CONNECTIONS

Linking EEO, Diversity and Science

STUDENT EDITION | EEO/Diversity Newsletter for NOAA Research | AUGUST 2020

OAR's 2020 Interns Share their Experiences

The OAR EEO/Diversity Program Office is excited to highlight some of this year's interns doing work across OAR. Although the interns had to complete their internships virtually, they all expressed their gratitude for the opportunity to gain meaningful work experiences and contribute to NOAA's science. As Chemical Sciences Laboratory (CSL) intern, Wydome Chace, said, "Despite the unexpected circumstances, my internship this summer has been my favorite research experience thus far! I found the research questions fascinating, and I learned a tremendous amount about tropospheric chemistry and modeling techniques (and gained some programming skills that will be especially useful down the road!)." Thanks to all the labs and program offices for contributing to this Special Student Edition of our newsletter.

NOAA's Weather Program Office (WPO)

Donald Long Jr.

Donald is a current William M. Lapenta Internship Program intern at NOAA's WPO and has been a National Weather Service (NWS) Pathways intern for two years.

Since June, Donald has contributed extensively to both the Earth Prediction Innovation Center (EPIC) program and to WPO while working alongside members of the WPO EPIC programmatic team on the Unified Forecast System (UFS). Together they conducted a comparative analysis of the system requirements necessary to run the UFS model in both high-performance computing and cloud architectures. The project goal was to identify what resources were needed to "house" and run the UFS in the cloud. Donald not only provided the EPIC Team with detailed suggestions about how to improve the process of building, compiling, and running the UFS in the cloud, but he also applied social science applications to identify how to make the process as user-friendly as possible.

Dr. Kandis Boyd, WPO Deputy Director said, "WPO strives to advance research to operations initiatives which require a unique skill set that combines innovation, creativity, and scientific/technical prowess. Donald is a pioneer in his own right, and brings a distinct perspective to the EPIC team to advance its modeling efforts to create the best forecast to ultimately save lives and protect property. We're proud that Donald is the first Bill Lapenta Memorial Intern for the summer of 2020 and is able to gain first-hand experience working in a program management office."

Donald is a rising Atmospheric Science graduate student at Howard University. He earned a B.S. in Meteorology from Valparaiso University in 2019. He plans on pursuing advanced degrees in both Atmospheric Science and Sociology at Howard University, combining his interest in weather with his passion for social justice and activism. He enjoys listening to music, playing the clarinet, podcasting, reading, and promoting diversity, equity, and inclusion.

OAR 2020 Interns

Air Resources Laboratory (ARL)

Eric Roy

Eric is a rising junior at the University of Massachusetts Lowell where he is working towards a dual degree in Atmospheric Science and Mathematics. This summer, Eric worked as a William M. Lapenta Intern at ARL with Dr. Alice Crawford and Barbara Stunder. He used the HYSPLIT dispersion model for volcanic ash transport simulations. The goal of this project was to compare use of deterministic and ensemble meteorological models as inputs to HYSPLIT in order to improve volcanic ash forecasts for aviation. During his time at ARL, Eric learned how to run a variety of HYSPLIT simulations and used these techniques to model the volcanic ash emissions of small to medium sized eruptions that occurred in Central and South America in June and July of 2020. These simulations used a variety of initialization parameters and with the guidance of his mentors, he was able to learn how to write bash scripts and python programs to initiate these simulations and plot their results in an informative way.

Even though the William Lapenta Internship Program is wrapping up for the summer, Eric is looking forward to using his Hollings Scholarship summer internship next year to work on some other facet of NOAA's Mission. Upon graduation, Eric plans to pursue a a graduate degree in Atmospheric Science and hopes to work at NOAA upon completion of his academic career. In his spare time, Eric enjoys mountain biking, hiking, and golfing.

Malachi Berry

Malachi is from Kingston NY. He received a Bachelor of Science degree in Chemistry from Morehouse College in Atlanta, GA in 2019. Malachi went on to Howard University to pursue a Master's degree in Atmospheric Science with a concentration in Atmospheric Chemistry. He is starting his second year of his master's program and would like to pursue a Ph.D. in Chemistry.

