

Achievement Rewards for College Scientists

# SCHOLAR BIO BOOKLET

2024

Animal Science • Astronomy
Astronomy • Bioengineering
Bioengineering • Biology •
Biology • Chemistry • Com
Computer Science • Com
Crops & Soils • Ecology • Er

Ecology • Engineering • Ento

Entomology • Environmental 🦎

Environmental Science • Epidem

Epidemiology • Fisheries • Forestry

Genetics • Math • Medicine • Neuroscience

Nursing • Oceanography • Pathology • Pharmacy

Physics • Plant Science • Space • Speech and Hearing • Statistics

ARCS SCHOLAR / Natalie Sturm, 2022-2025

Crop and Soil Sciences Washington State University



#### 2024-2025

#### **ARCS Foundation Seattle Chapter Scholars**

#### **Our Mission:**

ARCS® Foundation advances science and technology in the United States by providing financial awards to academically outstanding U.S. citizens studying to complete degrees in science, engineering, and medical research.

\*\*\*For ARCS Foundation Use Only\*\*\*

A Washington nonprofit organization: Tax ID 91-1042292

**Recipient Schools:** 

University of Washington and Washington State University

# Florence Adesope - Civil Engineering University of Washington ARCS New Member Class of 2023/2024



Florence received a bachelor's degree in Civil Engineering from Washington State University and a master's degree in Civil Engineering with an emphasis in Engineering and Project Management from University of California, Berkeley. She is interested in sustainable infrastructure and wants

to further research that topic, as well as infrastructure development. Florence would like to learn how this field could benefit others, especially those in underdeveloped spaces. She is looking forward to working in the industry and making powerful, impactful, engineering decisions and to work on large infrastructure projects. Florence also could envision herself in academia after industry to use her experience, research, and learning to impact future engineers. In her free time, Florence loves to watch tv, listen to music, and read novels.

## Evelyn Andrade - Chemistry Washington State University Geri and Chris Carlson



Evelyn received a Bachelor of Science in Chemistry from the University of Wisconsin - Superior. During her undergraduate research internships, she discovered a love for radiochemistry through a nuclear forensics project at Idaho National Lab, which inspired her to pursue this field of study at

WSU. After positive experiences at Lawrence Livermore National Lab, Oak Ridge National Lab, and Idaho National Lab, she aims to pursue a research career within the national lab system following her graduate studies. Evelyn was a college athlete and enjoys staying active and getting out into nature.

### Sam Barkal - MD/PhD - Molecular & Cellular Biology University of Washington

### Joanne & Bruce Montgomery ARCS Foundation Endowed Fellowship in Honor of the American Lung Association (6th)



Sam received his Bachelor of Science degree in Biochemistry and Cell Biology from the University of California, San Diego. He has an interest in genetics and cancer immunology and loves to learn more about how the two fields influence each other. Sam currently

works in Dr. Philip Greenberg's lab at the Fred Hutchinson Cancer Center and is leading a project aimed at identifying genetic drivers of T cell dysfunction in adoptive cell therapies treating cancer. This research will hopefully lead to cell therapies that are resistant to T cell dysfunction and able to significantly improve patient outcomes. Outside of the lab, Sam enjoys hiking, driving through the mountains, playing with his dog, Coco, and traveling with his family. He has two older sisters who are both physician scientists and hopes to start research collaborations with them in the future to tackle some of medicine's most complex problems.

# Teanna Barrett - Computer Science and Engineering University of Washington Walker Family ARCS Endowment (14th)



Teanna received a bachelor's degree in Computer Science with a minor in Philosophy from Howard University. Since she was a freshman at Howard University, her work has commonly been driven by an interest in investigating how technology perpetuates

western hegemony. A primary technology of interest is computer vision because its deleterious impacts are visceral and personally experienced (i.e., remote test proctoring systems). As she begins graduate school, Teanna is eager to expand her fairness research scope beyond computer vision to a variety of tasks within data science. In addition, she hopes to incorporate her interests in Black diasporic philosophies and community-based participatory research into her analysis of responsible data science paradigms. In her free time, Teanna loves to crochet, frolic in parks, bake, and travel.

### Tomas Bencomo - MD/PhD - Molecular & Cellular Biology **University of Washington**

#### Oliver W. Press ARCS Endowment (3rd)



Tomas received his bachelor's degree in Computer Science from Stanford University. During undergraduate studies, Tomas used bioinformatics approaches to study cutaneous squamous cell carcinoma, sparking his overlapping interests in skin

cancer biology and cancer genomics. He currently works in the Nghiem and Setty Labs using spatial multi-omics technologies to study the determinants of immune checkpoint blockade response in Merkel Cell Carcinoma, a rare and highly aggressive skin malignancy. After his graduate studies, Tomas looks forward to finishing his MD and subsequent residency training so that he can care for patients with cancer and autoimmune conditions and conduct research to improve treatment options for patients. Outside of work, Tomas enjoys hiking, pickleball, and binge-watching Netflix.

### Eleftheria Beres - Computer Science and Engineering **University of Washington**

### **ARCS Light in honor of Molly Pengra**



Eleftheria received a Bachelor of Science in Computer Science from Northwestern University. During her time at Northwestern, she worked in two research synthetic biology group developing groups: a software for biological data analysis, and a robotics

group simulating rigid-body robots with the ability to grow as they interact with their surroundings. She also worked as an undergraduate TA for six courses across engineering, data science, and computer science. Her current research goals focus on computing education, programming languages, and software engineering. She is passionate about developing programming systems that make it easier for noncomputer scientists and learners to interact with computing. She aspires to become a professor after completing her PhD. Eleftheria loves reading science fiction and fantasy, biking around Chicago, as well as playing and game-mastering tabletop roleplaying games.

