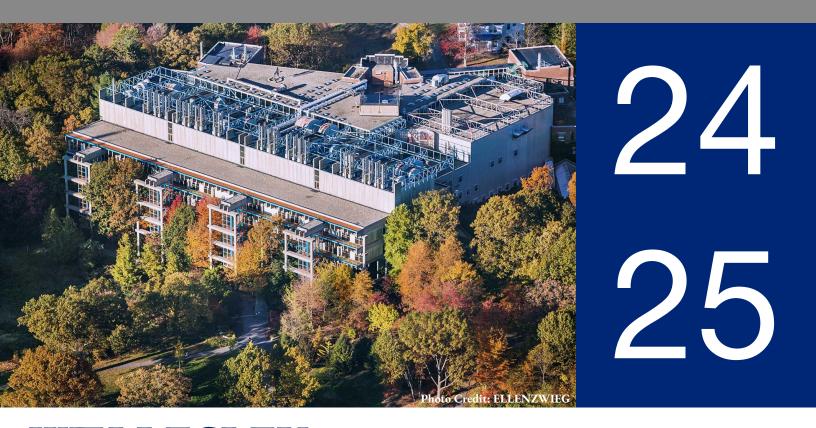
# STUDENT **DIRECTORY**



## WELLESLEY WELLESLEY CNAIR SCHOLARS PROGRAM



#### **STEPHANIE AMAYA**

Senior | Biochemistry Hometown: Miami, FL Research Interest/Area: Biomedical Research

"Hi everyone! I was born and raised in Miami, FL by Salvadoran parents. I have always had an interest in Biology, and after taking chemistry at Wellesley, I became fascinated with the intersectionality between the two. In my first year, I had the opportunity to conduct research on gene expression in the temperature dependent Tobacco Hornworm. As I gained confidence in the lab, my interest shifted towards the correlation between human health and hormonal imbalances. This led me to study the effects of Metformin on the development of the tobacco hornworm, focusing specifically on hormonal changes in Ecdysone. In the future, I aim to pursue a PhD in biochemistry with a focus on biomedical research."



#### **GRACY ARISTIL**

Senior | Women & Gender Studies & Biology Minor Hometown: New Jersey Research Interest/Area: Cancer Research, Stem Cells

"I am a junior from Hillside, New Jersey. I migrated to the United States from Port-au-Prince, Haiti when I was an infant. I identify as a Haitian American who is a low income and FGLI student. Through the research experience I first gained at Wellesley College, I've realized that my research interests are still evolving as of current. My long-term goals are to apply to graduate school or enter the industry immediately after graduation."



#### **KENNEDY BARNES**

Senior | Chemistry Hometown: Houston, TX Research Interest/Area: Radiation Chemistry, Photochemistry, Astrochemistry

"My name is Kennedy Barnes, and I am a Chemistry Major at Wellesley! (Class of 2025). In addition to McNair, I am a part of the Posse 5 Cohort on campus. I fell in love with the research process during the Wellesley Summer Research Program the summer before my sophomore year. I love how research challenges me to think of alternate, novel solutions. While I currently investigate the chemical processes and mechanisms that occur in space using an ultrahigh vacuum system, I hope to work in organic chemistry synthesis to design new and improved drugs that will change the current treatment options for a variety of illnesses. My goal is to get my Ph.D. in organic chemistry."



#### **EVE BUTTERWORTH**

Senior | Geosciences Hometown: Boulder, CO

Research Interest/Area: Contamination fate and transport and environmental justice

"I am interested in environmental geochemistry and contaminant fate and transport. Particularly, I want to investigate how and where anthropogenic contaminants enter the environment, how they are transported, where they end up, and their risks to humans. I am interested in conducting my geochemistry research through an environmental justice lens. Environmental justice plays a vital role in contaminant research as minority communities are far more likely to be at risk of exposure. I aim to change the view of environmental justice from a social science field to a mandatory and key variable in all responsible contaminant research. I plan to attend graduate school in fall 2025, pursuing a PhD in environmental geochemistry and later a master's in public health. Long term, I intend to work for the EPA, USGS, NIH, or a national laboratory studying anthropogenic contaminants and their impacts on environmentally underserved communities."