For the summer of 2020, Malachi is an intern in the Atmospheric Sciences Modeling Division of ARL in College Park, MD. Malachi's project focuses on a unique approach to improve the quality of atmospheric transport and dispersion model estimates. Atmospheric dispersion modeling is crucial to plan for and respond to the release of hazardous materials into the atmosphere. Tracer experiments in which well-characterized atmospheric releases of inert materials are measured and modeled downwind are essential model evaluation tools, but such observations are extremely scarce. In addition to conventional tracer experiments, "tracers of opportunity" can be used if emissions of a given substance are relatively well characterized and downwind concentration measurements are available. There is a large dataset consisting of emissions of SO2 from U.S. power plants fitted with continuous emissions monitoring systems (CEMS) and contemporaneous measurements of air concentrations of SO2 at downwind ground stations. Comparisons of modeled SO2 concentrations with measurements will allow for the evaluation, testing, and potential improvement of different boundary-layer turbulent-mixing schemes and parameterizations in ARL's HYbrid Single Particle Lagrangian Integrated Trajectory (HYSPLIT) model, widely used around the world for emergency response, transport, and dispersion applications.

What Malachi finds interesting about this internship is the opportunity to work with NOAA scientists and better understand the workings of a federal government agency. He is also very excited to learn the details of HYSPLIT script coding and to familiarize himself with this powerful and widely used model. As for hobbies, Malachi enjoys hiking with family and friends, reading, and learning about video game development.

Great Lakes Environmental Research Laboratory (GLERL)

Kaitlyn Rivers

Kaitlyn is from West Palm Beach, FL. Some of her hobbies include playing volleyball, reading underneath a tree, and writing poetry. She moved to Oberlin, OH to complete a Bachelor's degree in Biology which she finished this past spring. Her future plans include a Graduate degree in Wildlife Ecology and/or Conservation in and around marine ecosystems.

During the 2020 Great Lakes Summer Fellowship, Kaitlyn worked with NOAA GLERL and CIGLR scientists Dr. Ed Rutherford, Dr. Doran Mason, and David wells. The project consisted of modeling the bioenergetics of veliger contribution to larval alewife, bloater, and yellow perch diets in 2015, and the bioenergetics of the same three species but given the conditions and available prey in 1983. These two data sets were then flipped to observe if temperature or diet composition differences between 1983 and 2015 could be affecting larvae consumption and thus also growth.

She discovered this fellowship through CIGLR's website, which her academic advisor discussed with her prior. Kaitlyn was most excited about learning more modeling skills in R Studio and the updated package Fish Bioenergetics 4.0, as well as getting to meet other researchers. Besides leaving this fellowship with skills in R Studio and bioenergetics modeling, Kaitlyn will take with her more experience with presenting research, a network of CIGLR and NOAA researchers, and a great experience working with a Great Lake system.

Kaitlyn highly recommends this opportunity for other students with a similar undergraduate discipline focus, a strong interest in lake systems, or a general interest in fisheries. After completing this fellowship, she feels that she and the selected candidates had a strong interest in the projects they were working on, good independent work ethic, good communication skills, and a willingness to continually ask questions and think critically.

Lorrayne Miralha

Lorrayne was born in Rio de Janeiro, Brazil. She is a Ph.D. Candidate at Arizona State University starting her third year at the Civil, Environmental, and Sustainable Engineering program. She also has a bachelor in Forest Engineering, and a master's degree in Physical Geography.

This summer, she joined CIGLR and GLERL as a Great Lakes Summer Fellow and is working on understanding how the environment drives the phytoplankton community at the Western Basin of Lake Erie. She has visualized several datasets from NOAA, and has worked on new statistical approaches to better identify favorable and limiting lake conditions for the growth of phytoplankton species in the western basin. She truly enjoyed this project and opportunity because not only is it highly connected to her Ph.D. research, but it is also an important topic concerning the sustainability of our aquatic ecosystem as well as the well-being of the Great Lakes community.

"I heard about this internship through the Earth Science Women Network (ESWN) community. The chance of engaging in a deeper level with NOAA scientists at the Great Lakes region really caught my attention. This summer I have learned how proper mentorship can make a difference in the way you do research. My mentors were exceptional in giving feedback and guiding me through the process. I will never forget the insightful weekly conversations I had on how phytoplankton species behave and what these tiny organisms are most likely to enjoy in the water in which they grow. I highly recommend this fellowship program to other students."

Lorrayne's future goal is to become a research scientist in a private or governmental agency, or a professor at a research-driven academic institution. She has always enjoyed nature. Her favorite hobbies are camping, hiking, and traveling. She also enjoys cooking Brazilian food for her friends.