### Madeleine Carhart - Physics University of Washington Harriett & John Morton (5th)



Madeleine received her bachelor's degree in Physics from Vassar College. As an oboist, making oboe reeds was her first introduction to small-scale experimental work. A summer internship at UW introduced her to experimental topological photonics which opened a curiosity for studying the interaction between light

specifically, optoelectronic and matter, more systems nanofabrication techniques. Continued experimental work back at Madeleine resilience and additional lab research Vassar gave opportunities in the Merlo Lab. In the future, she sees herself researching and designing nanostructures in industry or possibly at a national lab. Madeleine also looks forward to mentoring the next generation of underrepresented students in STEM. In addition to physics and oboe, she is entertained by music theory and enjoys drawing cats when under pressure. You can follow her muse @Vassarcat on Instagram.

# Teal Coil-Otto - Applied Mathematics University of Washington Althea Stroum ARCS Endowment (36th)



Teal received a bachelor's degree in Applied Mathematics and Statistics with an Anthropology minor from Northwestern University. She is interested in interdisciplinary research in math, particularly involving mathematical biology, such as

climate modeling and understanding biological networks. She looks forward to exploring these fields at UW and spending time in Seattle and its nearby national parks. In her free time, Teal enjoys running, making sourdough, hiking, snowboarding, and spending time with her two cats, Lemon and Orange.

# Richard Colwell - *Materials Science and Engineering University of Washington*Zevenbergen Capital Investments LLC (38th)



Richard received a bachelor's degree in Materials Science and Engineering from the Massachusetts Institute of Technology. In his professional career, Richard first gained research experience in sustainable materials by developing plant-based meat

formulations at Tender Food, a Boston-based startup. He continued to develop materials lab skills as a materials lab engineer evaluating sustainable packaging materials in Worldwide Sustainability at Amazon. Richard is passionate about leveraging materials science to develop solutions to pressing sustainability challenges and looks forward to pursuing research in this area at UW. In his free time, Richard enjoys learning new languages, starting fermentation projects, and cuddling with his dog, Darwin.

## Kaitlyn Crookwell - *Veterinary Microbiology & Pathology Washington State University*Loch Anderson & Allyn Perkins (8th)



Kaitlyn received a bachelor's degree in biochemistry from the State University of New York at Fredonia. During the last two years of her undergraduate degree, she performed research on the interactions between metal ions and DNA mismatches. While at Fredonia, her interest in

proteins evolved into an interest in disease proteomics, which she plans to pursue at Washington State. After graduation, she worked at Millipore Sigma as a Quality Technician, testing filters for bacterial retention. Her research interests include disease pathogenesis, host-pathogen interactions, and vector-borne diseases. Kaitlyn is fascinated by how pathogens hijack host cells to invade, survive, and reproduce, and she hopes to research potential drug targets in an industrial setting. In her free time, Kaitlyn enjoys hiking with her husband, baking, and crocheting.

### Tryssa de Ruyter - Veterinary Microbiology & Pathology Washington State University Catherine Mee (6th)



Tryssa received a bachelor's degree in animal biology from the University of California, Davis, and a Veterinariae Medicinae Doctoris (VMD) degree from the University of Pennsylvania. During veterinary school, Tryssa's experience with

fish vaccine research drove them to pursue fish medicine and microbiology. They are excited to pursue a Combined Veterinary Microbiology Residency/PhD at WSU, allowing them to explore their interests through both a clinical and research lens. Their research interests include emerging infectious diseases of salmonids and responsible antibiotic use in aquaculture. They hope to serve the aquaculture industry in the future by promoting infectious disease prevention strategies and developing novel disease diagnostics and treatments. In their free time, Tryssa enjoys playing ice hockey, attending comic book conventions, and going to Disneyland.

# Mark Anthony Dunn - Aeronautics and Astronautics University of Washington ARCS Seattle Chapter in honor of PACCAR Inc.



Mark received a bachelor's degree in Aerospace Engineering and an undergraduate certificate in Computational Science and Engineering from The University of Texas at Austin (UT). As a student, Mark became intrigued by the rich theory of gas and

plasma dynamics and fascinated by the equivalence between their study at macroscopic and microscopic scales. Throughout his elective coursework and research at UT, he became enthralled by the power of computer simulations in describing such complex, multi-scale systems. At UW, he hopes to combine these interests by working on the development of efficient computational techniques for simulating plasma physics, facilitating deeper scientific understanding, and enabling the development of technologies such as nuclear fusion. Outside of science, Mark enjoys the challenge of unguided travel, listening to jazz, and reading philosophy.

# Solomia Dzhaman - *Mechanical Engineering University of Washington*Susan & William Potts ARCS Endowment (5th)



Solomia completed a Bachelor of Science in Mechanical Engineering from Columbia University. During college, she discovered her passion for fluid mechanics and computational engineering, which she applied to an industry job working on vehicle

lubrication and cooling simulations. She was inspired to pursue a PhD after a personal experience with blood clots, which spurred her to think about the fluid mechanics of blood flow. At UW, Solomia is excited to join the Multiphase and Cardiovascular Flow Lab, where she will work on blood vessel modeling and simulation to characterize intracranial aneurysms and ventricular pumps. She is passionate about combining engineering, computation, and health to allow physicians to make better decisions in their patient care. In her free time, Solomia likes to improve her cardiovascular health by running, and to relax by reading a good book.

## Lance Fredericks - MD/PhD - Pathobiology University of Washington Kristin N. Kenefick & Nancy P. Norberg ARCS Endowment (5th)



Lance received his bachelor's degree in Microbiology and Molecular Biology from the University of Idaho. During his undergraduate years he gained exposure to microbiology research, focusing on neglected infectious diseases with significant burdens on human health.

During Lance's first two years as a medical student at UW, he found a strong research fit in the Sherman Lab where he studied pathogens with an emphasis on the microbe rather than the host response. After graduating he plans to apply the skills and concepts from his training at UW to other neglected diseases, both in research and clinical practice. Lance enjoys spending his evenings at Mariners games and weekends fly fishing with his dog, TORi.

