

# What Do a Neuroscientist and a NASA Flight Commander Have in Common?



To celebrate Women’s History Month (and mostly because we’ll take any excuse to hang out with incredible people who are doing awesome things), we sat down to catch up with two women whose lives might look completely different but who have one crucial thing in common: using science and technology to advance what’s possible for all humans. They also happen to be alumni of the [Astronaut Scholarship Foundation](#). Our co-founder and CEO Michael Markesbery is an Astronaut Scholar himself, an experience that was formative in the curious, boundary-pushing road that led him to found OROS.

If you know anything about the team at OROS (and hey, maybe you don’t, but you’re about to) it’s that our two co-founders are lifelong proud STEM nerds, and that we’re all obsessed with helping people “find their beyond” and finding our own. The women we recently chatted with — NASA flight director Fiona Turett and neuroscientist Ashley Hayden — are masters when it comes to living this ethos in the work they’ve dedicated their lives to pursuing.

Here’s a little more about them along with some of the highlights from our conversations with them.

## FIONA TURETT — NASA FLIGHT COMMANDER



### **All about Fiona:**

Fiona Turett is deeply the real deal over at NASA. Over the past 9 years, she's worked in many key functions, notably on the Gateway vehicle. "Gateway is a spacecraft that will orbit the moon, and basically be a staging point for crew to meet at and go down to the surface [of the moon]," Fiona told us. "It lets you get to everywhere on the lunar surface. It also gives you a platform to do science year-round in lunar orbit. I started working on it when it was very new, so I would absolutely love to get to fly, from the ground, a Gateway mission." As flight director currently, Fiona leads human spaceflight operations for International Space Station missions and our return to the moon.

### **Fiona on who inspires her:**

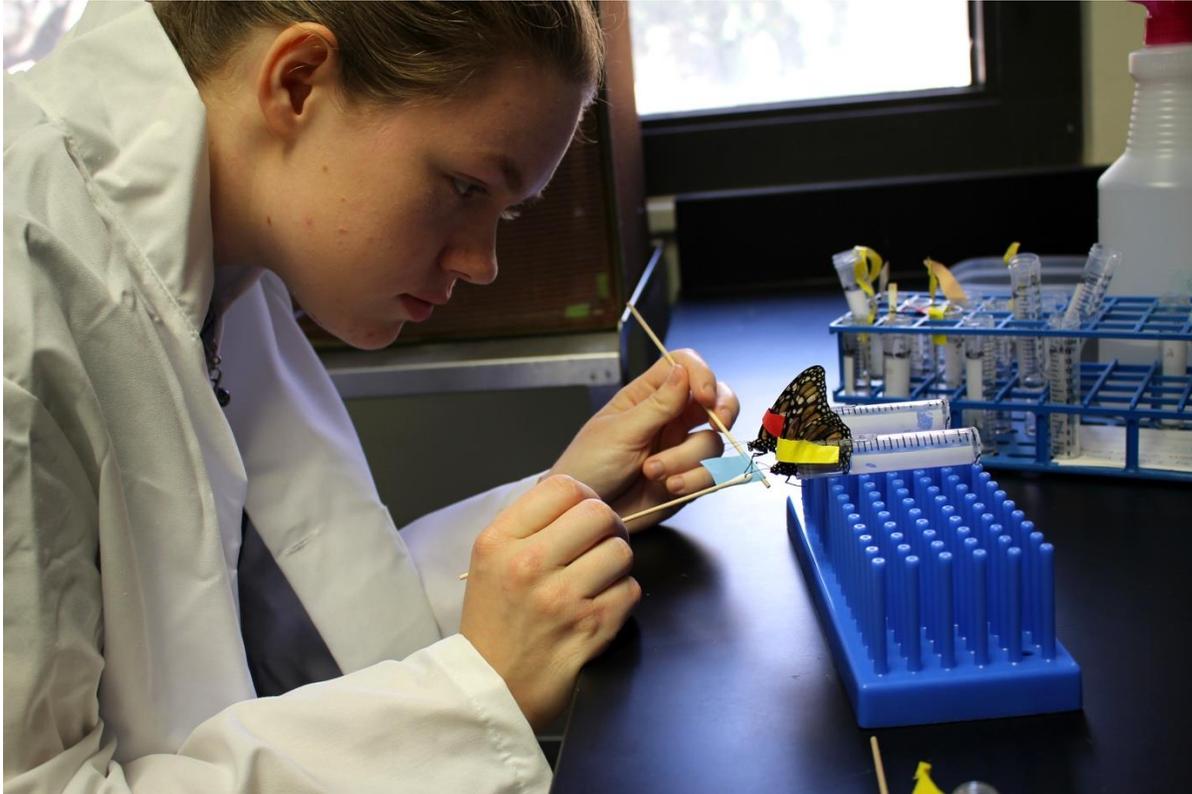
*"People who step out of their comfort zone, and people whose focus is on helping others ... You have these people who are willing to make personal sacrifices and take a lot of risk for something they really believe in."*