OAR 2020 Interns

National Severe Storms Laboratory (NSSL)

America Gaviria

America is participating in the National Science Foundation (NSF) Research Experiences for Undergraduates (REU) program. She is majoring in Physical Sciences at the University of Puerto Rico at Mayaguez.

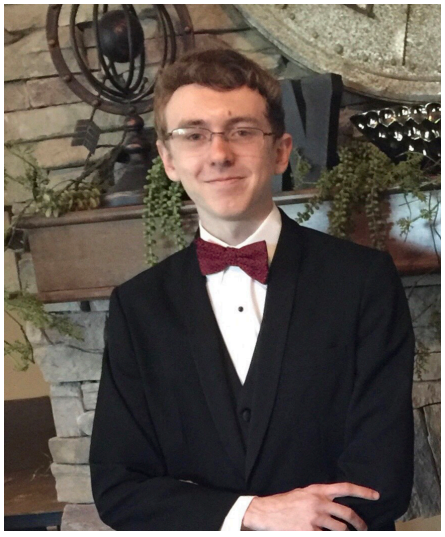
Her internship focuses on flash flood warnings, with mentors Jill Hardy (CIMMS), Jonathan J. Gourley (NSSL), and Todd Lindley (NWS Norman Forecast Office). She is classifying a database of recent flash flood events into three categories — base, considerable and catastrophic — based on the impacts of such events. The goal of her research is to provide tools that help increase National Weather Service forecaster confidence during the warning decision process.

The REU program allowed Gaviria her first real hands-on research experience. She has not only learned more about research but strengthened her programming skills. She said her mentors add a great aspect to the program. Networking, learning from and working with her mentors, while collaborating with others at the National Weather Center in Norman, Oklahoma, allowed her to see the inter- and multidisciplinary aspects of the field.

Gaviria said she was reassured about her decision to continue a career in STEM and she would highly recommend this experience to other students. She stated the experience "will completely change you." While learning and working on research, you also meet other professionals in the field and learn about other career opportunities.

She is applying to graduate schools and in December, Gaviria will complete her bachelor's degree. She wants to pursue a master's in Geography to work on the social impacts of natural hazards, science and bilingual communication. Gaviria said she wants to be part of the solution and make a difference. When not pursuing research or studying, Gaviria enjoys playing guitar, going to the beach, road-tripping, and spending time with her family.

Hayden Webb



Hayden is majoring in Computer Science at Southwestern Oklahoma State University. He is participating in the NSF REU program and his mentors are Kristin Calhoun of NSSL and Darrel Kingfield of CIRES.

Hayden, from Duncan, OK, is researching how lightning interacts with towers, specifically communications towers. He utilizes data from the National Lightning Detection Network (NLDN) and the Lightning Mapping Array (LMA). He has utilized Python to code several programs filtering such large sets of data associated with each tower. The goal of his project is to see how often there is an upward flash of lightning from the towers, and if it is caused by surrounding lightning of self-initiated. The results from his REU research are expected to be published.

He has enjoyed gaining real-life experience in research. He recently decided he wanted to change career paths and this internship allowed him to specifically explore research as a possible path, and a better understanding of graduate school. He had decided degrees beyond a bachelor's were not attainable. Now he plans on pursuing a master's degree, possibly in Meteorology.

Hayden highly recommends a NOAA internship. Webb said the REU improved him as a student while preparing him for graduate school or a potential research career. The connections and friends made are valuable and Webb describes the experience as unforgettable. His dream is to one-day work on research with NOAA Fisheries in an effort to study and help sea life. One of his hobbies includes collecting and maintaining aquariums with exotic fish and crustaceans.

Atlantic Oceanographic and Meteorological Laboratory (AOML)

Rebecca Kravetz

Rebecca is a communications intern for AOML. She was born and raised in Miami, FL. She received her bachelor's degree in journalism from the University of Florida, with a minor in Innovation (Entrepreneurship) from UF's Innovation Academy. Prior to attending graduate school, Rebecca worked in digital marketing for RCA Records, Sony Music Entertainment, in New York City. She recently graduated from the University of Miami with a Master in Business Administration, with a focus in marketing and sustainability.

Rebecca worked last summer as a graduate student intern at Smithsonian Institution in the department of organization and audience research (SOAR), where she helped the department develop social listening capabilities and led audience research projects. Rebecca is currently pursuing a Master of Arts in Environment, Culture, and Media at UM's Abess Center for Ecosystem Science and Policy. This program integrates the study of the environment with emerging screen technologies, digital culture, cultural theory, and ethics. Graduating May 2021, Rebecca aspires to a career that combines her interests in business and marketing with science communications.