# Zealon Gentry-Lear – *Microbiology University of Washington*William & Ruth Gerberding ARCS Endowment (13th)



Zealon received a bachelor's degree in Biology with an emphasis in Molecular, Cellular, and Developmental Biology from the University of Oregon. She has long been excited by biology, and more recently, has discovered the diversity and omnipresence of

microbes in our world. In her previous research, Zealon studied how bacteria grow and interact with host environments to refine targets for drugs that can resolve bacterial infections. She is excited to continue studying microbiology at UW and learn all she can about the microbial world, and ultimately, contribute to our understanding of microbes and how they impact human health. Zealon has a golden retriever, Charlie, and two cats, Madison and Scout, that keep her entertained at home and sometimes even provide opportunities for her to learn more about microbes.

# Claire Gervais – Chemistry University of Washington Nicole A. Boand ARCS Endowment (6th)



Claire received a bachelor's degree in Chemistry and a minor in German Language from Colorado State University. In her undergraduate career, Claire gained a wide range of research experience, but her main research project was investigating the tunable

properties of high-rate anode materials in lithium ion batteries. In the future, she hopes to broaden her research interests in the field of inorganic chemistry and pursue a career at a National Research Laboratory. In her free time, Claire likes to figure skate, play the upright bass, and hang out with her cat, Buffy.

### Christina Giannella-Nicolaides - Applied Mathematics University of Washington Depot by Lowis Simpson ARCS Endowment (20th)

### Dorothy Lewis Simpson ARCS Endowment (20th)



Christina received a bachelor's degree in Applied Mathematics from the University of California, Berkeley. She has always been fascinated by the mathematical structure and modeling of systems. Her motivation for attending graduate school is to expand

her knowledge of mathematics as it relates to optimization problems and operations research. Christina's research interests include applications to improve scheduling, disaster management, and social choice problems. She looks forward to all the research possibilities at UW. After earning her PhD, Christina aspires to cultivate a research career that spans both academia and industry, eventually becoming a professor. She aims to apply her mathematical expertise to environmentally and socially conscious research projects. In her spare time, Christina loves hiking, skiing, reading, practicing martial arts, and spending time with her friends and family.

# Ella Haefner - MD/PhD - Biochemistry University of Washington Fairway Fund ARCS Endowment (9th)



Ella received a bachelor's degree in Biochemistry from Grinnell College. She has always been excited about translating laboratory discoveries into the clinic, so she decided to pursue her MD/PhD degree at UW. Ella recently joined the Baker Lab and is excited to dive

into the research portion of her degree. Her research interests revolve around generating targeted cancer therapies using de novo protein engineering. In her free time, Ella enjoys hiking, birding, running, and trying new restaurants.

# Stephanie Hart - Chemical Engineering Washington State University Judy Rogers (3rd) Floyd Rogers Memorial



Stephanie received her bachelor's and master's degrees from Oklahoma State University in Mechanical Engineering and Materials Science and Engineering. In her professional career, Stephanie has gained a wide range of research experience through a continued internship with Pacific

Northwest National Laboratory. Her academic and professional experience includes knowledge in additive manufacturing, computational simulations in the mesoscale, and most recently, work in tissue engineering. Her growing interest in facets of bio-engineering has encouraged her to continue her studies at WSU. In her free time, Stephanie enjoys being outside with her pets and family. Additionally, she loves drawing and playing violin music.

# Emily Humphreys - *Biology University of Washington*Mary & Peter Kerr (2nd) with Gail & Larry Ransom (3rd)



Emily received a bachelor's degree in Biology from Oberlin College where she spent three years conducting plant science research. Her work focuses on botanical evolutionary ecology and has spanned phylogenetics, niche evolution, edaphic endemism,

pollination biology, natural history, and botanical collections. Most recently, she published on a novel response to rainfall in a rare species in the mallow family. Emily seeks to understand how and why botanical diversity came to be and leverage this knowledge to contextualize the present and inform the practices that will impact the future. She hopes to combine her research interests with teaching and outreach work to both advance botanical knowledge and share that knowledge with people it can serve. Outside of the lab, Emily enjoys board games, art, and time spent outdoors.

### Kunal Jha - Computer Science and Engineering University of Washington

#### **Cindy & Stan Freimuth ARCS Endowment (1st)**



Kunal received a bachelor's degree in Computer Science and Philosophy from Dartmouth College. After reading the book "Superintelligence" as a freshman at Dartmouth, Kunal quickly grew interested in

algorithms for learning, interaction, and memory that give rise to artificial and natural intelligence. Specifically, his research tries to tackle some of the key challenges of understanding social intelligence in machines and humans, such as social learning, theory-of-mind, and embodied cognition. Kunal is excited to expand his toolkit and focus his research interests at UW. He is passionate about leveraging the insights he will gain about cultural evolution and cooperation to make machines we can naturally interact with. In his free time, Kunal loves training MMA, playing basketball, and spending time with his friends and family.

# Kelly Kim - *Neuroscience University of Washington*Karen Cameron in honor of Kevin Cameron (2nd)



Kelly received a bachelor's degree in Human Biology from the University of California San Diego with a minor in History. The neuroscience courses exposed her to exciting research focused on understanding the effects of stress and fear on the brain. Inspired by her

classes, Kelly began working in Dr. Kay Tye's lab at the Salk Institute for Biological Studies investigating the role of social stress, such as social isolation, on alcohol drinking. Her research interests include characterizing the vast individual variability in neuropsychiatric disorders such as depression and anxiety. Kelly believes that a more nuanced, holistic understanding of mental health disorders is crucial for developing more effective treatments. She is very passionate about increasing access to education and science for underserved communities, mentoring undergraduate students and getting involved in community outreach efforts. at the UW. In her free time, Kelly loves traveling, going to concerts, and spending time with her family.

# Marissa Laramie - Global Animal Health Washington State University Lynn & Mikal Thomsen ARCS Endowment (19th)



Marissa received a bachelor's degree in public health from the University of New England and an MPH and two graduate certificates from Benedictine University. With clinical experience, she has always had a keen interest in the intersection between public health and biology,

specifically in what promotes the manifestation of disease. Before attending WSU, she managed the Ashrafi Lab at Washington University in St. Louis, where she co-authored a number of publications focusing on the metabolic regulation of synaptic transmission. Her research interests focus on exploring innovative approaches to diagnostics and treatment by understanding the mechanisms that contribute to pathogenesis. Marissa hopes her work will help alleviate the burden this imposes on patients and their support systems. She enjoys volunteering with various groups, baking, and is always looking for new camping or hiking spots.

