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The First Black Female Astronaut On Fear, Audacity, And The Importance of Inclusion

Want to encourage equality among races, genders, and generations? Be audacious and a little impatient.

By [Lydia Dishman](#)

On paper, [Mae Jemison](#)'s accomplishments are so varied and groundbreaking, you would never stop to consider that she—like most all of us— isn't completely fearless.



[Mae Jemison](#)

Jemison studied chemical engineering at Stanford before going to medical school at Cornell. From there, she went into the Peace Corps as a medical officer for Sierra Leone and Liberia before becoming a general-practice physician in Los Angeles. An itch to keep exploring, something that Jemison admits has been with her since childhood, led her to NASA, where she became an astronaut and the first woman of color in the world to go into space, aboard the *Space Shuttle Endeavour*, for its STS-47 Spacelab-J mission in 1992. Among her more recent ventures, Jemison's taught environmental science at Dartmouth, leads [100 Year Starship](#), an initiative to get humans to travel beyond our solar system within the next 100 years, started the Earth We Share science literacy project, serves as Bayer Corporation USA's national science literacy advocate, and is on the boards of Kimberly-Clark, Scholastic, and Valspar.

Along the way, she's learned a lot, from complex technical engineering to soft skills like patience.

Fear Isn't Always A Weakness

According to Jemison, she's learned it's what you do with that fear that makes the difference. She suffered from a fear of heights, but once she got into the astronaut training program, Jemison says, "There was no way I was not going to get through because of my fear of heights." Instead, she relied on the strength of her ego to push forward.

"It's a weakness only if it keeps you from doing stuff."

"It's a weakness only if it keeps you from doing stuff," Jemison explains, adding that derring-do is not necessarily a strength. She believes as you learn your strengths and work on weaknesses, the key is more an issue of balance than to focus on one in hopes the other will disappear.

"You can rely on strength so much, you don't build up your other capabilities," says Jemison. Having too much empathy can hold you back as much as not having any and not be able to read a room, she points out. As for herself, she always tries new things to see what she could do better, something as simple as switching which hand she uses to do something. "I do things with my left hand just to see if I can," she explains. The change in perspective is enough to shake things up a bit. "We are all tasked to balance and optimize ourselves," she underscores.

Confidence Boost Or Bust

One of the results of this practice has been boosting confidence, according to Jemison. She has had her share of both supporters and detractors. The latter, from the time she was in kindergarten, included one teacher who learned she wanted to become a scientist and told her to pursue nursing instead.

On the flip side, Jemison says other teachers were there to provide encouragement, or at least equality. One professor at Stanford chose lab partners and stressed that those who didn't all contribute to the experiments would cause the entire team to fail. Still, being in the minority on an engineering track, Jemison says she looked further afield for support. African American studies became a major as she explored dance and learned Swahili. "I gravitated to those places that could give me support," she says, crediting those as the outlet she needed to stick it out in engineering.

Dancing, in particular, has been more than a creative and supportive outlet for Jemison from the time she was 8 years old. Training in a variety of styles, including ballet, modern, jazz, African, and Haitian, has helped her learn discipline and the importance of practice and rehearsal as well as given her the ability to interact with a group and the situational and physical awareness needed to move correctly across a stage.

It's also taught her a different kind of confidence. "You don't even get to talk," says Jemison. "You are just up there in front of God and everybody in that little outfit and you have to be you." Maybe that doesn't translate into every area of life, she admits, but even in a boardroom, drawing on the practice of working through something until you know it well and then delivering is made easier. And if it's not? "People shouldn't see how hard it is," she says.

Camaraderie Makes A Difference

Jemison doesn't discount the effect that women-only schools and professional organizations can have on encouraging women to pursue male-dominated jobs. "The level of confidence women are able to build in women-only groups is important," she believes, because every role is filled by a female. "You don't have to be as brazen as I was," says Jemison.

"Camaraderie makes a difference," she says. That's why she organized Celebrating Women of Color in Flight, Jemison says. Not only did she feel it was her responsibility to raise awareness about these women's achievements. When female pilots, a master electrician aboard an aircraft carrier, a technical officer from a submarine, and others came together to meet for the first time, it was just as important to see them share stories and bond in a way they don't get to do with their mostly male colleagues.

Blocking Internal Biases

But just as she was given multiple chances by teachers and colleagues to try and fail or succeed, Jemison says the one major thing she's learned works to get more women to complete STEM degrees and go on to jobs in those fields is tackling the bias of appearance.

"People graduate and go into fields in spite of the professors, not because of them."

In her work with Bayer, a survey asking department heads of research universities about interactions with young women revealed that incoming female students were prepared to complete a STEM degree but they were not phased by the dwindling number of those who actually did it.

The typical reasons were cited: The women either weren't competitive or confident enough to see it through. "I am impatient with that because that is foolish," says Jemison. She cites studies that found professors often discourage their young female students, in part because they can't visualize them becoming their colleagues eventually. "People graduate and go into fields in spite of the professors, not because of them," Jemison contends. Success in part comes from what you give people permission to do, she argues.

Organizations that want to make a difference and be more inclusive need to shed their internal biases, too, she posits. As an example, she calls out companies that encourage staffers to play golf in order to belong. "I don't know how to play," says Jemison. "But my lack of ability should not preclude me from talking to people."

Talking to people and educating them is what Jemison continues to do. She gets asked to make a lot of professional appearances given her track record and the fact that she's still one of the few black women astronauts. But at one recent conference on getting more girls into tech, she felt like a fish out of water.

"We needed a woman who decided to major and go all the way through in computer science to have this make sense," she recalls suggesting. Then she was told that such a person would only want to talk about algorithms and that might be boring or off-putting. "These are women who are trying to get more women in IT who had a negative view of women in computer science, and they didn't even see the block," Jemison remembers.

"We get different results when we are inclusive," she says, and not just to reach the stars but to accelerate the pace of equality. Her recommendation: Balance inclusion and audacity. "And be a little impatient," she adds with a hearty laugh.

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