Rebecca is very excited to learn from AOML's communications team, its exceptional staff and many scientists. She wants to help contribute to the lab's mission through effective communications and digital storytelling. She is currently managing AOML's social media pages on Twitter and Instagram as well as helping to develop content for the AOML website. Check out her most recent Instagram campaign, AOML Field Journal.

Nikolaus Rentzke

Nikolaus was born in Cape Town, South Africa and moved to America at the age of 8. He is now going into his Senior year at Embry-Riddle Aeronautical University as a double major in Meteorology and Computational Mathematics. Nikolaus, a NOAA Hollings Scholar, began his virtual Hollings summer internship with Hui Christophersen and Jason Sippel in June.

Nikolaus is working on a project to evaluate the relative value of Global Hawk GPSdropsonde observations at different altitudes on TC prediction, one of the remaining questions from the NOAA SHOUT project. The project will provide some guidance on the benefits or drawbacks of doing drops throughout the whole tropospheric column (e.g., Global Hawk) vs. from G-IV/G-550 altitudes vs. from P3 altitudes on the hurricane forecasts. Although the internship was virtual, he was still able to work on the cutting edge of hurricane research. Nikolaus harnessed the power of NOAA computing by using the Hera supercomputer to run the operational HWRF model for each of his experiments. Additionally, he created hurricane tracking scripts to plot the paths of each model output. What excited him the most about the internship was being able to work on a project that is very relevant and has potential to make a future impact on predicting these powerful storms.

Nikolaus highly recommends students to participate in NOAA internships because they provide vital real-world research experiences that are difficult to find elsewhere. Nikolaus was able to meet some of the scientists at AOML in March 2020 and was very happy by how helpful and enthusiastic all of them were. The Hollings program is a great way for students to build connections very early in their career and provide valuable skills and experience to go on to graduate school or pursue other scientific careers.

NOAA Office of Ocean Exploration and Research (OER)

Phoebe Lease

Phoebe is a rising senior at Smith College, where she is majoring in American Studies with a concentration in Economics and Climate Change. This summer, she is a science communication intern with the Office of Ocean Exploration and Research (OER). This is a new collaborative internship between OER's Science and Technology Division and Engagement Division, and Phoebe works with both groups to write new content for the Exploration Tools page of the OceanExplorer.NOAA.gov website.

Phoebe is grateful for her mentors' efforts to smoothly transition her internship program to a virtual space. She has enjoyed the informal weekly lunch chats with her teams and the chance to hear about their career trajectories and amazing field research stories. She has also appreciated the opportunity to sit in on other NOAA webinars, like the Knauss fellowship presentations, and to attend the virtual Capitol Hill Ocean Week (CHOW).

Her experience at OER has improved her science communication skills and helped her understand the importance of the ocean in human and planet health. Upon graduation, Phoebe hopes to enter the field of climate change communication or policy. In her spare time, Phoebe likes hiking in the woods of North Carolina, discovering new music, and hanging out with her dog.

Jason Gronich

Jason is a senior undergraduate student, working on a Bachelor's degree in Marine Science and a minor in Statistics from California State University, Monterey Bay. Currently, his undergraduate research consists of working with MBARI on a mathematical lipid correction model for stable isotope analysis of the California spiny lobster. His studies have led him to become well versed in marine ecology and oceanography as well as a certified AAUS scientific diver and remote Unmanned Aircraft Systems (UAS) drone pilot.

During his summer internship with the NOAA Office of Ocean Exploration and Research Science and Technology Division and National Marine Fisheries Service, he created a full taxonomic inventory of organisms recorded on NOAA Ship Okeanos Explorer cruises conducted at Johnston Atoll and Musician Seamounts in 2017. He assigned all the organisms into four major functional groups and ran statistical models to determine how these creatures are affected by environmental factors such as the oxygen concentration, practical salinity, temperature, and the depth of the deep sea scattering layer.

Jason has been entranced by this project since the start. With very little known about the midwater communities at Johnston Atoll and Musicians Seamounts, his project contributes previously unknown knowledge to the research community. From this internship, Jason has had the opportunity to work with data sets he has never heard of before, meet and collaborate with expert scientists, and improve upon his writing and professional development skills. When Jason is not pursuing his academic goals, he enjoys spending time surfing, rock climbing, backpacking, and writing.