# Ashton Larkin - Computer Science and Engineering University of Washington Lisa & Mike Losh ARCS Endowment (8th)



Ashton received a bachelor's degree in Computer Science from Brigham Young University. After his undergraduate studies, he spent four and a half years in industry as a software engineer at Open Robotics, Intrinsic, and PickNik Robotics. Ashton is interested in

researching how robot learning techniques can be used to enhance robot manipulation capabilities. After completing his PhD at UW, Ashton is interested in either becoming a robotics research scientist in industry or continuing robotics research in academia. In his free time, Ashton enjoys music and time outdoors.

# Nga Yu Lo - Applied Mathematics *University of Washington*Althea Stroum ARCS Endowment (35th)



Nga Yu received a bachelor's degree in Mathematics and Computer Science from the Macaulay Honors College at Hunter College. She has conducted a wide range of research in artificial intelligence and computational neuroscience. Her research interests

lie in the development of rigorous theories and methods for analyzing big data. These interests also encompass theories in complex AI models such as deep learning. Nga Yu seeks a PhD in Applied Mathematics to deepen her understanding of high-dimensional structures and refine methods for analyzing them, including better AI models. She is passionate about the development of safe and robust AI models that can benefit the broader community. In her free time, Nga Yu enjoys playing video games, reading high fantasy, and hiking.

### Katherine Lovelace – Statistics University of Washington Andrea Ellison Hess (6th)



Katherine received both a Bachelor of Science degree in Mathematics and a Bachelor of Arts degree in African American and African Studies from The Ohio State University. She has always had a passion for social justice and a love of numbers. So, she decided

to combine the two: she would use statistics and data to study people and society in order to create social change. Katherine aspires to analyze statistics and data in addition to collaborating with social scientists to work on quantitative social justice; such that, one day, Black Americans will be afforded the rights to Life, Liberty, and the Pursuit of Happiness. When she's not studying, Katherine enjoys reading, watching movies/tv shows, and spending time with her friends doing game nights and/or trying new places to eat.

### Matthew Magoon - MD/PhD - Bioengineering University of Washington



### Vicki J. & Thomas W. Griffin in Honor of Paige & Griffin Thoreson ARCS Endowment (9th)

Matt is a Medical Scientist Training Program student in the School of Medicine and the Department of Bioengineering at the University of Washington. Although he's from Colorado, Matt earned an Honors

Bachelor of Science degree in Biological Engineering with minors in Mathematics and Biomedical Engineering from Montana State University. Based on Matt's clinical interest in emergency medicine and cardiac arrest, his research focuses on abnormal heart rhythms, especially ventricular tachyarrhythmias, using computational modeling of individual patients' hearts to understand disease mechanisms. After graduating, he plans to work as an emergency physician and to continue studying ways to better predict and treat dangerous heart rhythms. In his free time, Matt enjoys spending time with friends, drinking coffee, and exploring the Pacific Northwest.

### Nora McNamara-Bordewick - MD/PhD - Biochemistry University of Washington

#### Nancy P. & Douglas E. Norberg ARCS Endowment (6th)



Nora received her bachelor's degree in Cellular and Molecular Biology from Barnard College. Through researching infectious diseases in honeybees in Jon Snow's lab during her time as an undergraduate, and then studying the structural biology of innate immune

pathways in Philip Kranzusch's lab at Harvard Medical School after graduation, she became very interested in the molecular biology of infection and immunity. In particular, Nora became fascinated with how understanding this biology can help to develop better treatments for infectious diseases and autoimmune diseases. As an MD/PhD student, Nora has joined David Baker's lab, where she hopes to use protein design to develop more specific and effective treatments for these diseases. In her free time, Nora loves to spend time adventuring in the outdoors, particularly through rock climbing, backcountry skiing, backpacking, and trail running.

### Taylor McNees - Plant Pathology Washington State University

#### Washington Research Foundation ARCS Endowment (140th)



Taylor received a Bachelor of Science in Biomedical Science from the University of Washington Tacoma. During her undergraduate studies, Taylor worked in WSU's Ornamental Plant Pathology lab at the Puyallup Research and

Extension Center, where she found a passion for research focused on forest health. For her graduate studies, she intends to focus on research into the ecology and genetics of the pathogen that causes Sooty Bark Disease and how it is impacted by climate change. Post-graduation, Taylor aims to become a professor where she can continue to research forest health and mentor students who share a love for research and the environment. She also hopes to use her education to inspire and involve K-12 students interested in STEM. Outside of research, Taylor enjoys hiking, camping, playing video games, reading, and spending time with her cats.

### Taylor Moreno - MD/PhD - Molecular & Cellular Biology University of Washington Vijay Raghavan & Bairavi Vijay



Taylor earned bachelor's degrees in Biochemistry and in Molecular, Cell & Developmental Biology from the University of Washington. During his postbaccalaureate research at the NIH, Taylor gained an interest in cancer immunotherapy development and chose to return to

UW for his MD/PhD to pursue further training in the field. He now studies in the Rongvaux Lab at the Fred Hutchinson Cancer Center, where he is investigating immune interactions with melanoma in the MISTRG humanized mouse model. With his current and continued training, Taylor aims to bridge the gap between bench and bedside by developing more effective and better understood immunotherapies. Taylor enjoys indie games and music, loves running, and spends as much time as he can with his cat, Tenzin.

### Gilliane Nwafor - Nursing Science

#### **University of Washington**

#### Bobbie & Richard Berkowitz ARCS Endowment in Nursing Science (2nd)



Gilliane received a bachelor's degree in Global Disease Biology from UC Davis and a Master of Science in Nursing at DePaul University. A common thread between both of these degrees was her involvement in research, which ultimately influenced her decision to pursue her PhD in Nursing Science. She has always

been a staunch proponent of reproductive justice and her passion for social justice and women's health is the source of inspiration behind her research interests. Gilliane aims to focus her research on Black maternal mortality and the impacts of cardiovascular health on labor outcomes. After doctoral studies, she hopes to remain immersed in research and make an impact on reproductive health policy and advocacy. In her free time, Gilliane can be caught either working out at the gym, reading, plugged into her headphones listening to the newest R&B album, or indulging in fashion and makeup. She also wants to take full advantage of Seattle's nature and explore as much as she can.

