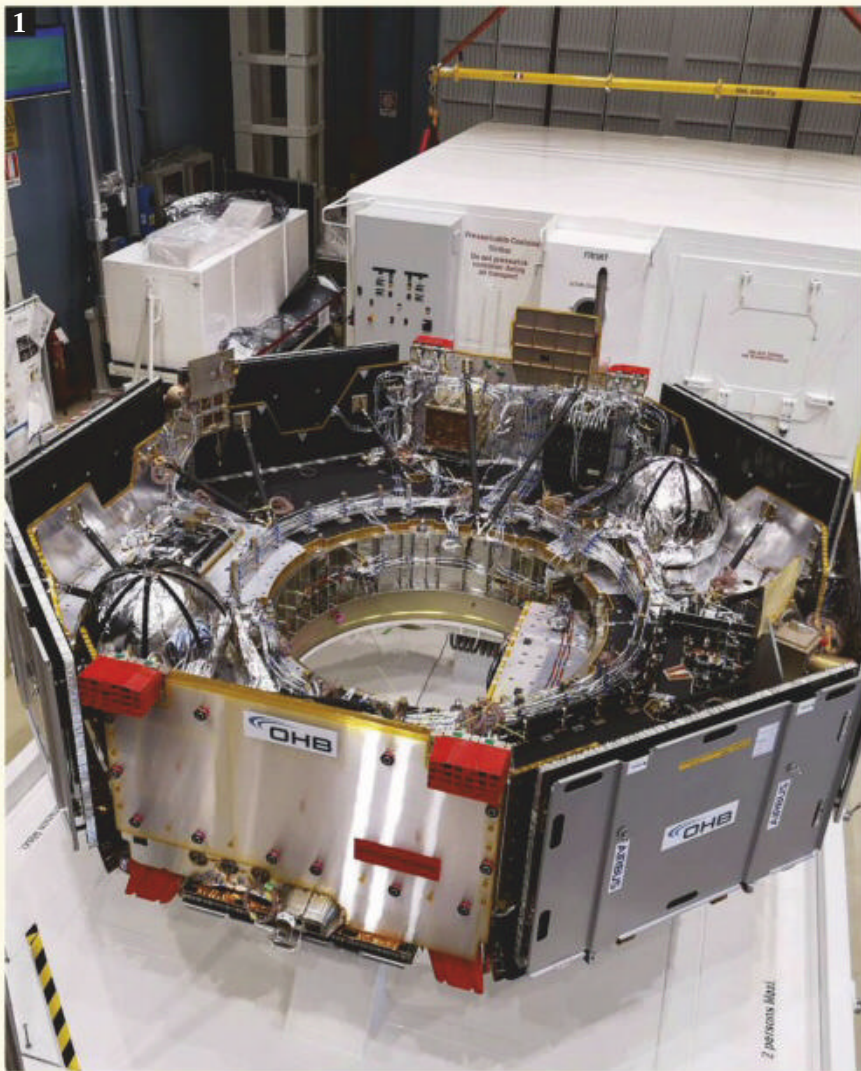
SPACE

ESA's Martian rover readies for launch

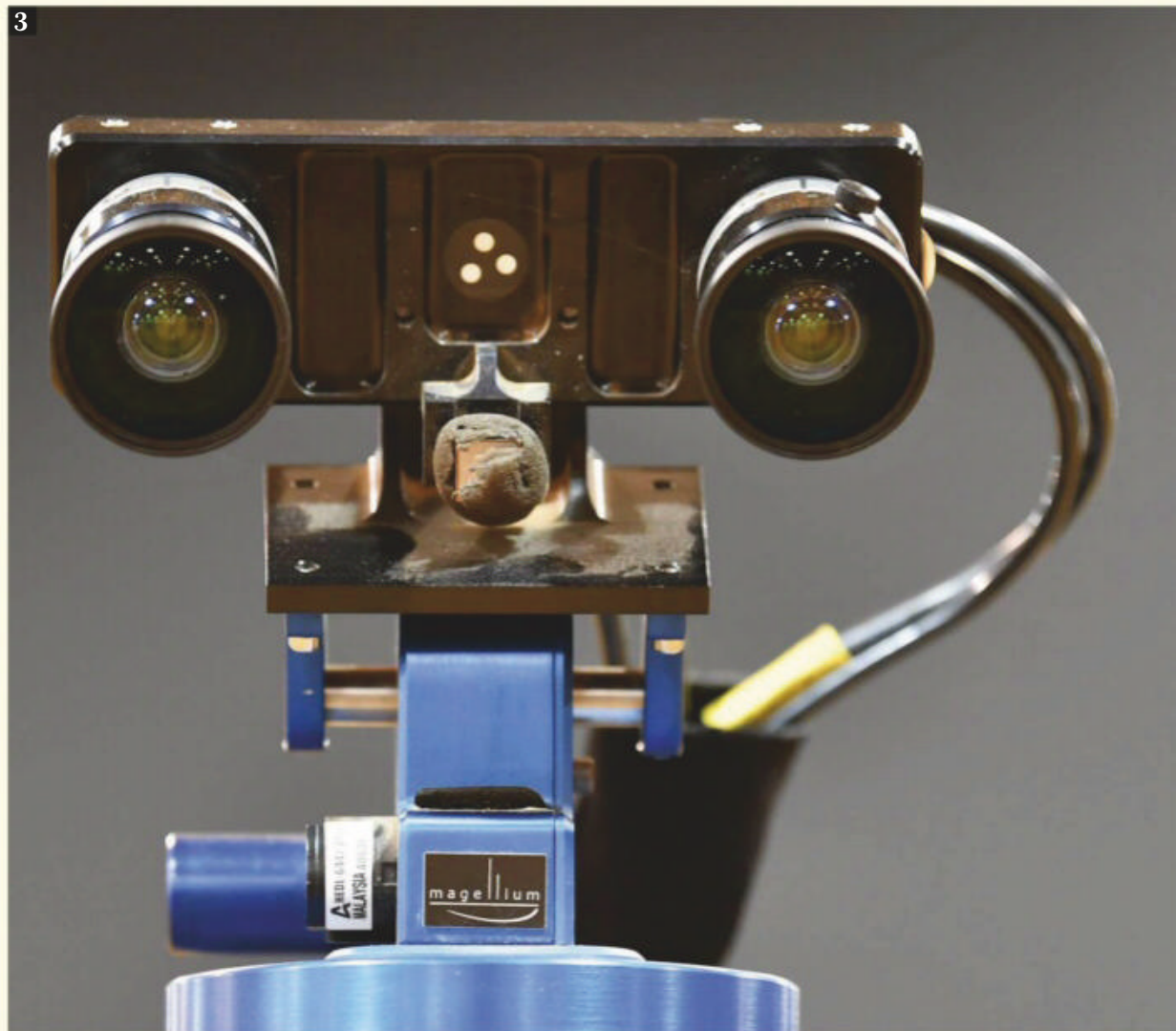
If all goes to plan, the European Space Agency's Rosalind Franklin rover, currently being tested in Turin, Italy, will be the first to search for life on the Red Planet



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1. The ESA carrier module that will house the Rosalind Franklin rover on its journey from Earth to Mars is under construction here. It will also provide the communication link between Earth and the spacecraft during the trip.

2. The Aerospace Logistics Technology Engineering Company (ALTEC) in Turin houses a Mars yard filled with 140 tonnes of rocks and soil, specially designed to mimic the surface of the Red Planet. This allows scientists to rehearse various scenarios prior to launch.

3. The two cameras mounted on top of the Rosalind Franklin rover allow it to 'see' in 3D. It will use the cameras to analyse the slopes and the rocks ahead of it to make sure it doesn't get stuck.

4. ALTEC has a platform with a well that will allow the rover operators to test the rover's drilling equipment. The rover will drill two metres down into the Martian surface to sample the soil, analyse its composition and search for evidence of past – and perhaps even present – life buried underground.

5. All of the components of the rover are sterilised before they are assembled in a purpose-built clean room. This ensures that dirt or microbes from Earth will not contaminate any evidence of life on Mars.

6. The rover is scheduled for launch in July 2020. It will then embark on an eight-month interplanetary cruise before landing on the surface of the Red Planet.

