



REACHING FOR THE STARS, REALIZING A DREAM

BY JOYCE McCALLISTER

When 8-year-old José Hernandez '85 watched Neil Armstrong step onto the moon, suddenly everything seemed possible. "I could be an astronaut," he said to himself, and a life of intention was set into motion.

For years it was his secret conviction. He shared it only with his parents.

"They were supportive as always," he says. "I was a little embarrassed because it was such a big idea. I didn't even tell my wife until after we were married."

Then, on August 28, 2009, the secret dream became reality; Hernandez blasted off into space, his lifetime goal achieved. On his mission, he spent nearly two weeks in the involved technical work of transporting material from space shuttle Discovery to the International Space Station. Thanks to thousands of hours of simulation practice, he operated the robotic arm with ease.

"It was eerily the same; the visuals felt the same," he says. "Of course, we were floating."

Getting his "land legs" after being weightless for 12 days was harder than he thought. He wanted his nieces and nephews to be proud of him, and yet it was a struggle to make his limbs work correctly. Perhaps it was a hint of how uncertain his life on spaceship Earth would be now.

"I just don't know yet," he responds when asked the inevitable question: What's next? "For the first time in my life I really don't know what I want to do when I grow up."

Hernandez has thought about politics. As a young man, he drew inspiration from President John F. Kennedy, and read Kennedy's "Profiles in Courage." He isn't so sure about running for office himself, though.

"Politics has become so dirty," he says. "You can lose yourself in the political process, and I'd want to be careful I don't do that."

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“I could be an astronaut.”

Discovery's crew Clockwise from lower left are Mission Specialist John "Danny" Olivas, Pilot Kevin Ford, Mission Specialists Nicole Stott and Patrick Forrester, Commander Rick Sturckow, and Mission Specialists José Hernandez and Christer Fuglesang.



PHOTO CREDIT: NASAKIM SHIFLETT

Hernandez does have ideas he'd like to see implemented. Because education has been an important touchstone in his own life, he wants to be sure others have the same opportunities. His Reach for the Stars Foundation is in its infancy, and he wants to see it grow to provide an endowment for scholarships for first-generation college students in San Joaquin County.

"We want to start programs that reach into the grade school level, to introduce kids to science, technology, engineering and mathematics — STEM areas — because this is what we need to help this country move forward," he says. "We must engage every aspect of society to keep the U.S. competitive in the marketplace."

At Stockton's Franklin High School, where he was student body president his senior year, Hernandez took part in MESA (Mathematics Engineering Science Achievement) and Upward Bound programs, which were aimed at encouraging students in those areas his foundation also advances. He continued to work with Upward Bound as a Pacific student, teaching calculus to area high school students on Saturday mornings.

Studying engineering at Pacific provided a foundation for his aspiration to work for NASA. He also had the opportunity to do his Engineering Co-op at Lawrence Livermore National Laboratory, where he would later work. A focused student, he credits former Engineering Professors Andres Rodriguez and Thuan Nguyen, Mathematics Professor Coburn Ward and fellow student Fred Cleveland '75 with giving him the special attention that made



José Hernandez with his family (clockwise from top right): sons Julio and Antonio; daughters Yesenia, Vanessa and Karina; and wife Adela.

parents in the fields. At the end of the day, when they were hot and dirty, tired and thirsty, his parents Salvador and Julia would remind the kids that unless they stayed in school, the migrant life was what they could expect. Hernandez says his father's friends in this country criticized him for keeping the children in school during the harvest season.

"All his friends' kids worked full time in the fields from age 16 on to bring in more money for the family," he says. "They didn't finish high school. It was harder for us to stay in school, but my father saw it as a long-term investment." Salvador and Julia's persistent encouragement paid off. All four of their children graduated college or took advanced training.

One of Hernandez' early school memories is of riding a big yellow school bus to school, not knowing English and being confused about what the teacher was saying. Spanish was spoken at home, and, until José was seven, the family spent two to three

him a successful student.