#### ALISON DE LA CRUZ

Senior | Neuroscience Hometown: Richmond, VA Research Interest/Area: Pediatrics, Translational Neuroscience

"Hello! My name is Alison De La Cruz and I am a first-generation, low-income student and the daughter of a Mexican immigrant. My interest in medicine began when I was just a kid but as I grew older my interests grew to take into consideration enthusiasm for performing research. During the summer of 2023, I was fortunate enough to participate in a program that gave me both clinical and research experience. I worked on a retroactive chart study regarding how hyperglycemia affected extremely low birth weight infants. This experience made me realize how much I loved working in medicine specifically with children and how little research there is regarding how different ailments affect subsects of children, such as extremely low birth weight infants. I will also soon be starting a position at the Veteran Affairs Medical Center where I will be participating in research regarding their clinical trials in Parkinson's disease. I would love to continue to explore research with applications to pediatric medicine and neuroscience and eventually gain an MD or an MD/PhD.



#### **GRACE DODD**

Senior | Biology Hometown: Cincinnati, OH Research Interest/Area: Cell & Molecular Biology

"Hello! I'm Grace (She/her). I am originally from Ghana and have since lived in four cities (Nashville, Cincinnati, Eugene, and Boston). I love to travel and I can't wait to explore more cities. I became interested in science in my early days in highschool and middle school. I am a part of the Darling Lab at Wellesley College. This year I am conducting a thesis investigating the phosphorylation patterns and protein abundance of the voltage-gated potassium ion channels hERG and KVLQT1. My current hobbies include: drawing, hiking, reading, travelling, and trying new coffee shops."



#### DANIELA GONZALEZ

Senior | Physics Hometown: Los Angeles, CA Research Interest/Area: Experimental Physics with Lasers and Optics

"Hello everyone! I was born and raised in Los Angeles, California, and I am planning to pursue a PhD in physics. My goal is to work at the International Space Station to produce superior optical fibers manufacturing in microgravity. As the first woman in my family to graduate high school and attend college, I feel driven to enter a challenging field where people who look like me are underrepresented. I hope to inspire other women and Latines to believe that any ambitious goal is achievable. I hope my success will create more opportunities for other people. Additionally, I aim to establish a non-profit organization to support low-income and first-generation high school and community college students in Los Angeles County, helping them attend top universities."



#### HANNA HARMON

Senior | Astrophysics Hometown: Suwanee, GA Research Interest/Area: Black Holes, Gravitational Waves, AGN

"My research primarily focuses on black hole detection and observation. I have done research on the variability of AGN's brightness, detections of supermassive black holes via gravitational waves, and the ability to make electromagnetic observations of black holes. I'm also interested in how black holes function in the greater Universe in terms of galaxy mergers. My long-term goal is to go to grad school and earn my PhD in astrophysics."



#### **TRISHA LOPEZ**

Senior | Biological Sciences Hometown: Norwalk, CT Research Interest/Area: Hematology, Pediatrics, Global Health

"I'm a first-generation and low-income Ecuadorian-American student thinking about becoming a physician-scientist! I enjoy doing work in the field of pediatric hematology, with research experience (both wet lab and clinical!) at children's hospitals involving sickle cell disease and vascular anomalies. Through my hematology research, I've also been exposed to the field of global health by doing work benefitting pediatric patients with sickle cell disease in the Dominican Republic and international patients with a wide range of vascular anomalies. I found great fulfillment in doing global health work, so I hope to continue it, with a focus on aiding underserved populations in resource-limited settings."



#### **CAMILA LOPEZ**

Senior | Biochemistry Hometown: Los Angeles, CA Research Interest/Area: Molecular and Cellular Biology, Biochemistry

"Hello everyone! My name is Emily Camila Lopez and I am from Los Angeles, CA. I am a junior (Class of 2025) and majoring in biochemistry. Although I didn't know much about research before coming into Wellesley, I knew that I wanted to pursue a career in the science field and that I wanted to give back to my community. Now, through the research I have done at Wellesley, my research interests lie in the fields of biochemistry and molecular/cellular biology. For the future, I want to gain more knowledge and explore these fields further through graduate school."



