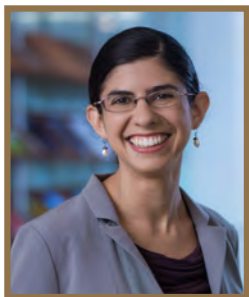




The 2026 Science Olympiad Alumni Research (SOAR) Grant \$15,000 Award Winner for Medical Research Impacting Human Health



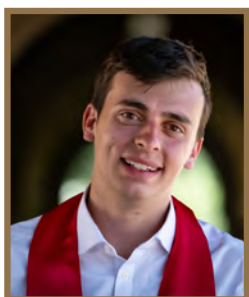
Amelie Raz
Massachusetts Institute
of Technology
Whitehead Institute for
Biomedical Research

Amelie Raz is a postdoctoral fellow in the Yamashita Lab at the Whitehead Institute for Biomedical Research at MIT, working with fruit fly sperm-producing cells as a model of engineering stem cells *in vivo*. Like many stem cells whose function we recognize (to grow hair, skin, or fingernails), these cells can be grown in reverse, a process called dedifferentiation. She is testing if these engineered stem cells act as real and functional as their native counterparts.

Dr. Yukiko Yamashita, Howard Hughes Medical Institute Investigator and Professor in the Department of Biology at MIT, says Amelie's work reveals the "amazing complexity of how germline stem cells navigate through the continuous and ever-changing landscape of threats against the genome." Practical applications of her research include fertility treatments, tumor suppression and tissue regeneration; data Amelie has shared in two first-author papers and multiple review articles.

In middle and high school, Amelie's personal development intertwined with her academic growth: "In the emotional minefield of adolescence, Science Olympiad became my safe space and found family. Write It Do It taught me how to make a protocol that can be followed by others. Heredity taught me the basis of genetics I use every day in my fruit fly work." Amelie currently serves as volunteer with the MIT Science Olympiad Invitational Tournament.

The 2026 Science Olympiad Alumni Research (SOAR) Grant \$15,000 Award Winner for Computer Science, AI, Cybersecurity, Quantum Computing



Brian Amaro
Stanford
Department of Earth &
Planetary Sciences

Brian Amaro is a PhD student in Stanford's Earth and Planetary Sciences department, using modern AI methods and machine learning to locate, map, and measure all observed rocks in the Solar System, creating an open-source rock database and maps for space missions.

Brian's models characterize boulder morphometrics from satellite imagery with great accuracy, leading to two publications in the *Journal of Geophysical Research: Planets* and garnering notice from high-profile lunar scientists. "Detecting and mapping boulders is an important task that planetary scientists have been trying to automate for a couple of decades," said Dr. Mathieu Lapotre, Associate Professor of Earth and Planetary Sciences at Stanford.

A former team captain, Brian says, "My academic trajectory was shaped by competing in Science Olympiad events like Codebusters that further developed my analytic skills, while Geologic Mapping and Dynamic Planet sparked my passion for Earth and planetary sciences. Today, my research expands on the combination of those two skillsets: applying advanced machine learning to planetary geology." Brian now serves as National Event Supervisor for Dynamic Planet and volunteers extensively with Science Olympiad at the regional, state and campus chapter level.

The Science Olympiad USA Foundation is a nonprofit organization founded in 2020, dedicated to carrying out the charitable, educational and scientific purposes of Science Olympiad, Inc., a nonprofit formed in 1984. **This year, two first-place \$30,000 SOAR Grants and two \$15,000 runner-up SOAR Grants were awarded** in each category of medical research impacting human health and computer science and engineering research in cybersecurity, AI, quantum computing and communications.

