



GALACTIC

Meet Your IIAS Crew

KELLIE GERARDI



Kellie Gerardi is a bioastronautics researcher and payload specialist who serves as the Director of Human Spaceflight Operations for the International Institute for Astronautical Sciences (IIAS). IIAS-02 will be Kellie's second spaceflight, building on the knowledge gained from the Galactic-05/IIAS-01 research mission in 2023, during which she operated three biomedical and thermodynamic fluids experiments in space on behalf of IIAS. Kellie has tested and matured technologies across more than 100 parabolas in reduced gravity research flight campaigns performed here on Earth, including with the National Research Council of Canada (NRC) and the Canadian Space Agency (CSA). Kellie is a notable science communicator and the author of the acclaimed children's picture book series Luna Muna, which has been read aloud from both the International Space Station and the First Lady's Reading Nook at the White House. Kellie serves on the Defense Council for the Truman National Security Project and as Mission Operations Lead at Palantir Technologies. She is a Fellow and former Executive Board Member of The Explorers Club, and carried the Club's esteemed flag on a crew rotation to the Mars Desert Research Station. Kellie lives in Jupiter, Florida with her husband Steven and their daughter Delta V.

DR. SHAWNA PANDYA



Dr. Shawna Pandya is a physician, aquanaut, bioastronautics researcher with the International Institute for Astronautical Sciences (IIAS), skydiver, pilot-in-training, VP Immersive Medicine with Luxsonic Technologies, and Director of IIAS' Space Medicine Group. Dr. Pandya was on the first crew to test a commercial spacesuit in zero-gravity in 2015. To date, she has flown 10 parabolic flight campaigns, culminating in over 160 parabolas of experience in micro- and reduced gravity. She earned her aquanaut designation on the 2019 NEPTUNE (Nautical Experiments in Physiology, Technology and Underwater Exploration) mission, and completed a second aquanaut mission, NEP2NE. She served as Payload Crew and co-PI of the 2023 IIAS-01 suborbital research flight, as well as a PI and/or co-I for Ax-2, Polaris Dawn and Blue Origin payloads. Her publications include a paper on medical guidelines for commercial suborbital spaceflight, and book chapters on space technologies that have benefitted terrestrial medicine, psychological resilience in long-duration spaceflight, reproduction and sexuality in long-duration spaceflight, and the future of space medicine. Her work is permanently exhibited at the Ontario Science Center alongside Dr. Roberta Bondar, the first Canadian woman in space. In 2022, Dr. Pandya was named to the Explorers' Club's "50 Explorers Changing the World." In 2024, she was recognized for her contributions by the Women's Space Awards in the Medicine and Health category, and named a Karman Pioneer. Her work has been profiled by Nature Careers and the Royal Canadian Mint. The IIAS-02 Mission will be her first spaceflight.

DR. NORAH PATTEN



Dr. Norah Patten is an aeronautical engineer and bioastronautics researcher with the International Institute for Astronautical Sciences (IIAS). Norah's extensive research experience includes multiple microgravity research campaigns, commercial spacesuit testing and evaluation, and emergency egress operations. She was the PI of an experiment investigating the aerosolization of water droplets in microgravity, and tested a novel 3D bioprinter investigating novel solutions for skin grafts in weightlessness. Norah is an award-winning author and STEM advocate and is passionate about inspiring the next generation. In 2019, Norah released her children's book called 'Shooting for the Stars' and it won the An Post Children's Book of the Year, senior. She was awarded the IIAS Educator Award in 2018, was a recipient of the Emerging Space Leaders Grant and a Next Generation Plenary panelist at the International Astronautical Congress in 2015. Through a partnership with NanoRacks and the Irish Composites Centre, Norah created and managed 'The Only Way is Up' project which launched Ireland's first student experiment to the International Space Station in 2014, in which she was also the co-PI. Norah participated in the International Space University Space Studies Program in 2010, holds a PhD in Aeronautical Engineering from the University of Limerick, participated in the Enterprise Ireland New Frontiers Program, and has industrial experience from The Boeing Company and Bell Labs Alcatel Lucent. Norah is a former global faculty member at the International Space University (ISU), and currently works in Dublin, Ireland. Norah's spaceflight will make her the first Irish astronaut. The IIAS-02 Mission will be her first spaceflight.