

Tracing a Path to the Stars

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Georgetown vet's career features twists and turns

The sun sets, and an inky blanket unfurls across the sky. Stars emerge and twinkle mysteriously, and for some of us, a yearning to learn their secrets takes hold. Few will see the awe-inspiring view of Earth from space or set foot on the moon, but for veterinarian Dr. Ericka Davis, exploring the final frontier was a dream she was determined to make reality.

“I had big aspirations that I would be an astronaut one day,” Ericka recalls. The daughter of an Air Force fighter pilot, Ericka grew up around planes. She developed a fascination with aviation, which evolved into a passion for the space program.

Ericka’s ease with physics and math served her well as she obtained a degree in aerospace engineering at Texas A&M. After graduation, her co-op with a NASA contractor netted her a job offer. “I became a test engineer and put being an astronaut on the back burner,” she says.



Then tragedy struck NASA, and Ericka's work became more vital than ever. On February 1, 2003, the space shuttle *Columbia* fell apart during reentry to Earth. All seven crew members were killed. After a lengthy investigation, NASA ruled that the incident occurred due to foam falling from the external tank and breaching the left wing.

Shuttle activity ground to a halt as "return to flight" research took center stage to fix the problem. As an extra-vehicular activity department test engineer, Ericka worked with her team to determine the feasibility of repairing cracks in the shuttle's thermal protection system tiles with a specialized bonding gel.

"I did a lot of testing to learn how the gel would work in zero gravity and if astronauts could

feasibly work with it in space,” Ericka recalls. The gel also had to pass tests of intense vibration, temperature extremes, and the vacuum of space. Ericka’s team also conducted tension and vibration tests on the tethers that prevent astronauts from floating off into space, paring options down to the main tethers in use today.



Her work was meaningful, but it wasn’t always exciting. While she did get to fly in the infamous “vomit comet” and scuba dive in the neutral buoyancy laboratory, her time was often spent in her cubicle working on reports. Work began to slow, and it became clear that retirement of the space shuttle program was imminent. Though Ericka still wanted to become an astronaut, she pondered her next move and considered attending medical school. A conversation with friend and former veterinary astronaut Richard Linnehan inspired her to follow a different passion and pursue a new career.

“I wanted to do something to benefit society, and I’ve always had a lifelong passion for animals,” Ericka explains. “There have been a few veterinary astronauts, and I decided it would be amazing to combine both of my passions.”

She began taking prerequisite classes while working full time and eventually applied to Mississippi State's veterinary program. The program's emphasis on two years of class instruction and two years of clinical work appealed to her because she wanted to get as much hands-on experience with animals as possible.



"Most veterinarians were technicians first. They've grown up around animals and know a lot going in. I was never a technician," Ericka recalls. "I had to learn everything." Veterinary school increased her respect for medical professionals as she realized that understanding how a body and its organs' function requires consistently diligent study and memorization. Even now, she's learning new treatment protocols and attending conferences to maintain her professional edge.

It's not just the lifelong learning that Ericka sees as a plus in her veterinary work. It's also the people she interacts with. "I work with interesting people with interesting stories from different walks of life and backgrounds," Ericka explains. "I try to teach people that shadow me to have an open mind about that and to show kindness."

Ericka has grown fond of Georgetown, and she aims to become more active in the community. She has a record of speaking at schools on career days, and she recently volunteered at Ford Elementary's "Paw"-tea family night, manning a booth where children could bring their stuffed animals for checkups. Seeing the difference her work makes and being of service to others gives her pride and a sense of fulfillment.



“We in the veterinary community joke that we wish humans could receive the kind of care that vets give pets,” Ericka explains, “because as veterinarians we become so invested not only in the patients but in the families and often serve as counselors and friends.”

Ericka believes that being a good veterinarian involves knowing her capabilities and limitations, including when to defer to a specialist. But for most of the cases that come her way, she’s confident in her abilities and looks forward to taking care of pets for years to come.

Many might wonder how someone could leave a job at NASA, but Ericka has no regrets. “I appreciate and think fondly on my time at NASA, but I love what I do now,” she says. Still, no one can tell what the future holds, and Ericka won’t entirely rule out reaching for the stars again, though that dream will have to wait.



For now, her life as a vet, a wife, and a mother to her young daughters takes precedence. “My children need me now. I can’t risk my life going up in a space ship. Before, I was career driven and would’ve gone on any mission,” Ericka says. “Now I’m thinking of the impact on my family. In the future, when they’re all grown and can take care of themselves and NASA is looking for an old veterinarian, I can apply to the astronaut corps.”

If Ericka were to return to NASA, her skills, scientific research, and experimentation would prove useful. The International Space Station continuously experiments with plants and microbes, and there’s always concern that medical emergencies may occur. Ericka believes her education would be invaluable, because if none of the crew has medical knowledge, a physician on Earth must talk the crew through the crisis. She’s confident she could use her veterinary skills to help her fellow astronauts, though she admits helping her fellow mammals is rewarding in itself.



“I love making a difference, and even if the dream of being an astronaut never comes to fruition, I’m still a veterinarian, and that’s wonderful,” Ericka says. “Being around pets and their families is such a joy.”

Dr. Ericka Davis is a veterinarian with Zoot Pet Hospital in Georgetown. For more information about Ericka, her services, or Zoot, visit www.zootpets.com or email Ericka at dred@zootpets.com.