



SPACE AGENT

BIOASTRONAUTICS
RESEARCHER AND ASTRONAUT
KELLIE GERARDI
TAKES A MISSION-DRIVEN
APPROACH TO HER CAREER,
MOTHERHOOD AND LIFE.

BY GWEN GRAY

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"LIKE A BULLET TO THE STARS."

That's how astronaut Kellie Gerardi describes the experience of taking off from Earth on her first space flight on the Virgin Galactic 05 mission in November 2023.

"First you hear it: the rocket motor behind you in the spacecraft. Then you see it: the flames out [the] window and the sparks. And then you feel it, and it's the full-body vibration at nearly 5g," she remembers of the launch. Once the craft was in space, "you could hear a pin drop."

What happened next was a moment that Gerardi—despite years of training and participating in over 150 parabolas (an airplane maneuver nicknamed the "vomit comet" that's designed to simulate microgravity conditions)—could not have prepared for emotionally. "I saw Earth light..." she recalls with awe. "The blackness of space contrasted with the neon-blue, bright band of Earth's atmosphere, the fragility of that thin band, the beauty of our planet and then the cognitive dissonance of feeling both a part of it while being slightly outside of it."

It was a pinnacle of Gerardi's career that she says will be "permanently imprinted" on her forever. Now, Gerardi is preparing for a second space mission in 2026 and reflects candidly about the nontraditional path that's sent her career into the stratosphere—and beyond.

CHARTING A NEW COURSE

Growing up in Jupiter, Florida (whose name she jokes is "very on-brand" with her story), Gerardi spent a lot of time alone, becoming an imaginative daydreamer and voracious reader who loved science fiction. The activities at the Kennedy Space Center, just up the coast, meant the idea of space exploration was never far from her periphery. She dove into space studies throughout her formative years and into college, and after realizing the growing possibilities in commercial spaceflight following her graduation from New York University, Gerardi was inspired to pursue graduate studies in bioastronautics at the International Institute for Astronautical Sciences (IIAS).

It was a new, somewhat uncertain avenue for an aspiring astronaut. The conventional route, until recently, was to secure a position with a government-funded agency like NASA. "Now when I think about it," she says, "I realize that what I was really doing was paving a path out of a brick wall... not knowing how it would happen, but... believing that was, directionally, where our future was headed."

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Her confidence turned out to be well placed. In 2023, Gerardi's space flight on the Galactic 05, sponsored by IIAS, made her the first industry-funded researcher sent up on a commercial spacecraft. As a payload specialist on that flight, she conducted tests examining how fluid behaves in low-gravity conditions to help improve the designs of life-support systems, syringes and humidifiers used in space. She also wore a specially designed "smart" undergarment that collected biometric data and a continuous glucose monitor to study space flight's effect on insulin resistance.

The 36-year-old confesses that the groundbreaking flight assuaged a nagging impatience she'd felt throughout her 20s, as she watched other young professionals being awarded achievements like the *Forbes* 30 Under 30 list. Now, she wishes she could go back and tell her younger self that "there will be decades where it feels like nothing happens, and then there will be days and weeks where it feels like decades happen."

The tenacity she leaned on during that time is a trait she believes her parents helped instill, alongside the belief that "ordinary people are capable of extraordinary things." She points to one of her first jobs, as a coat check attendant for The Explorers Club, as evidence, remembering that she felt driven even then to "give 110%" and developed a system for cataloging members' belongings and memorizing their names. Soon, those around her took note of her dedication. She says that experience taught her that "you can design your own reputation in life. It is in your power... pick the words you want to be true and you want people to think about you, and then put in the work to make them true."

MOM ON A MISSION

As the 90th woman to enter space, Gerardi is keenly aware of how few women have had the opportunity to see Earth from a spacecraft. For her, gazing at her home planet from afar came with the "existential realization, as a mother, that in that moment, I'm not on the same planet as my baby...." she says. "It was a momentarily arresting feeling."

Her daughter, Delta V (named after the physics term *delta-V*, which represents the change in velocity needed for spacecraft maneuvers), was 6 at the time. Gerardi says, "Age 6 was a really fun age to watch Mommy fly to space because she was old enough to understand it, to have really thoughtful, curious questions and to be able to celebrate it." After that, "she walked a little taller back into kindergarten," Gerardi smiles.

While Gerardi had complete confidence in the safety of her Galactic 05 flight, she felt compelled to prepare herself and her family for the inherent risks associated with space travel. She wrote 100 letters to be given to Delta in the tragic event that the mission didn't go as planned. Yet, Gerardi remains unwavering in her pursuit of a career that others might deem too perilous. She firmly believes that when a mother lives up to her full potential and aspirations, it can only benefit their family. Just as importantly, she strives to set a positive example for her daughter. "If she wants to get married and have a child, I don't want her to feel like her life gets capped at pregnancy," she says. "That's not when your potential ends. That's not when your

identity ends.... It should be full of agency and choice."

Gerardi says while pangs of guilt are a reality as a mother who misses the occasional milestone moment at home, regret is not. When she is away for extended periods due to professional commitments, she is sure to spend some extra time with Delta and her husband upon her return, saying, "There's no given day or week where my personal and professional lives have been perfectly balanced on the scale, but the years are—and I make sure that they are."

MORE GIANT LEAPS AHEAD

Fans of Gerardi's, unlike those of many scientists and space explorers, have the unique advantage of having a digital front seat to her adventures. She happens to be a highly prolific social media content creator and influencer, with over 1.4 million followers on Instagram and approaching 1 million on TikTok. You'll find her singing along to the TikTok sound bites of the week, asking followers to help her choose an outfit for a special event or walking a runway at New York Fashion Week. She's even documented her personal, sometimes heart-breaking, struggles with secondary infertility and in vitro fertilization. It's all part of her mission to remove boundaries around science and open the field of space to ordinary people. She says of her willingness to be authentically herself online, "I wanted to just ensure I wasn't accidentally trying to fit society's image of what someone flying to space should look like and instead be a part of forcing that image to expand to include me."

And expand it will. In 2026, Gerardi will lead the first all-female research-focused astronaut team in history. Beside her will be Dr. Shawna Pandya, a Canadian astronaut and physician, and Norah Patten, Ph.D., Ireland's first astronaut. The mission, once again aboard a Virgin Galactic craft, will build upon the research conducted during Gerardi's last flight and will add several experiments relating to women's health.

In preparation, Gerardi continues to work with her team, refining their scientific objectives and training for the physical demands of microgravity. She notes that the high-stakes environments in space training have helped shape many of her values as a leader, including building rock-solid trust among the crew. "You really have to keep eyes and ears and hearts on each other," she says. She leans on a combination of "humility and confidence" to help build that trust, saying, "People want to work with someone that they know has their back, but will also hold them accountable."

Above all, Gerardi is steadfast in her commitment to opening space science to wider audiences. "I think that our next giant leap as a species is going to require the talents of so many different skill sets and so many different slices of innovation in society," she says. "Space is our shared past and our shared future." ♦

GRAY IS A COLORADO-BASED ENTREPRENEUR, MOM, ADVENTURER AND WRITER WHO'S USUALLY EITHER GLOBETREKKING OR SHARING STORIES ABOUT TRAVEL, BUSINESS, HEALTHY LIVING, FOOD AND THE ARTS.