### Alexandra Papesh - Earth and Space Sciences University of Washington

#### Trish Keegan & Tom Lennon - Terry Keegan Memorial 4th



Alexandra earned her bachelor's degree in Physics with a concentration in Astronomy and a minor in Mathematics from California State Polytechnic University, Humboldt. She has been fascinated by the night sky and the planets since she was young, and her

interest in planetary sciences has only grown with time. It has been her dream to attend graduate school and earn her PhD, studying and contributing to the knowledge base of humanity. Alexandra is thrilled to have the opportunity to pursue her educational and research interests at the University of Washington and hopes her research will help create a deeper understanding of planetary evolution and habitability. Outside of academics, Alexandra loves to travel with her family, read, and explore nature.

### Quinn Peters - Pathobiology University of Washington Bill & Melinda Gates Foundation ARCS Endowment (5th)



Quinn received a bachelor's degree in Biochemistry form Seattle University. As an undergraduate student, she worked under Dr. Chris Whidbey studying chemical biology in the vaginal microbiome. After graduating, Quinn worked as a research scientist in the Harrington

Lab at Seattle Children's Research Institute, a maternal-fetal medicine lab that specializes in maternal microchimerism. Under Dr. Whitney Harrington, she also studied non-invasive methods to sample immune cells from the female genital tract to facilitate the longitudinal study of mucosal immunity at this site. She hopes to continue the study of adaptive mucosal immunology, especially as it relates to women's health. In her free time, Quinn also enjoys hiking, cooking, and reading.

### Erin Peterson - MD/PhD - Molecular & Cellular Biology University of Washington Viscinia M. Dickerson Managial ABCS Endowment (40)

Virginia M. Dickenson Memorial ARCS Endowment (10th)



Erin received a degree in Biochemistry, Biophysics, and Molecular Biology from Whitman College before joining the MD/PhD Program at UW. She is fascinated by the ways in which one's immune system can be harnessed to kill cancer, creating options for patients

who previously had few or none. Erin worked at the Fred Hutchinson Cancer Center for three years after college, most recently engaging in melanoma research, a topic she'll continue exploring as a graduate student in the Rongvaux Lab. Specifically, Erin will examine T cell infiltration into melanoma lines to identify actionable molecular mechanisms that mediate resistance to immune checkpoint blockade therapies. In her free time, Erin loves soccer, running, biking, making art, and exploring new parks and food spots with friends and family.

### Baylie Ann Phillips - Materials Science and Engineering University of Washington

#### Washington Research Foundation ARCS Endowment (138th)



Baylie received a Master's in Materials Science & Engineering and Bachelor's in Metallurgical & Materials Engineering from Montana Technological University. Baylie has always had a wide interest in all types of materials, but never knew which field she wanted to

pursue. Three major surgeries in 2021 resulted in two stent implants, one of which crimped, it was then she knew what her calling was. She became determined to revolutionize & transform vascular biomaterials through fundamental research & improvement of the materials to prevent patients from experiencing the life-altering challenges she had. Professionally her long-term goals are to examine materials for permanent and temporary stents, generate technical advances that prolong the life of vascular stents, improve the properties to prevent mechanical failure, enhance biocompatibility to prevent pathological failure, and work with medical professionals to design stents for easier implantation. Baylie loves to write, read, paint, and explore. She is currently writing a book about her chronic health experiences, which will serve as a self-help guide for patients experiencing similar issues.

### Matteya Proctor - Neuroscience Washington State University Washington Research Foundation ARCS Endowment (141st)



Matteya received a double bachelor's degree in neuroscience and psychology and a certificate in research communication from Washington State University. She has always been an avid learner, which prompted her interest in neuroscience, as well as a passion for cognitive research. Matteya has gained a wide range of research

experiences, including research on decision-making, sleep deprivation, health communication, and cognitive aging. As a graduate student, she hopes to specialize in higher-order cognitive functions and investigate translational models of learning and factors impacting learning. She is passionate about using translational research to inform science and health communication and hopes her future work can increase access to evidence-based education. Matteya enjoys reading, photography, sports, coffee, and traveling anywhere and everywhere (especially if her dogs get to come).

# Connor Quiroz - Aquatic and Fishery Sciences University of Washington Polly & Andrew Kenefick (2nd)



Connor earned a Bachelor of Science in Environmental Science, Technology, and Policy with a double minor in Data Science and Statistics from California State University, Monterey Bay. In his undergraduate studies, he gained a passion for applied statistics and data science through his research modeling the

present and future habitats of California red-legged frogs, a threatened species. Connor is especially excited to apply his quantitative modeling in Dr. Jessica Gephart's Seafood Globalization Lab at the University of Washington. He wants to develop models to improve the lives of others, particularly predicting food shortages across locations using socio-environmental interactions, which has the potential to inform the conservation of fisheries and improve food access. He loves the outdoors, especially hiking with his family, and wants to complete a full Ironman Triathlon.

# Raisha Rahman - *Oceanography University of Washington*Alden Garrett & Charles Eriksen (2nd)



Raisha received a joint bachelor's degree in Chemistry and Earth and Planetary Sciences from Harvard University. During her undergraduate and postbaccalaureate research career, she studied mechanisms of nitrogen isotope fractionation during

the biosynthesis of nitrogen-containing compounds in microorganisms, in order to better understand these key players in the nitrogen cycle. Raisha's work, in addition to the incredible support she received from her mentors and peers, inspired her to continue unraveling the microbial and biogeochemical mysteries that underly all life on earth. At the University of Washington, she plans to learn more about all the cool microbes in the world's oceans, particularly how the chemical compounds produced by these organisms contribute to global carbon cycling. In her free time, Raisha enjoys reading, ceramics, watching fun short films, and (attempting) art.