Chemical Sciences Laboratory (CSL)

Katherine (Kat) Ball

Kat is originally from a rural county on the Eastern Shore of Maryland. This fall, she will start her senior year at University of Maryland Baltimore County (UMBC), where she is majoring in Chemical Engineering on the Environmental and Sustainability Track with a minor in Chemistry.

Kat, a Hollings Scholar, is analyzing absorbing organic aerosol from western wildfires, using filter samples from the Fire Sciences Laboratory in Missoula, MT and measurements taken onboard the NOAA Twin Otter aircraft during FIREX-AQ in 2019. "Working with the scientists at CSL has been one of the best undergraduate summer experiences that I could have possibly dreamed of. I am so grateful that not only do I get to work with some of the most impressive scientists in my field, but that they are also willing to share their experiences (both professional and personal) with someone who is just getting started in their career, like myself."

Her first experience with atmospheric chemistry research was through a NOAA CESSRT fellowship at UMBC. Kat measured ammonia and aerosol composition on Hart-Miller Island in 2018 for the OWLETS-2 campaign. Kat says, "I always knew I was passionate about the environment. Through my studies at UMBC, I've come to realize the key to solving any chemical engineering problem is by having a well-defined chemical system and what system within the environment is more intricate or has a boundary that is any bigger than the atmosphere? Recognizing how important and complex the problems surrounding air pollution truly are led me to realize that atmospheric chemistry was the field for me."

In her free time, Kat likes to spend time outdoors and enjoys hiking and swimming. She is active in her Baltimore community, where she advocates strongly for civil rights and social justice, including Black Lives Matter and LGBTQ+ Pride.

Wyndom Chace

Wyndom is a rising senior at Williams College, majoring in Chemistry with a concentration in Environmental Studies. She spent the summer in the CSL Tropospheric Chemistry group as a Hollings Scholar, modeling ozone depletions in industrial plant plumes in northern Utah. Her project involved quantifying the halogen emissions from the plant using aircraft observations from the recent NOAA UWFPS field campaign. She then developed a zero-dimensional box model to explain the downwind ozone depletion, which she determined is due to reactions with photo chemically produced halogen radicals.

"Despite the unexpected circumstances, my internship this summer has been my favorite research experience thus far! I found the research questions fascinating, and I learned a tremendous amount about tropospheric chemistry and modeling techniques (and gained some programming skills that will be especially useful down the road!). My mentors were wonderful and did a great job of making me feel connected, albeit virtually. I also really appreciated the chance to learn about the work of other researchers in CSL and engage with the other Trop Chem interns every week."

"I knew very little about NOAA coming into the program, so the Hollings program has been a great opportunity to learn about the huge range of scientific work happening within the agency. I have been very impressed by everyone I have met at NOAA, and I would definitely recommend interning (and the Hollings program)." Wyndom was born in Boulder, CO, but grew up in North Kingstown, RI. She likes to run, hike, ski, watercolor, and frequent farmers markets. She plans to pursue her scientific interests in graduate school next year. She is especially interested in the intersections between climate science, policy, and environmental justice.

OAR 2020 Interns

Geophysical Fluid Dynamics Laboratory (GFDL)

Akira Di Sandro

Akira will be a senior at Oberlin College, OH, studying Math and Neuroscience. In her free time, she likes to cook, read, go to the beach, listen to music, practice taiko (Japanese traditional drumming), and help organize events, all in the company of friends and family.

Akira said, "It may seem weird at first glance that a math and neuroscience major is interested in climate modeling and oceanography. I actually did not even know that climate modeling existed until a year ago when my math professor who does a lot of research in climate modeling brought a guest speaker to campus to talk about how she uses math to understand and predict the Earth system. As someone who has training in modeling through various math, statistics, and neuroscience classes, and whose interests lie in real world applications of science, this talk inspired me to look further into this field as a possible future career. In my search for research opportunities, GFDL's oceanographic and atmospheric research with emphasis on computational models seemed a perfect fit for me."

Akira said she is fortunate to have experienced this internship this year. Her project, titled Validating Tropical Pacific Circulation in GFDL Ocean Models, consisted of choosing a model to work with, making transport calculations based on the model output data, and comparing it to the observational data of the Solomon Sea transport. She said she learned plenty of skills ranging from coding, communication, to time management.

