

A portrait of Jennifer Patrissi Cram, a woman with long dark hair, smiling, wearing a dark blue and white striped sleeveless top. The background is a solid blue color. There are three overlapping circles in shades of blue and purple behind her head.

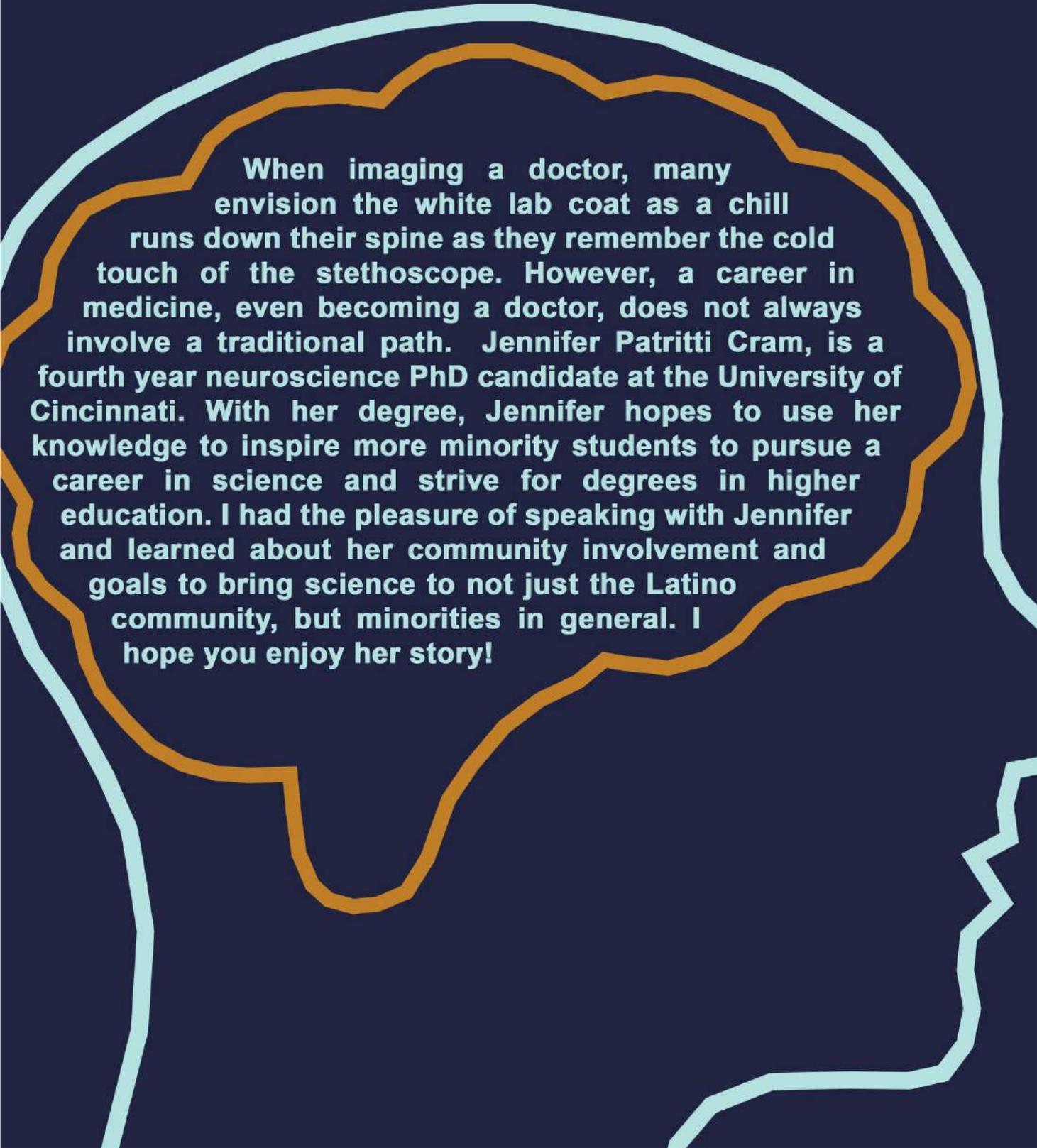
Latino Community Highlight

Ohio | Latino Affairs
Commission

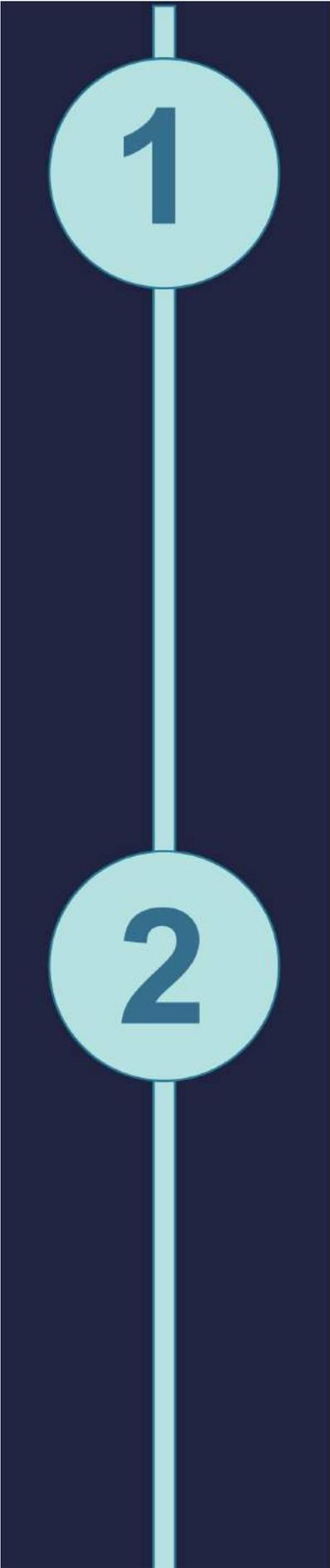
Jennifer Patrissi Cram

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A Doctor of a Different Degree



When imaging a doctor, many envision the white lab coat as a chill runs down their spine as they remember the cold touch of the stethoscope. However, a career in medicine, even becoming a doctor, does not always involve a traditional path. Jennifer Patrilli Cram, is a fourth year neuroscience PhD candidate at the University of Cincinnati. With her degree, Jennifer hopes to use her knowledge to inspire more minority students to pursue a career in science and strive for degrees in higher education. I had the pleasure of speaking with Jennifer and learned about her community involvement and goals to bring science to not just the Latino community, but minorities in general. I hope you enjoy her story!



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Tell me a little bit about yourself.

I am a first-generation Latina scientist pursuing a PhD in Neuroscience. I was born in Venezuela and shortly after I was born, my parents moved to Puerto Rico looking for better opportunities. Since I was very young, I have been very determined to pursue higher education in the United States mainland because there are limited opportunities to study biomedical sciences back home. I wanted to pursue a career in molecular genetics and do research. When I applied for college, I applied to a bunch of schools, got accepted in many, but when it came down to choosing a school, I went with The Ohio State University (OSU). OSU has a variety of majors, amazing research opportunities and offered the most financial aid. Financial aid was imperative for me considering my parents could not afford to pay my college tuition. My experience at OSU was very different from what I expected. I was suddenly amongst a sea of valedictorians and my transition wasn't easy. I am a first-generation student, meaning my parents didn't go to college and they could not