#### ALEJANDRA RODRIGUEZ

Senior | Astrophysics Hometown: Houston, TX Research Interest/Area: Astrophysics, Cosmology, Galaxies & Instrumental

"Hello Everyone! I am a first-generation and low-income student from Houston, Texas. I'm currently a senior majoring in Astrophysics and plan on attending graduate school! I plan to obtain a Ph.D. in Astrophysics/Astronomy/Physics after graduation. I hope to work at NASA in the future as it's been my dream career since elementary school or become a researcher. I am interested in the Cosmology field of Astronomy and instrumentation! I find it interesting to hear about theories and discoveries that can contribute to our understanding of how our Universe came about. Currently, I am conducting research with Professor Lamiya Mowla in the Astronomy and Physics department. This research involves taking data such as galaxy images from the James Webb Space Telescope database and using them to analyze their age, composition, etc."



#### **GABRIELLE ROSE**

Senior | Geosciences Hometown: Coconut Creek, FL Research Interest/Area: Geophysics/Seismology, Natural Hazards

"Hi, I'm Gabby and I'm a Geosciences major from South Florida. My research interests lie in geophysics, specializing in seismology and natural hazards. My previous projects involved utilizing seismic data to determine and improve the accuracy of volcanic activity detection in West Antarctica and viewing low-frequency earthquakes through different modeling techniques to add nuance to future analysis of the phenomenon. I would like to earn a PhD in Geophysics and continue researching natural hazards and how they affect underserved communities in the future."



#### **JULIA SHERMAN**

Senior | Astrophysics Hometown: Houston, TX Research Interest/Area: Nuclear and Accelerator Physics

"Hello! My name is Julia Sherman and I am a senior astrophysics major from Houston, TX. I came to Wellesley truly undecided but fell in love with my first physics class where I was introduced to particle physics research. Although I am interested in all things physics and astronomy, I have found myself gravitating (pun intended) towards medical and accelerator physics research with the goal of increasing accessibility to advanced imaging and treatment methods. My goal is to pursue a PhD in physics after graduation."



#### SHENEIKA STEWART

Senior | Psychology Hometown: Jamaica & The Bronx Research Interest/Area: Social Psychology

"My name is Sheneika and I was raised in Jamaica, but I currently live in the Bronx, NY. Since my first year, I have been doing research in Dr. Gleason's Imaginary Lab where the main focus is social and developmental psychology. In combination with my research experience, my interests in prejudice, discrimination & racial inequality has led me to develop an enthusiasm for studies that intertwines both areas."



#### **DIARIOU BARRY**

Junior | Biochemistry & Women's and Gender Studies Hometown: Bronx, NY Research Interest/Area: Diabetes & Metabolism, Women's Health, Health Disparities, Translational research

"Hi, my name is Diariou Barry. I have been interested in research at a very young age, always wanting to understand what causes diseases and find the solution. Being from the South Bronx, I was aware of the way the lack of resources contributed to health outcomes in Black and Brown communities. I intend to pursue an MD-PhD where I can bridge my passion for research and medicine. My goal is to become a physician-scientist, where I can research the pathology and treatments of diseases. I also hope to treat patients who look and come from communities like mine. I am currently in the Elmore lab, looking at antimicrobial peptides as a solution to bacterial resistance. I am working on testing histone-derived antimicrobial peptides (HDAPs) on common bacteria."



#### **SABINE BERRY**

Junior | Neuroscience & Cognitive and Linguistic Sciences Hometown: Cincinnati, OH Research Interest/Area: Language Processing, Speech and Language Pathology

"Hi everyone! My name is Sabine Berry and I am from Cincinnati, OH. I am part of the class of 2026 and I am majoring in Neuroscience and Linguistics. I am broadly interested in language processing and the neural bases of various speech and language pathologies. I currently work in Dr. Pyers' lab in the psych department studying sign languages and cognition. I have developed a recent interest in using machine learning to improve human-computer interaction to help individuals with speech impairments and disorders. After I graduate I plan to pursue a PhD in Cognitive Neuroscience or Neurolinguistics."



#### **OLIVIA BROOKS**

Junior | Psychology Hometown: Orlando, FL Research Interest/Area: Clinical Psychology

"I hope to further my education after undergrad and pursue a Ph.D. in clinical psychology, specifically focusing my studies on how childhood trauma affects the developing and adult brain and its impact on resilience in adulthood. As a career, I want to work as a clinical psychologist, helping all those with mental, emotional, and behavioral disorders and providing culturally responsive care. I hope to be an advocate and expert in the field so that my patients feel seen and heard and help eradicate the stigma surrounding mental health."