### **Fiona on women at NASA:**

*"In my 10 years at NASA, I've always seen women doing amazing things. It hasn't been strange*

*or unique to be in a room that might be more women than men. I feel really lucky to be in an environment where it's not unique to see a woman in a leadership role or crushing this technical problem or a woman leading a program.”*

**ASHLEY HAYDEN — BAYLOR COLLEGE OF MEDICINE STUDENT**



**All about Ashley:**

Ashley Hayden is currently pursuing a Ph.D. in Neuroscience at Baylor College of Medicine. Interests include the human mind, genetics, and bioinformatics. “I use very tiny microscopic worms, and they have about as simple of a nervous system as can still learn something as you can get,” she explained to us. “They actually learn and remember things the way that we do. The way they form memories molecularly is pretty much the exact same as us, even though their nervous system is way less complex.” (Her work is insanely cool and complex, and we asked her objectively too many questions about it. Sorry, Ashley!)

The future Dr. Hayden has also stayed close to ASF, having served on their 2019-20 Strategic Planning Task Force. “I really wanted to bring a voice for the younger scholars. Before myself and a couple other scholars joined the program committee last year, there weren’t many younger scholars represented in ASF. We’re busy people! But for me, it was very important to give us a voice, but also to give back to the organization. They’ve done a lot for me, whether they realize that or not. So that drives me too, just giving back to the foundation that’s gotten me to where I

am today.”

## TWO WOMEN FINDING THEIR BEYOND

Being an astronaut scholar has been similarly impactful for Fiona, who casually dropped this immensely inspiring story on us during our conversation:

*“The first time I went to an ASF event, I sat down at dinner next to some lady, and I said “Hi, I’m Fiona,” and she said, “Hi, I’m Marilyn Lovell and this is my husband, Jim.” Hearing their story and just talking about their life, you then go back and look at Apollo 13 and it’s very personal. It’s not this distant thing that happened — it’s this personal thing, because I’m thinking about my conversation with Jim and Marilyn when I’m thinking about it. So being in a role like flight director, where I am part of that ground team that keeps the crew safe, I think those interactions I’ve had through ASF do help humanize that. This is why we do what we do. You look at Jim Lovell sitting there, years after Apollo 13, and this is why that, in my job everyday as a flight director, I do the best I can.”*

But unlike Fiona, whose parents were both scientists, who pretty much knew from a very young age that she was interested in space — “In middle school, we could pick any topic we wanted [for a project], and I picked the solar system,” she told us — Ashley took a bit of a longer road to the path she’s on now.

*“I grew up around art and artists and was considering making that into a career for a long time. But when I was in my early teens, my mom got liver cancer. When she passed away, I was 17 — I completely changed direction and decided I wanted to go into medicine. I wanted to help people like her and families that went through what I went through. During my first rotation in a hospital, I passed out. So I started to think maybe I can’t handle medicine, but I did find the human body really fascinating, and especially the human mind.”*

### **Fiona on finding her beyond:**

*“I’m very driven to keep learning. Both at work and outside of work, i’m just very curious and I like learning new things. I continually try to find new ways to challenge myself ... Any kind of part in returning humanity to the moon, or going further, any role in that, I would accept.”*

### **Ashley on what what drives her:**

*“My main motivator is to help people, but sometimes with research that can be a little difficult because research is very far-sighted: it helps the world ultimately but I probably won’t see it in my lifetime. A lot of scientists only get awards for their work or accolades long after they’re gone. I’m still trying to incorporate my love for science and my love for helping others and teaching others, but ultimately my goal everyday is to make someone’s life a little better or help*

*someone understand something they didn't know before. And just try to get people to be excited about science and be excited about learning in general."*

**Ashley on the coloring book she's working on:**

*"One of the things I love most about science is being able to teach others, so I was thinking about how I could do that. I used to work with children when I was an artist. I was an artist's assistant at a child's pastel studio. So I was thinking, "How could I incorporate my love for art with my love for kids with my love for science?" I was like, "Wait a minute. Is there a science coloring book out there that features these really powerful women in science?" And I looked and there wasn't. Within a couple weeks, I just had this burst of passion for this project and ended up generating like 10 to 15 designs in two weeks. I just sat down, read the stories of these famous (or not) women in science who were highly influential, who discovered things that changed medicine or space or engineering or mathematics or computation, and I just felt so inspired by their stories. I poured all of that into this coloring book."*



as leaders, teachers, and advocates in STEM fields aren't superhuman; they're just people. And honestly, that's a little more impressive to us.

**ABOUT THE ASTRONAUT SCHOLARSHIP FOUNDATION:**

The [ASF](#) isn't just an organization that we at OROS feel spiritually aligned with — it's a core part of our backstory. Our co-founder and CEO Michael Markesbery is an ASF scholar himself, an experience that was formative in the curious, boundary-pushing road that led him to OROS. And the organization itself is truly awesome: ASF is a 501(c)3 non-profit that provides annually more than 50 scholarships to the brightest and most talented college students in science, technology, engineering and mathematics. We're super thankful to them for the incredible work they do and for connecting us with Fiona and Ashley.