provide me with much educational advice. I was alone, with no family support and barely getting by in classes. The public high school I attended did not have great resources, and I never once took science classes in English. Naively enough, it never crossed my mind that to study science in the US, I needed to relearn the scientific language in a whole new language: English! With great determination, the amazing support from my parents and academic mentors, I excelled in my coursework and obtained a bachelor's degree in Neuroscience. Now, I am at the University of Cincinnati (UC) pursuing a PhD in Neuroscience.

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Tell me a little bit about your career, where are you now, what is your specialty?

I've been involved in research since I was in high school. Back home in Puerto Rico, I did research in high school as I was part of great programs set up for high school students to do research and learn about what a research career entails. That experience definitely sparked my love for research. Then, at Ohio State, I did research with Dr. Helen Chamberlin in the Department of Molecular Genetics. After 3 years of doing research and great mentorship from her, I decided that I wanted to pursue a career in biomedical research. After graduating college, I applied to graduate school and was accepted to the University of Cincinnati's Neuroscience Graduate PhD Program. I am currently a fourth year Neuroscience PhD candidate working with Dr. Nancy Ratner. The PhD journey isn't easy, as many Hispanic scientists can relate. It takes a village to finish a PhD degree. My village is composed of my family, my close friends and a network of mentors all over the world that provide me with guidance and support to succeed in grad school.

What are you studying?

My dissertation research is studying a disease called Neurofibromatosis Type 1. Patients with this disease develop tumors anywhere along the peripheral nervous system. Currently, there is no curative treatment for this disease. For my research I use animal models to understand the mechanisms of how these tumors form and determine what drugs can be used to prevent tumor formation or shrink tumor growth.

Have you always had a passion for this path in medicine or is it something you discovered along the way and why this area specifically?

