curiosity

Four years ago today, NASA's Mars rover Curiosity made one of the most dramatic and harrowing landings in the history of space exploration.

On the night of Aug. 5, 2012, a rocket-powered "sky crane" lowered the car-size Curiosity onto Mars' red dirt using cables, then flew off and crash-landed intentionally a safe distance away.



Curiosity team members had modeled this novel technique repeatedly using computers, but it had never been tested fully here on Earth, let alone employed on the surface of another world.

Still, everything worked perfectly at crunch time, and Curiosity soon began exploring the interior of Mars' 96-mile-wide (154 kilometers) Gale Crater. The discoveries came fast: The rover found that the area near its landing site harbored a lake-and-stream system long ago, showing that at least some parts of the Red Planet could have supported microbial life in the ancient past.

The main goal of the \$2.5 billion Curiosity mission is to answer that very question.

"It was just an early home run that kind of took the pressure off and allowed us to expand on that [discovery] for the next few years," Curiosity project scientist Ashwin Vasavada, of NASA's Jet Propulsion Laboratory (JPL) in Pasadena, California.