"I had a knack for math, and I thought engineering would be a good fit for me," Hernandez says. He points out that mathematics is a universal language — one that everyone can speak. It was an important fact for a youth who didn't feel he had fully conquered English until he was 12.

The Hernandez family were migrant workers, moving through the north San Joaquin Valley following the crops during harvest season. He went to several schools each year. On weekends, he and his brothers and sister joined their



months of every year living with his grandparents in Mexico.

“I have lots of fond memories of my cousins and uncles in Mexico. It felt like home,” he says. “I have room in my heart to be comfortable with two countries as home. I feel an allegiance with America, and I honor my Mexican heritage and background. The border is more fluid to me.” He says he feels an obligation on both sides of the border to speak about the importance of a good education, a good plan and perseverance.

“That recipe is going to work anywhere: don’t give up!”

Although he was aggressively recruited by Stanford University, Hernandez chose Pacific. Pacific’s Community Involvement Program’s scholarships made it possible for him to attend Pacific and also live at home. He felt comfortable with the program and the support it offered. He says the tutoring and counseling services were invaluable to a first-generation college student.

“We had a one-week retreat before school started with empowering speakers that helped raise our self-esteem and confidence so that we could succeed,” he says. “Coming to the CIP office felt like coming home on campus.”

Hernandez worked at Lawrence Livermore after he graduated, and then received a full scholarship for graduate work at the University of California Santa Barbara. Returning after he earned a master’s degree in electrical engineering, he worked on laser weapons systems. He also was a co-developer for the first full-field digital imagery for mammography, which improved early detection of breast cancer. He received awards throughout his career for outstanding performance and for professional and community contributions.

Each step brought him closer to his dream. His tenacity is amazing. He applied to NASA each year for 12 years before he was finally accepted. He continually worked to become a better candidate for NASA.

“There’s an element of perseverance and improving your situation each time you apply,” he told the space agency before his flight last August. Everything he did was focused toward that goal. In 2001, Hernandez joined NASA as a materials research engineer, eventually managing professional civil servants and contractor support for the Johnson Space Center in Houston.

“Finally, after 12 years of perseverance I did get selected in 2004,” he says. Hernandez completed Astronaut Candidate Training in 2006. He took special pride, he says, in noticing the 28-volt power



Hernandez, pictured with his parents Salvador and Julia, says they considered a good education as a long-term investment and encouraged all their children to stay in school.

supply strips on Discovery.

“I had worked on them seven years earlier. It was pretty cool to see something in use that I had helped develop before I became an astronaut.”

Back on earth, he is a proud father and supportive husband. His wife, Adela, runs the Tierra Luna Grill in Houston.

“My friends call it the Dirt Moon Grill,” says José. His favorite dish? “Mole poblano,” he says, and he prefers it with chicken. Adela’s recipe has

origins in the Hernandez family’s province of Michoacan in Mexico.

Their five children are the most interesting people on the planet, he says. Elder son Julio, 15, attends a combination high school and community college. When he graduates from high school, he’ll also have finished two years of college and would like to come to Pacific.

“He wants to be an engineer,” his proud dad says.

Daughter Vanessa, 12, is an athlete. She came to campus recently with her father to look at athletics facilities for cross country and swimming. She’d like to attend Pacific as well. Karina, 14, is creative and nurturing, like her mother, and Yesenia, 10, has the intelligence to become an engineer if she chooses, although she talks about becoming a veterinarian like her sister Vanessa. Antonio, 7, has a knack for math, his dad says.

As a regent and alumnus, Hernandez serves on board committees dealing with student life, facilities and academic affairs. He feels the best thing he can do for the University is to be an ambassador.

“I want to see that Pacific gets recognized and gets positive exposure because of my experiences there,” he says.

At 47, his lifelong dream accomplished, Hernandez is excited about the future.

“Perhaps I’ll retreat to a mountaintop to consider the possibilities,” he jokes. “I’m as interested as you to see where I am going to go.”

“That recipe is going to work anywhere: don’t give up!”

– José Hernandez ’85