Overall, Akira said her experience was challenging, and at times frustrating because of coding blocks, but very fulfilling and enriching. "I am so grateful to have had the opportunity to work with Dr. Marion Alberty and Dr. Sonya Legg, two wonderful mentors, as well as the rest of the GFDL/NOAA team who have dedicated so much time to make this remote internship not only possible, but excellent!"

Quiana Berry

Quiana is a Spanish Harlem native, student leader/activist at Bronx Community College, New York City, NY, and Biology, Anthropology and Chemistry interdisciplinary major transferring to Lehman College in the Fall. She is of Peruvian and African American heritage and plans to pursue a future career in the intersection of science, activism, and policy.

Quiana learned about the internship for the first time when Sonya Legg from Princeton/ NOAA-GFDL came to give a talk at Bronx Community College. She is most excited that she has the opportunity to learn from and ask experts questions on topics ranging from ocean geophysics, zooplankton, ocean mixing, machine learning to the latest research on the Arctic. The project she is working on with Liz Drenkard and Jessica Luo of GDFL/Princeton is Assessing drivers of primary productivity in the Humboldt Current in a changing climate. Quiana feels fortunate to be able to connect her travels, stories of Incan folklore, and grandparent's accounts about growing up near the Peruvian current, alongside GDFL data.

Interning during these historic times has been challenging but rewarding for Quiana, balancing research and activism in one summer. She is inspired by contributing to discussions about diversifying STEM and academia alongside building research skills.

This virtual internship experience has taught her a valuable lesson in managing competing passions and priorities, taking any negative in the world and filtering it into something positive. Quiana truly believes science can be a creative outlet of expression and mechanism for positive change within society if applied properly.

Quiana would highly recommend this NOAA internship to other students looking to grow professionally and personally. She recommends to interns, "Be curious, ambitious, ready to think critically, fully participate in discussions and scientific inquiry, come with an open growth mindset ready to contribute anywhere you can add value."

Physical Sciences Laboratory (PSL)

Engela Sthapit

Engela is a NOAA Center for Earth System Sciences and Remote Sensing Technologies (CESSRST) graduate scholar at City College of New York, working on a PhD in Civil Engineering with a focus on Water Resources. She began her NOAA Experiential Research and Training Opportunities (NERTO) virtually in March and hopes to continue with an in-person NERTO when travel restrictions are lifted.

Although snow is one of the most important parameters of any hydrological model in snow influenced areas, estimating and representing snow from atmospheric forcings to hydrological processes remains a challenge. Engela's research focuses on understanding snow representation in the Noah-MP land surface model and its hydrological expression in the WRF-Hydro model, both models used in the current version of NOAA's National Water Model (NWM). She is working on testing the impact to snow and streamflow of various atmospheric forcing data sets, such as the North American Land Data Assimilation System (NLDAS) and in-situ data from the CREST-Snow Analysis and Field Experiment (SAFE) in Caribou, ME. Comparison of the snow-specific performance of Noah-MP with different forcing datasets can provide insight into physical reasons underlying model deficiencies.

What excites her most about this research is to be able to work in the area of water prediction, which has been her long time interest. It has been a great opportunity for her to be able to do this in a national research laboratory with the experts in the field and gain some invaluable experience.

Engela advises those who are interested in this internship to have scientific curiosity, a thirst for knowledge, respectful demeanor, and a 'can-do' attitude. Her future career goal is to be part of a research team in a non-profit mission-driven organization, working in the area of her current studies and interest. She enjoys hiking, swimming, reading and outdoor activities with her two kids.

Koffi Apegnadjro

Koffi is an undergraduate scholar at City College of New York and he participated (virtually) in the NOAA Education Partnership Program for Minority Serving Institutions summer internship program for undergraduates at PSL in June and July 2020.

Koffi's research was focused on precipitation whiplash events in CA. Precipitation whiplash refers to the rapid transitions between precipitation extremes and the opposite, so a heavy season of rain followed immediately by drought or vice versa. California has experienced a switch in the flood to drought and drought to flood cycle in the past decade. Koffi's mentors for the summer internship at NOAA included Drs. Roger Pulwarty, Rob Cifelli, and Meg Fowler. His mentors at City College of New York included Drs. Indrani Pal, Shakila Merchant, and Valerie Were.