#### **BLANCA MARTINEZ-HERRERA**

Junior | Biochemistry Hometown: Zion, OH Research Interest/Area: Stem Cell, Cancer, Molecular and Cellular Biology

"Hello! My name is Blanca Martinez-Herrera and I come from the suburb of Chicago called Zion. I am a Biochemistry major interested in stem cell and cancer cell research! Prior to arriving at Wellesley, I had no research experience or any idea of what I wanted to major in. After taking Chemistry and Biology, I realized the Biochemistry major was perfect for me. My long term goals include earning a PhD and finding a way to help people through research. I want my research to uplift those who have been overlooked or excluded by the science industry."



#### HAILEY REID

Junior | Chemical Physics Hometown: Wichita Falls, TX Research Interest/Area: Electron Dynamics, Reaction Kinetics

"Hi everyone! My name is Hailey (she/her), and I'm currently a junior at Wellesley College majoring in Chemical Physics. Over this past summer, I did research on tight-binding models as a means to understand the physical properties of ideal crystals. I'm interested in integrating the general fields of chemistry and physics in a more cohesive manner in order to accurately model chemical reactions, and inspiring children's curiosity for STEM through teaching and volunteering. I plan to attend a graduate program in physical chemistry."



#### **MELISSA RETANA**

Junior | Environmental Studies & Political Science Hometown: Anaheim, CA Research Interest/Area: Phenology, Ecology, Environmental Justice

"Hello! My name is Melissa Retana and I'm a first gen student. My research interests fall in the intersection of policy and ecology. Growing up in California, I was able to see the first hand consequences of climate change. I want to know the impacts that climate change is having on ecological systems. With the degradation of the environment has come consequences for people. Environmental injustice has continued to disproportionately impact communities of color. Ultimately I want to make information about climate change and environmental inequalities accessible to all communities, especially those who have historically been underserved and underrepresented."



#### KAT RODRIGUEZ

Junior | Economics & Environmental Science Hometown: Brooklyn, NY Research Interest/Area: U.S. Healthcare Policy & Poverty

"My interest in research on economic development is primarily focused on my broader goal of utilizing empirical evidence as a method for the development of policy and addressing issues relating to global poverty. I am passionate about promoting the value of social welfare and outreach programs because of the impact they have had on my life and the potential they have to create a positive impact on future generations in our world. In my own life, accessibility to the field of economics ensures that I can go beyond these barriers and be a voice for marginalized communities in need of cooperation, trust, and most importantly truth. In completing my major(s) in both economics and environmental studies, my goal is to pursue a PhD program in economics with the broader goal of becoming a university professor, increasing representation in the field, and contributing meaningful rhetoric on pressing issues."



#### **CHARLIE SCHNEIDER**

Junior | Physics and Mathematics Hometown: Los Angeles, CA Research Interest/Area: Theoretical Astroparticle Physics, Quasicrystals and superconductors

Hello! My name is Charlie, and I grew up in the LA area. I am a physics and mathematics double major planning to pursue a PhD in Physics. Coming to Wellesley, I knew that I wanted to pursue some combination of physics, mathematics, and astronomy, but I was unsure of exactly what subfields I wanted to concentrate on. Throughout my time here, I have had the chance to explore a few different labs. Specifically, I have worked in the Wellesley Optics and Quantum Electronics lab under Prof. Hall and the Condensed Matter Theory lab under Prof Addison—where I am currently working. However, my overall interests now lie in the theory in two different subfields. The first of which is astroparticle physics, and the second of which is quasicrystals and superconductors. I hope to continue to explore over the next year to narrow down my interests to one subfield for graduate school!



#### SHAINOOR SHOWRIN

Junior | Neuroscience & Sociology Hometown: Bridgeport, CT Research Interest/Area: Biological Sciences, Neuroscience

"Hi everyone! My name is Shainoor Showrin and I am a first-generation student who hopes to further build on my research skills in Cellular and Molecular Neuroscience. My curiosity drives me to investigate how dysfunction in biological and neurological systems leads to disease with the hope of innovative solutions. I aim to apply my knowledge not only in research but also in community-driven healthcare initiatives where I can make a tangible difference. My experiences within my family and community have motivated me to pursue a path to benefit my community and other underserved areas. Engaging with local communities and understanding the distinct challenges individuals face is influential to designing health interventions."