### Griffin Rangel - Medicinal Chemistry University of Washington

#### Candice Rosenberg Peterson ARCS Endowment (18th)



Griffin double majored in Cognitive Science with a Neuroscience emphasis and Pharmaceutical Chemistry, receiving his bachelor's degrees from the University of California, Davis. His academic pursuits are driven by a deep fascination with the interplay of chemistry and computation, especially in unraveling complex

biochemical and biological systems. Griffin gained experience in structural biology, physical chemistry, and biophysical enzymology while investigating the temperature dependence of enzyme catalyzed reactions under the supervision of Dr. Michael Toney. With a PhD, he hopes to master the skills required to deepen our understanding of disease mechanisms and discovery of new therapeutic approaches, with a special interest in brain-related diseases and psychiatric disorders. In his free time, Griffin enjoys Brazilian jiu-jitsu and spending time with his family, including his German Shepherd, Ozzy.

### Kaitlin Riggan - Molecular Plant Sciences Washington State University

#### ARCS Seattle Chapter in honor of Lyndi and Bob Taylor



Kaitlin graduated with honors from the University of Puget Sound with a bachelor's degree in molecular and cellular biology. She has always been fascinated by plants and curious about their biological mechanisms. Her current research involves plant stress responses to environmental changes and their

effects on cell cycle progression. Her interest in this field stems from a desire to understand and mitigate the impacts of climate change on agriculture. After completing her PhD at WSU, she plans to pursue a career in plant biology research, focusing on solutions for sustainable agriculture or biofuels. Kaitlin enjoys hiking in the beautiful Pacific Northwest, baking desserts, and crocheting cozy sweaters. She also loves to spend time with her family in Tacoma, Washington, and decorate her apartment like the Barbie Dreamhouse.

# Veronica Sikora - *Molecular and Cellular Biology University of Washington*Rosa Ayer ARCS Endowment (12th)



Veronica received her Bachelor of Science from the University of Michigan, with majors in Philosophy and Molecular, Cellular, and Developmental Biology. As a student of both philosophy and biology, she has always been fascinated by how physical processes in

the brain give rise to mental experiences like consciousness. As an incoming graduate student to the UW, Veronica is excited to investigate the molecular and genetic programs that "wire" developing brains, to better understand how this wiring influences our cognition and behavior. Her research interests have been strongly shaped by her experiences in the Clowney Lab at Michigan, where she currently studies the development of neural circuits that underlie innate social behaviors in fruit flies. When not in the lab, Veronica enjoys hiking, reading, and practicing yoga.

# Ryan Talusan - Bioengineering University of Washington Washington Research Foundation ARCS Endowment (139th)



Ryan earned his bachelor's degree in Bioengineering with double minors in Chemistry and Materials Science and Engineering from the University of Illinois at Urbana-Champaign. Inspired by his nurse parents, Ryan aspires to improve medicine for patients and

healthcare providers. Benefiting from biotechnology through his hearing aid, he aims to innovate in the biomedical field to make a similar impact. His research focuses on developing novel biomaterials for targeted drug delivery, particularly for cancer and hearing loss. Ryan is committed to nurturing curious, goal-driven scientists who prioritize health and wellbeing. Outside research, Ryan explores his Filipino heritage through food, cultural dances, and historical readings. He is also passionate about hip-hop dance, participating in battles, teaching workshops, and learning from fellow dancers.

#### Lucy Tian - MD/PhD - Neuroscience University of Washington

#### Keith & Mary Kay McCaw Family Foundation ARCS Endowment (22nd)



Lucy received a bachelor's degree in Neuroscience with a minor in Computer Science from Washington University in St. Louis. At Washu, she studied experience-dependent plasticity in sensory systems and how they are disrupted by neurodevelopmental

disease. She is fascinated by how single neurons performing simple computations can build into neural circuits underlying complex behaviors, and she hopes that a better understanding of those circuits can lead to improvements in the lives of patients with neural and psychiatric disorders. She is part of UW's MD/PhD program and is working in Garret Stuber's lab studying the reward circuits underlying substance use disorder. She aspires to continue learning and growing in academic medicine and become a practicing anesthesiologist running a translational lab. Outside of the lab, Lucy enjoys rock climbing, running, reading, and hosting dinner parties with friends.

### Chelsea Weeks - Veterinary Microbiology and Pathology Washington State University

#### **Aven Foundation ARCS Endowment (7th)**



Chelsea received a Master of Science in Biology and a Post Baccalaureate Certificate in Zoo & Aquarium Studies through Western Illinois University. She was selected to be part of a small group of students based in Chicago, IL, where she completed

coursework and research at the Shedd Aquarium and Brookfield Zoo. Chelsea's previous experience in fisheries and aquaria, where she worked on projects related to fish health and conservation, has instilled in her a deep interest in aquatic animal health. She is passionate about conservation and is interested in the differing pressures faced by captive and wild populations of animals. Chelsea is eager to perform research investigating how host-pathogen interactions affect our relationships with animals and inform ecosystem management decisions. In her free time, Chelsea loves traveling, swimming, and spending time outside.

### Emily Zhang - Applied Mathematics

#### **University of Washington**

#### **Chisholm Foundation ARCS Endowment (16th)**



Emily received her bachelor's degree in Mathematics from Wellesley College. Her curiosity about the dynamics of physical phenomena led her to participate in several National Science Foundation Research Experiences for Undergraduates (REUs),

sparking her interest in the approximation and computational methods she employed. She is especially interested in using concepts from analysis and linear algebra to develop algorithms for solving intractable problems in physical systems. Emily believes the University of Washington, with its strong research in scientific computing and numerical analysis, is the ideal place for investigating and creating efficient and accurate methods to solve problems in continuous mathematics. She aspires to be a research mathematician, working on cutting-edge computational projects while inspiring young students just as her mentors have inspired her. In her free time, Emily enjoys spin classes, experimenting in the kitchen, and reading.