What excites him most about this research is to be able to research whiplash events which California never experienced in past but will likely see an increase in such events in the future. It has been a great opportunity to him to be able to conduct this research with the experts of the PSL and academic mentors in the field and gain some invaluable experience.

Koffi absolutely recommends the NOAA internship to his peers. He advises those who are interested in this internship to have scientific curiosity, gaining some research experience during the academic semester, being respectful to mentors, and always ask peers who are already in the NOAA internship program the type of steps they followed to being offered that opportunity. His future academic goal is to pursue his graduate studies after graduating from GSoE in the spring 2020. He enjoys running, biking, reading, and listening to music.

OAR 2020 Interns

Climate Program Office (CPO)

Gabriela Jeliazkov

Gabriela is originally from Bethesda, MD. She is a rising sophomore at the University of California, Berkeley, where she is majoring in Molecular Environmental Biology and minoring in Conservation and Resource Studies. On campus, she works in a freshwater ecology lab, and is part of various other environmental organizations.

This summer she is a Climate Variability and Predictability Program Student Visitor. Gabriela was previously an intern in her senior year of high school, and was thrilled to hear from her previous supervisor, Sandy Lucas, that another opportunity was opening up this summer. Gabriela is organizing a webinar series that will feature the progress of funded research projects. She is also tracking the number of publications resulting from funded research, and completing an analysis of her findings. As an individual project, Gabriela is conducting interviews with climate researchers regarding current events in the field of climate science. Her goal is to write an article that will raise awareness of current events in climate science and be a resource to improve environmental literacy for those only beginning their journeys as scientists. Finally, she initiated a project which culminated in a presentation given by the CPO interns on the youth perspective on the intersection of race and pursuing STEM in school.

Gabriela is most excited about the exposure this internship gives her to current climate research. She is thrilled to be able to be in touch with researchers and read through their publications. She hopes to come out with a better understanding of how research is conducted in this field - this is due to her desire to someday become a research scientist. Gabriela is looking forward to recommending NOAA internships to other students, as she has found the NOAA community to be receptive of her ideas and dedicated to helping her grow.

Natalie Baillargeon

Natalie is a Hollings scholar and rising senior at Smith College, studying Environmental Science and Policy. She is from Westborough, MA. Much of her undergraduate work has been focused on ecological research, ranging from investigating how Arctic tundra fires affect vegetation composition/nutrients to understanding the ecological impacts of utility-scale solar arrays. She was interested in working in the Climate Program Office this summer, so her advisor at Smith connected her with CPO Deputy Director Ben DeAngelo and, from there, she was connected with Dan Barrie in Modeling, Analysis, Predictions, and Projections (MAPP).

In MAPP, Natalie was conducting a review of their Task Forces (TFs), which are nearing their tenth anniversary. TFs are a group of mostly MAPP-funded investigators working on a specific research area, such as drought or climate model development, for about three years. Each investigator is funded separately for their own projects, but the TFs allow for organization around a topic in the hopes of completing larger-scale initiatives. Her goals were to learn the successes and challenges of the TF model as well as possible improvements. During her internship, she got to practice and use many of her research skills. She completed quantitative analyses, citation counts and participation rates, but she also conducted interviews and surveys of investigators in the Task Forces. For MAPP, she has also worked on some ad hoc projects. For example, she helped to update content for the website and worked on a two-pager report on how the National Integrated Drought Information System (NIDIS) and MAPP are working together.

She would definitely recommend a NOAA internship to any student interested in any field that relates to climate and environmental science. After completing her undergraduate degree, she is interested in pursuing a career in environmental policy and management.

The Pathways Program - Recruiting & Hiring Students & Recent Graduates

by SheRee Lee and Keeli Otto, OAR Pathway's Program

As part of the Hiring Reform Initiative and to address the federal government's competitive disadvantage compared to other sectors in recruiting and hiring students and recent graduates, President Obama signed Executive Order 13562 entitled "Recruiting and Hiring Students and Recent Graduates," on December 27, 2010. This Executive Order established the Pathways Programs and directed the Office of Personnel Management (OPM) to implement the programs throughout the federal government. The federal regulation for the Pathways Programs became effective July 10, 2012.

The Pathways Programs are designed to streamline the hiring process and level the playing field for entry-level applicants. It includes three programs – (1) current students, (2) recent graduates and (3) Presidential Management Fellows. The main tenet of these programs is the opportunity to be non-competitively converted to a full-time employee after successful completion of the program requirements.

