PROFILE

Young, TikTok-famous and an astrophysicist: MEET KATE SHAVELLE

// BY HANA TILKSEW

Kaitlyn Shavelle, 23, is many things: a SoCal girl by birth, a ballerina since her youth and a budding TikTok influencer. She's also a second-year PhD candidate in Princeton University's astrophysics department.

I first stumbled onto her TikTok page as a community college student who could only dream of the Ivy League. My eventual arrival at Yale culminated in an identity crisis: How could I reconcile my California girl identity with my rigid, austere image of the Ivy League? The TikToks were no longer aspirational, but a realistic guide on finding joy in academics without allowing them to consume me. Her perspective could benefit many of us at Yale who feel torn between our intellect and our humanity.

Shavelle, who goes by Kate, has heard from many that she doesn't "look" like a scientist. She's heard it from undergraduate professors at Columbia, from first dates and from skeptical social media followers. She's young, Black and female in a field where the stereotype is typically older, white and male. In between academic commitments, she uploads beauty tutorials and sisterly advice for her TikTok audience of almost 67,000. I met with Kate over Zoom to discuss the experience of online stardom and how she balances femininity with intellect.

Kate grew up in Manhattan Beach, California. Her mother, an MD-PhD, was an early inspiration for the woman she would become. "She is so fabulous. Her closet is crazy," Kate says. "I saw her get ready for work and I was like, okay, that's just part of the process. You can wear makeup and you can wear cute clothes and you can go be a surgeon."

As Kate has shared on TikTok, she comes from an impressive line of academics. Her grandmother, Annie Marie Garraway, received a PhD in mathematics from University of California, Berkeley — one of the first Black women in the United States to do so.

"For African Americans of my generation and before, education was valued and sought after as a 'way out' and as a way to realize a higher economic status in life," Garraway writes to me in an email. "While there were virtually insurmountable barriers in the days of slavery and Jim Crow, we saw value in education for its own sake, for helping navigate the world in which we lived and for the inward strength and character an education could provide."

Before Columbia and Princeton, teenage Kate's dream was Yale, but she was rejected after applying early. At the time, she says, the disappointment was "heart-breaking" and "soul-crushing." When she applied again as a prospective graduate student, Yale said yes — this time, it was Kate's turn to say no.

"I was looking at schools, obviously, that were the best in astro and places that were supportive," Kate says. "It is obviously a very rigorous thing that you're doing and I wanted to be very supported." While she was impressed by Yale's Science Hill when she toured, she felt that Princeton was better suited to her personal academic interests.

Kate's trajectory towards astrophysics was heavily impacted by her childhood love for the movie "Interstellar." When her mom found a book detailing the science behind the movie's plot points, she was attracted to the field — no pun intended. When I point out that most kids would watch "Interstellar" and dream about being astronauts, not astrophysicists, Kate laughs.

"I was like, well, no. I want to be the person who's doing the blackboard equations, you know?"

Dr. Regina Jorgenson, who mentored Kate during a 2022 summer research experience, writes to me in an email that "It's been a joy to watch Kate develop and grow as a scientist and as a person. And perhaps most impactful to me personally, has been experiencing Kate's perseverance, tenacity, honesty, and joy."

Before she fell in love with science, Kate had her heart set on ballet, starting pre-professional ballet training at eight years old. "I always say that astrophysics is my backup career," she says, "because if you were to ask me when I was 14 years old, 'Kaitlyn, what do you want to be doing when you're 23,' I would have said a professional ballerina, and I think it would have really crushed me to hear that I was an astrophysicist at Princeton."

In September 2024, after Kate's get-ready-with-me video gained traction, she began to share more videos about life at graduate school. Eventually, her content became more personal, discussing her family history and personal struggles while also remaining lighthearted with the occasional makeup tutorial. Her blend of typical influencer content with academia-inspired content allowed her to cultivate a distinct audience.

"I'd seen a lot of law school creators and a lot of med school creators, but I hadn't really seen anyone going through a PhD, and I also just wanted to record for myself my own experiences," Kate says of her motivation to become a creator. "I just thought maybe there would be a niche for me and somehow there has been."

One of Kate's most viral TikToks, with 990,000 likes, details her journey of training as a ballerina through adolescence, planning to audition for professional companies until COVID interrupted her plans and led her to attend Columbia instead. The comments flooding that video echo comments left on her page all the time: things in the vein of "you're so cool" and "you do it all." One person writes "limited edition barbie material."

Conscious that her online persona may lend itself to an image of perfection, Kate is not shy about sharing less-than-ideal aspects of her day-to-day, including her battle with stress-induced alopecia. "I feel like part of TikTok and sharing so much of my life has been showing the not-so-good parts and showing that I am human too, and I think people really resonate with that," she says.

When the camera isn't on, Kate's daily life revolves around teaching undergraduates as a teaching assistant, working in her office at Princeton's astrophysics department, completing coursework and doing research. She is specifically interested in active galactic nuclei, which are areas of matter around black holes — or so Kate tells me. I wouldn't know — I'm an English major! She is in year two of a five-year program, after which she looks forward to becoming a full-fledged professor.

"Depending on where you go and depending on what level of faculty you are, you don't get to interface with students as much, so I hope I'll end up at a place that is very interactive and I'll be able to actually really have deep connections with students because that's something I really love right now," she says.

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