Back in high school and maybe even the first year of college, I didn't know definitively that I wanted to be scientist. I would love to say to people "I've always wanted to be a scientist and I've known it since I was three years old". In reality I don't remember. Last Christmas, I went back home to Puerto Rico and my mom showed me this piece of paper from a homework assignment from kindergarten and the assignment asked "What do you want to be when you grow up?" and my top choice was to be a scientist." So, I guess I've always had it in the back of my mind even if I don't remember it! At OSU, my initial declared major was molecular genetics, not neuroscience. I started in genetics but didn't feel that passionate about it. I wanted to go to classes and really be interested in what was being taught. I was taking a psychology course, as a general education requirement, and there was a chapter on neurobiology of the brain. The chapter discussed how biology controls a lot of the behavior and processes that happen in the human brain. For me, that was amazing! That's when I switched majors to neuroscience. Now, having been a scientist for four years in undergrad and four years as a PhD candidate, I realized that I don't really want to spend my whole life in a lab. Instead, I want to use my scientific knowledge to help and encourage students, especially minority students pursue a career in science.

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What do you hope to do with your degree, what are your goals once you graduate? What are your plans for the future?

One of the biggest misconceptions is that PhDs only do research. That is far from true. There are many careers for PhDs like science policy, intellectual property, science writing, academia, industry, non-profit amongst many others. For me, doing a post-doctorate is always an option but I've also been thinking about other potential career paths. I have been involved in advocating for minority students since I started my undergraduate degree at OSU. For me, that's been a big part of my career for almost eight years now. I was the founding president of the Ohio State SACNAS Chapter. SACNAS stands for (Society for the Advancement of Chicanos/Hispanics and Native Americans in Science). Currently, at UC, I'm president of the Cincy SACNAS Chapter. SACNAS is a national organization that provides professional development opportunities to minority students pursuing science degrees. Through my involvement with this organization, I consolidated a community of Latino scientists on campus that support and encourage each other and hosted Latino scientists from different parts of the nation to give talks and to serve as mentors to undergraduate and graduate students. Being involved in that organization made me realize, science advocacy is a part of me and whatever career I pursue with my PhD will have to have a component of that. After I finish my PhD, I will pursue a career in intellectual property law and science policy. Pursuing a PhD has allowed me to dive into my passion for science and to realize that I can combine my love for science, law and science policy to advocate for those who don't have a voice.



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As a Latina, are there issues in the medical community/research community that you wish to remedy and in what ways are you working to remedy these issues?

There are many problems in the medical/ biomedical research community, especially affecting minorities. There are not many male or female minority scientists hired for faculty or administrative positions. Like many fields, science is very white, male dominated. For this reason, upcoming minority neuroscientists such as myself, don't have role models that they can relate to and reach out for advice. I believe the problem of minority representation in STEM is caused by more than just hiring practices in higher education institutions. Many minorities do not pursue a career in STEM because they don't have the resources or encouragement to succeed when they are in elementary school and high school. The pipeline gets smaller and smaller as students move on to the next career stage. At the end, very few of us end up finishing MD or PhD degrees. My advocacy work is focused on changing this. Personally, my outlet has been the SACNAS organization, which provides a platform to connect with the community and help other who are going through the same struggles. At the UC Cincy SACNAS Chapter, we started a community outreach program where our Chapter goes to Heritage Hill Elementary School in Springdale, Ohio (a primarily minority elementary school) during Hispanic Heritage month and introduce the students to what we do as scientists.

We bring brains and other props and explain to the kids what we do as scientists. Doing this not only shows them that science is fun, but that science is being done by people that look like them and speak their language. I went to the school for the first time two years ago and when the kids came to the auditorium, I could hear them speaking Spanish. I had planned on doing the presentation in English because I didn't want to exclude those who don't understand Spanish. But when I heard kids speaking Spanish, I decided to do the presentation in both languages. The moment I started speaking in Spanish the kids looked super happy and surprised. It was great! This has been one of the highlights of my entire PhD career. I believe the way to encourage future scientists is by showing them that there are people that look just like them doing science. Hopefully, little by little, we can increase minority interest in science and increase the pipeline of students that go on to pursue MDs or PhDs as a career.



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What was the award you received at the Hispanic Chambers of Commerce Cincinnati USA Gala? Why were you honored?

The Cincinnati Hispanic Chamber of Commerce Foundation has a scholarship that recognizes the honors and achievements of students attending colleges and universities in the Greater Cincinnati area. This scholarship is used as a platform to inspire other younger Hispanic students to pursue higher education. At their Annual Gala, I gave a speech on behalf of all scholarship recipients where I talked about where I'm from, my journey as a Latina scientist pursuing a career in biomedical research and my advice to those who want to pursue a career in this field. After the award, I received many complements on the speech, from high school students to faculty, who were thankful that I shared my experiences and expressed how much they could relate to my journey.

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What advice do you have for people wishing to pursue a career in both the medical field and research field?

DO IT! Don't give up. There's going to be many, many times where you feel like you want to give up or you feel that you are not good enough. That's not true! You are good enough and you can do it! It's not going to be easy, and you need to work very hard. Surround yourself with people who want to see you succeed. Perseverance is the key to success!