1) The Pathways Intern Program provides current students with the opportunity to work as Federal employees with the potential to convert to a permanent position after the completion of their degree and other program requirements. This program is designed for students in high schools, colleges, and trade schools and can be utilized year round.

Each year, OAR solicits participation from labs/program offices to hire eligible students through the Summer Intern Program. This program is an essential hiring mechanism to provide students currently enrolled in school, at least on a half-time basis, the opportunity to gain work experience and provide them with exposure to the NOAA mission. Currently, OAR has five summer interns working within our organization.

As of January 2020, OAR converted three Pathways Interns in the Weather Program Office, CFO/CAO-Employee Services Division, and CFO/CAO-Management and Organizational Development Division to full-time positions.

2) The Pathways Recent Graduates Program is available to individuals who graduated with either an associates, bachelors, masters, professional, doctorate, vocational, or technical degree in the past two years. Similarly to the Intern Program, the Recent Graduates must meet required qualifications in order to be converted to a permanent position.

This year, OAR successfully hired three Recent Graduates as a part of the first OAR Pathways Recent Graduates program cohort. These cohort members will complete a one-year developmental program which includes training, quarterly tableside (virtual) discussions, and special projects.

3) The Pathways Presidential Management Fellows (PMF) Program is the Federal Government's premier, two-year leadership development program for advanced degree candidates who demonstrate academic excellence, possess management and leadership potential, and have a clear commitment to public service. These individuals serve in a two-year excepted service position, and they can ultimately be converted to a permanent position.

Earlier this year, OAR converted a PMF in the Office of Ocean Exploration and Research to a full-time position.

For more information about the Pathways Programs and how your office/lab/program can utilize the program, please contact:

OAR's Pathways Program Manager, **SheRee Lee** (sheree.lee@noaa.gov) (Left photo)

or

OAR Student Programs Coordinator, **Keeli Otto** (keeli.otto@noaa.gov) (Right Photo)

NOAA Research EEO/Diversity Program Office

Nicole Mason
EEO/Diversity Program Mgr
301-734-1279

Georgia Madrid
EEO Specialist
303-497-6732

ABOUT US

VISION OF EEO OFFICE: To assist the Agency in creating a diverse workforce that is inclusive and free of discriminatory and retaliatory actions.

EEO MISSION: To bring awareness to employees, applicants for employment and management about EEO through the following:

Empowerment: Consultation services to employees, managers and applicants for employment.
Exposure: Recruitment and outreach activities for short and long-term recruitment.
Education: Federal EEO Mandated training, Special Emphasis programs and *Connections* newsletter.
Evaluation: Monitor employment statistics to prepare reports for NOAA, DOC, EEOC and OPM.

CONNECTIONS NEWSLETTER

Connections is published quarterly by the OAR EEO/ Diversity Program Office. The purpose is to share accomplishments and to link Diversity, EEO and Science within all of the OAR laboratories and program offices. If you have any newsletter ideas, suggestions and stories to contribute, please email Georgia Madrid - **georgia.madrid@noaa.gov.**

Website: eeo.oar.noaa.gov

KNOW YOUR RIGHTS

EEO COUNSELING:

Federal law prohibits discrimination based on race, color, religion, national origin, sex (including sexual harassment and pregnancy discrimination), age (40 years and over), physical or mental disability, including the provision of reasonable accommodations for qualified applicants and employees with disabilities or genetic information (GINA), gender identity, and retaliation for participating in activities protected by the civil rights statutes. In addition, NOAA prohibits discrimination based on sexual orientation.

Employees, NOAA Corps Officers, or applicants for employment with NOAA who believe that they have been discriminated or retaliated against may contact an EEO Counselor. The Counselor will attempt to resolve the matter and furnish information about filing a complaint of discrimination. To preserve your rights under the law, you must contact an EEO Counselor within 45 CALENDAR DAYS of the date of alleged discrimination.

To initiate EEO Counseling or for more information, contact:
NOAA Office of Inclusion and Civil Rights
Phone: (301) 713-0500 or 1-800-452-6728
Fax: 301-713-0983
Website: www.eeo.noaa.gov

ALTERNATIVE DISPUTE RESOLUTION:
NOAA's Alternative Dispute Resolution (ADR) Program provides mediation and other services and seeks early resolution.
Website: www.wfm.noaa.gov/adr/

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www.careers.noaa.gov/
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www.noaa.gov/opportunities/student-opportunities#page=page-1