#### **DHARLENNY SOTO**

Junior | Astrophysics Hometown: East Bridgewater, MA Research Interest/Area: Observational Astronomy, Cosmology, Galaxy Evolution

"Hi! I'm Dharlenny, an Astrophysics major at Wellesley. I was born and raised in Massachusetts, but my entire family is from the Dominican Republic. Growing up, I always knew I wanted to be in STEM but never knew what field I was interested in. It wasn't until I talked to my grandfather and dad about astronauts one day, that I realized astronomy is pretty cool! During my time at Wellesley, I've done research during the semesters and an REU at another institution over the summer, confirming this is something I want to do for the rest of my life. When I graduate from Wellesley, I plan to get a PhD in astronomy, continue researching galaxies, and complete my dream of working at NASA."



#### **LUCIA URRETA**

Junior | Chemistry Hometown: Bogota, Colombia & Houston, TX Research Interest/Area: Natural Product Synthesis

"Hi! My name is Lucia Urreta and I am a chemistry major raised in Houston and currently living in Colombia! I am interested in natural product synthesis, specifically how natural products can be modified for medicinal purposes. I am currently working in the Movassaghi lab at MIT, conducting a total synthesis of a modified complex ETP, a type of molecule found in many species of fungus that seems to have promising anti-cancer properties. My goal is to get a Phd in organic chemistry, and use this research to develop more effective treatments against cancer."



#### **CARINA ZHANG**

Junior | Biology & Anthropology Hometown: Mission Viejo, CA Research Interest/Area: Biology \* Molecular Biology

"Hi everyone! My name is Carina and I am a Junior at Wellesley double majoring in Biology and Anthropology. Born in Southern China, I moved around a lot in the States with my family before finally settling down in Massachusetts a few years ago. Currently, at Wellesley, I conduct research in Professor Suzuki's lab looking into RNAi and temperature-induced variations in different insects' development and regeneration. In the future, I plan on attending graduate schools and applying to PhD programs focusing on molecular biological research, possibly continuing the work with epigenetics. In addition, because of my interest in biology research while also being an anthropology major, I am currently looking into the intersection between the two and researching more into the emerging biosocial research in epigenetics"

### Not pictured:

Levi Chavez: Senior | Studio Art Saniya Dawn: Senior | Computer Science Jasmine Le: Senior | Data Science Jenna Meyers: Senior | Independent major Rebeca Rodriguez: Senior | Biochemistry Mahilet Tefera: Senior | Biochemistry Aiyana Vazquez: Senior | Geosciences



#### Jocelyne L. Dolce, M.S.

Director | Biological Sciences Hometown: Rahway, NJ Research Interest/Area: Biomechanics and Evolution of Ventilation in Sharks

My primary focus at Wellesley is managing the day to day operations and meeting the overall objectives of the McNair Scholars Program, housed in the Science Center under the Office of the Provost. In this role, I work collaboratively with other student support programs in the Science Center and with faculty and staff to support McNair Scholars on campus in the academics and research. I am a graduate of the University of Rhode Island in Kingston, RI, where I earned a Bachelor of Science in Marine Biology and a Master's of Science in Biological Sciences. Prior to McNair, I was a lab instructor in the Dept. of Biological Sciences and was the faculty mentor for the first cohorts of the Posse and Clare Boothe Luce Scholars Programs. My professional interests include exploring the many issues that impact student success particularly for traditionally underrepresented STEM disciplines, and in first-generation, low income students in higher education.





#### Teofilo Barbalho, M.Ed.

Assistant Director | Student Success Hometown: Framingham, MA Research Interest/Area: Metacognition & Student Debt

I was born and raised in Framingham, MA and received my Bachelor of Arts degree in Criminology from Framingham State University and a Master of Education degree in Student Success from Regis College. I am particularly interested in helping students think about how they learn best and develop strategies they can utilize. Additionally, strategizing how to tackle student debt with students to ensure they understand their student loans is a passion of mine. My goal is to help first generation and low-income students develop academic strategies and financial literacy skills that will later translate in their personal lives.