#### SECOND YEAR SCHOLARS

Esteban Abeyta – UW MD/PhD - Molecular and Cellular Biology Sandra and Kent Carlson (5th)

Genevieve Aguilar – UW Nursing Science
Pamela H. & Donald W. Mitchell and ARCS Endowment (8th)

Hailey Akins – UW *Chemistry*Gladys Harrington in honor of Eve Alvord ARCS Endowment (27th)

Celine Atkinson – UW *Oral Health Sciences*Washington Research Foundation ARCS Endowment (135th)

Megumi Azekawa – UW *Nursing Science*Doris L. Carnevali ARCS Endowment in Nursing (3rd)

Jeffrey (Tanner) Badigian – WSU *Molecular Biosciences* Washington Research Foundation (133rd)

Raelynn Cameron – UW *Nursing Science*Joanne & Bruce Montgomery ARCS Endowment (12th)

Hank Cheng – UW MD/PhD – Genome Sciences
Washington Research Foundation ARCS Endowment (136th)

Nikol Damato – UW *Environmental and Forest Sciences* Kathy Fraser (4th) with Sally and David Wright (4th)

Kimberly Derderian – UW *Neuroscience* ARCS Light in honor of Marcia Lewis

Alex Doan – UW MD/PhD - Molecular and Cellular Biology
Joanne & Bruce Montgomery ARCS Foundation Endowment in Honor of the American Lung Association (5th)

Kathleen Durkin – UW Aquatic and Fishery Sciences
Keith & Mary Kay McCaw Family Foundation ARCS Endowment (21st)

Kaitlin Flores – UW Computer Science and Engineering
Lindsay Eberts & Patti Paxton Eberts (2nd) with ARCS Foundation

Maria Garcia – UW *Biology*Camille & Jim Uhlir ARCS Endowment (17th)

Maya Gong – UW *Oceanography*Alicia & Jeff Carnevali ARCS Endowment in Oceanography (3rd)

Sarah Hadley – UW *Medicinal Chemistry* Allison and Steve Harr (3rd)

Luan Heywood – UW *Earth and Space Sciences*Karyl and Elias Alvord (5th)

Ula Jones – UW Earth and Space Sciences
Margery S. Friedlander ARCS Endowment (8th)

Jane Keth – UW *Chemical Engineering* Althea Stroum Endowment (34th)

Mitch Kluesner – UW MD/PhD - Molecular and Cellular Biology Washington Research Foundation ARCS Endowment (137th)

Yongjun (Joseph) Kwon – WSU *Chemical Engineering* WSU Vice Provost for Graduate and Professional Education

Medina Lamkin – UW Computer Science and Engineering Virginia M. Dickenson Memorial ARCS Endowment (9th)

Chloe Leach – WSU *Immunology and Infectious Diseases*Janis Mercker

Kate LeBlanc – UW MD/PhD - Molecular and Cellular Biology
Keith & Mary Kay McCaw Family Foundation ARCS Endowment (19th)

Annabelle Souza – UW *Pathobiology* Melissa and Eric Jones

Casmali Lopez – UW *Mathematics*Walker Family ARCS Endowment (13<sup>th</sup>)

Nancy MacKenzie – UW *Neuroscience*John W. and Elaine A. Zevenbergen, Sr. ARCS Endowment (36th)

Taydin Macon – WSU Entomology
Zevenbergen Capital Investments (35th)

Alyssa Maine – WSU *Immunology and Infectious Diseases*Alicia and Jeff Carnevali in Honor of Sophia R. Carnevali (3rd)

Gygeria Manuel – UW *MD/PhD - Molecular and Cellular Biology* Chisholm Foundation Fellowship (15th)

Kaylie McCracken – WSU *Chemistry* WSU Pullman Chancellor

Eric Mei – UW Atmospheric Sciences Rosa Ayer ARCS Endowment (11th)

Bria Metzger –UW *Molecular and Cellular Biology* Tina & Karl Neiders (4th)

Angela Montemayor – UW Computer Science and Engineering Vicki & Gary Glant ARCS Endowment (11th)

Peter (Wes) Maughan – WSU *Crop & Soil Science* Cassa Hanon (2nd) with ARCS Foundation

Manali Nayak – UW Atmospheric Sciences
Becky & Jack Benaroya ARCS Endowment (18th)

Karina Pastrana – WSU *Molecular Biosciences* Washington Research Foundation (134th)

Sean Perez – UW Genome Sciences
Candice Rosenberg Peterson ARCS Endowment (17th)

Pip Petersen – UW Astronomy
ARCS Foundation Seattle Chapter

Clare Riley – WSU *Chemistry* ARCS Light in honor of Kitti Lile

Gabriel Rodriguez – UW Aeronautics and Astronautics Dorothy Lewis Simpson ARCS Endowment (19th) Amanda Rokicky – UW *Biology*Jeff & Jana Foushée Family ARCS Endowment (5th)

Mary Steele – WSU *Plant Pathology*Alice Gautsch Foreman (1st) with Missy and Kurt Zumwalt (2nd)

Abby Strominger – UW Chemistry
Mark A. Jones ARCS Endowment (6th)

Derrick Tang – UW *Oral Health Sciences*Keith & Mary Kay McCaw Family Foundation ARCS Endowment (20th)

Justin Thomas – UW MD/PhD - Molecular and Cellular Biology Michael & Marti Young ARCS Endowment (3rd)

Rebecca Villa – UW *Pathobiology*Carlyn & George Steiner ARCS Endowment (12th)

Stevie Walker – UW *Oceanography*Kristin N. Kenefick & Nancy P. Norberg ARCS Endowment (4th)

Olivia Waltner – UW *Genome Sciences*Nancy & John Zevenbergen ARCS Endowment (37th)

Amelia Wilhelm – UW *MD/PhD - Molecular and Cellular Biology* Julie Tall ARCS Endowment (8th)

Riku Yasutomi – UW *MD/PhD – Genome Sciences* Eve and Chap Alvord (26th)

Brayden Young –WSU *Immunology and Infectious Diseases*Jenny and Scott Wyatt (4th) with Debbi and John Wilson (4th)

