

Global Science This Week: Cancer Breakthroughs, Space Discoveries, and Qu

Science Discoveries · Answer Key · 8 Questions

1. In early June 2026, South African researchers at the University of Cape Town announced a significant breakthrough in understanding cancer's survival strategies. What key protein did their research focus on and how is its alteration crucial for tumor growth?

- A) MUC1, by altering its sugar coating to evade immune detection.**
- B) TP53, by disabling its tumor-suppressing functions.
- C) BRCA1, by initiating uncontrolled cell division.
- D) KRAS, by promoting abnormal cell signaling.

2. An international team of marine experts, utilizing advanced technologies on the Schmidt Ocean Institute's research vessel Falkor (too), discovered over 30 new species off the coast of which South American country in early June 2026?

- A) Brazil
- B) Argentina
- C) Chile
- D) Peru**

3. Japan's advancements in robotics and AI were highlighted in June 2026, with a focus on the 'AI-Powered Robotics Advancements' conference in Kyoto. What is a key societal challenge that advancements in Robotics and Automation Sciences are helping to address?

- A) Improving healthcare outcomes and efficiency.**
- B) Reducing global carbon emissions through automation.
- C) Developing sustainable food production methods.
- D) Enhancing cybersecurity measures against AI threats.

4. Canada is positioning itself as a leader in quantum computing. In June 2026, which city is identified as the leading professional hub for quantum computing events in Canada, hosting a significant number of specialized conferences?

- A) Vancouver
- B) Montreal
- C) Ottawa**
- D) Edmonton

5. In early June 2026, Brazilian astronomers announced the discovery of two new exoplanets around the star HIP 68468. What are these newly discovered planets referred to as, based on their mass relative to known planets?

A) Mini-Neptune and Super-Jupiter

B) Super-Earth and Mini-Mars

C) Super-Neptune and Super-Earth

D) Gas Giant and Ice Dwarf

6. South Africa launched the national rollout of lenacapavir, a twice-yearly HIV prevention injectable, in June 2026. Which province was history made in when the first person received this injection?

A) Western Cape

B) Gauteng

C) Mpumalanga

D) KwaZulu-Natal

7. A significant development in Japan's robotics roadmap in June 2026 involves collaboration with the USA for deep-sea rare-earth mining. What type of advanced robotic systems are being used for this purpose?

A) Autonomous underwater vehicles

B) Deep-sea drilling robots

C) Sonar-equipped submersibles

D) Benthic landers with robotic arms

8. Researchers from the Hackensack Meridian Center for Discovery and Innovation and Quest Diagnostics published a study in June 2026 on antibiotic resistance in the United States. What common bacterial strain, found in guts, showed significant non-susceptibility to three widely used oral antibiotics?

A) Staphylococcus aureus

B) Escherichia coli

C) Streptococcus pneumoniae

D) Klebsiella pneumoniae