#### THIRD YEAR SCHOLARS

Mark Andrade – UW MD/PhD - Molecular & Cellular Biology Washington Research Foundation (131st)

Shiven Bhardwaj – UW *Health Economics & Outcomes Research* Candice Rosenberg Peterson ARCS Endowment (16<sup>th</sup>)

Christina Bjarvin – UW *Environmental & Forest Sciences* Elizabeth and Jonathan Roberts (3<sup>rd</sup>)

Becca Blyn – UW *Pathobiology*Kristin N. Kenefick ARCS Endowment (2<sup>nd</sup>)

Cassidy Burke – UW MD/PhD - Neuroscience Lisa & Jim Koch

Emily Callen – UW Health Economics & Outcomes Research Vicki & Gary Glant ARCS Endowment (10<sup>th</sup>)

Caleb Carr – UW MD/PhD - Genome Sciences
Lynn Pigott Mowe (4<sup>th</sup>)

Hannah Cook – WSU *Entomology*Jeff & Jana Foushée Family ARCS Endowment, Second (3<sup>rd</sup>)

Cameron Coyle – WSU *Veterinary Microbiology & Pathology* Eve & Chap Alvord (24<sup>th</sup>)

Samantha Dilday – WSU *Entomology* ARCS Seattle Chapter

Augusta Finzel – WSU *Molecular Plant Sciences* Pendleton & Elisabeth Carey Miller Foundation (8<sup>th</sup>)

Kailie Franco – WSU *Veterinary Microbiology & Pathology* Rick & Jacque Doane ARCS Endowment (6<sup>th</sup>)

Anthony Garcia – UW *Biology*Gladys Harrington in honor of Eve Alvord ARCS Endowment (24<sup>th</sup>)

Siena Glenn – WSU *Veterinary Microbiology and Pathology* Mani Barrier (7<sup>th</sup>)

Angela Gonzalez – UW *Environmental & Forest Sciences* Cheryl & David Hadley (4<sup>th</sup>)

Mathew Heaney – WSU *Chemistry* ARCS Seattle Chapter

Tia Hoisington – WSU *School of Molecular Biosciences* Zevenbergen Capital Investments (33<sup>rd</sup>)

Julisa Juarez – UW *Chemistry*Mark A. Jones ARCS Endowment (5<sup>th</sup>)

J Harris Kahn – UW *Quantitative Ecology & Resource Management* Winifred & Peter Hussey (4<sup>th</sup>)

Caroline Kikawa – UW *MD/PhD - Genome Sciences* Kathleen & Richard Gary (2<sup>nd</sup>)

Lucy Zhao Li – UW *MD/PhD - Molecular & Cellular Biology*Keith & Mary Kay McCaw Family Foundation ARCS Endowment (17<sup>th</sup>)

Kaitlynn Lilly – UW Applied Mathematics
Becky & Jack Benaroya ARCS Endowment (17th)

Yilda Macias – UW *Epidemiology*ARCS Seattle Chapter in honor of Jeff Eby

Paul Martinez – WSU *Crop and Soil Sciences*Ronald and Darlene Howell ARCS Endowment, WSU (1<sup>st</sup>)

Haley Masterson – WSU *Veterinary Microbiology and Pathology* Jim & Trish Rogers ARCS Endowment (7<sup>th</sup>)

Shirley Mathur – UW *Statistics*William & Ruth Gerberding ARCS Endowment (12<sup>th</sup>)

Jenna McHale – UW *Nursing Science*Pamela H. & Donald W. Mitchell & ARCS Endowment in Nursing Science, Second (6<sup>th</sup>)

Patrick Monreal – UW *Oceanography* Fairway Fund ARCS Endowment (8<sup>th</sup>)

Raul Moreno – UW *Atmospheric Sciences* Nancy Mee & Dennis Evans (4<sup>th</sup>)

Monika Perez – UW Genome Sciences
Washington Research Foundation (130th)

Nick Petty – UW MD/PhD - Molecular & Cellular Biology Oliver W. Press ARCS Endowment (2<sup>nd</sup>)

Vyom Raval – UW *MD/PhD - Neuroscience*Keith & Mary Kay McCaw Family Foundation ARCS Endowment (18<sup>th</sup>)

Larissa Jean Etta Robinson-Cooper – UW *Neuroscience* Kitti & Bill Lile (3<sup>rd</sup>)

Kellen Rodriguez – UW Computer Science & Engineering John W. & Elaine N. Zevenbergen ARCS Endowment (34th)

Joelle Scott – UW Chemical Engineering Luciana Simoncini & Todd Scheuer (2<sup>nd</sup>)

J. S. Silviria – UW *Earth & Space Sciences* Mary Dunnam (6<sup>th</sup>)

Chad Small – UW Atmospheric Sciences
Micki E. & Robert J. Flowers ARCS Endowment (9th)

Meg Southard – WSU *Neuroscience*Washington Research Foundation (128<sup>th</sup>)

Ella Spurlock – UW *Chemistry*Nicole A. Boand ARCS Endowment (5<sup>th</sup>)

Aymee Dale Steidl – UW *Nursing Science*Pamela H. & Donald W. Mitchell ARCS Endowment (7<sup>th</sup>)

Natalie Sturm – WSU *Crop & Soil Sciences* Washington Research Foundation (129<sup>th</sup>)

Kirsten Thompson – UW MD/PhD - Molecular & Cellular Biology Washington Research Foundation ARCS Endowment (132<sup>nd</sup>)

Robert Trujillo – UW *Biostatistics*Ronald & Darlene Howell ARCS Endowment, UW (1st)

Marita White – WSU *Molecular Plant Sciences* ARCS Seattle Chapter

Lauren Wilner – UW *Epidemiology*Charles & Delphine Stevens Family Fndtn ARCS Endowment (2<sup>nd</sup>)

Naomi Yamamoto – UW *MD/PhD - Molecular & Cellular Biology* Julie Tall ARCS Endowment (7<sup>th</sup>)

Jina Yoon – UW Computer Science & Engineering Margaret Breen & Stewart Landefeld (4<sup>th</sup>)