

Betsy and Jesse Fink Career Development Program

ESF Career Fellows 2025

These opportunities are made possible through donors to the ESF College Foundation, specifically The Fink Family Foundation (Betsy '79 and Jesse '79 Fink), ESF Alumni Association in memory of Robert M. Sand '50, Clara and Wilton B. Griffiths '51, and Douglas and Susan Cotton. Student awards ranged from \$300 to \$6,000.

Climate Science Track

- **Khalil Deka '27 (PhD in Environmental Science: Policy, Planning, Communication and Society); Imagine Water Works (IWW), New Orleans, LA:** Khalil will work with Imagine Water Works (IWW), a local non-profit organization in New Orleans, Louisiana. IWW addresses queer climate justice issues and applying queer methods to fight/cohabitate with disasters in the region. During the internship, Khalil will work on three projects. First, Khalil will support the planning and execution of a session with the Centers for Disease Control at the Philanthropy Conference to learn about the intersections between climate, health, and gender. Khalil will also work with the IWW team on July Supply, a weekly food and hurricane supply distribution with local partners. Third, Khalil will lead new Queer Climate Mela in August, an event designed to bring community awareness of climate change and its disproportionate impacts on marginalized communities through art and conversation. At the end of the three months, Khalil will produce a report to include an account of activities over the course of the project, data relevant to the populations served, and an analysis of potential areas of growth or collaboration.
- **Bethany Fuer '25 (BS in Environmental Science: Environmental Information and Mapping):** The Wetland Trust, Central NY: Bethany will intern with The Wetland Trust, a non-profit in Central New York that protects, restores and enhances wetlands that provide critical habitat for rare and unique reptiles and amphibians (herpetofauna), plants, and other wildlife in New York and beyond. Bethany's role at The Wetland Trust will contribute to the nation's largest wetland mitigation project by updating and creating GIS maps, analyzing spatial data for restoration projects and assisting in field data collection.
- **Ryan Hesch '26 (BS in Biochemistry); Amazon Learning Organization, Tena, Ecuador:** Ryan will pursue an internship through Amazon Learning Organization's Climate Change Mitigation, Agroforestry, and Forest Conservation program in Ecuador. Ryan will have the opportunity to work alongside farmers, indigenous communities, foresters, and environmental engineers to address

these challenges. Ryan will work with local farmers to diversify agroforestry systems and contribute to the expansion of climate resilient agricultural landscapes that can store more carbon in both vegetation and soil. This involves data collection on flora and fauna in protected forest areas, the creation of plant inventories and seed banks, and research on drought solutions that can enhance system resilience. By examining the interactions between plant root exudates, microbial communities, and soil composition, Ryan aims to develop strategies that promote long term soil fertility and climate adaptation. Furthermore, Ryan will contribute to environmental education programs for local students and community members. These programs will emphasize the importance of soil health, biodiversity, and carbon sequestration, helping to build local capacity for sustainable agroforestry management. Finally, Ryan will work with community driven ecotourism initiatives.

Independent Exploration Track

- **Samuel Asamoah '28 (PhD in Sustainable Energy); LEED Certification:** Samuel will be completing the LEED Green Associate course this summer with the intention of obtaining LEED Certification. This process will allow Samuel to be equipped with the knowledge and skills to contribute to the development of energy-efficient and environmentally responsible building strategies.

Internship Track

- **Amelia Alvarez '26 (BS in Environmental Studies: Policy, Planning, and Law); NYS Department of Environmental Conservation (DEC), Syracuse, NY:** This summer, Amelia will be collaborating with the NYS Department of Environmental Conservation (DEC) and Dr. Shari Dann to reimagine the Onondaga Lake Visitor Center. Amelia will complete projects such as preparing a gap analysis of community groups and non-traditional audiences (including groups with disability focus, new Americans, First Nations). Using this information, Amelia will build community relationships and partnerships to better understand their needs and how the Onondaga Lake Visitor Center can support them in their outdoor and science literacy. This opportunity will also allow Amelia to plan public events with ESF programs.
- **Meredith Barges '27 (PhD in Environmental Science: Policy, Planning, Communication and Society); Chicago Bird Alliance, Chicago, IL:** Meredith will be a Senior Intern with the Chicago Bird Alliance working on the "Bird Collisions in the Anthropocene" project (BCA). BCA helps to document and prevent bird building collisions in North America by engaging the public in bird conservation disguised as simple, community centered craftmaking. At BCA workshops across the U.S. and Canada, community members will be collectively and meticulously crafting 10,836 fabric bird replicas to represent the 10,836 birds killed in building collisions in Chicago. The BCA's final product will be a 300-foot-

long sculptural carpet on which the birds will be hand-sewn. Meredith will support the planning and facilitation of workshops as well as co-developing BCA's first strategic plan, fundraising, and writing major grant proposals. Finally, Meredith will also play a role in media initiatives by creating and disseminating content that educates the public about the hazards of bird collisions and the role they can play in preventing them.

- **Anna Beach '26 (MS in Environmental Biology: Indigenous Peoples and the Environment): Syracuse Department of Parks, Recreation & Youth Programs, Syracuse, NY:** Anna will be completing an internship with the Syracuse Department of Parks, Recreation & Youth Programs with the City Arborist. Anna will support all aspects of urban forestry in the City of Syracuse including pruning, assessing the survival of new plantings (over 1,000 newly planted trees), and leading restoration projects through Onondaga Earth Corps. Furthermore, Anna will learn about tree risk assessment, tree permit enforcement, tree friendly design and construction, invasive species management, and landscape restoration. Anna will also mentor youth through interested in this work during this experience as well.
- **Makayla Cobb '26 (BS in Wildlife Science); NYS Parks, Recreation and Historic Preservation, Pulaski, NY:** Makayla will intern with NYS Parks, Recreation and Historic Preservation, specifically working with Piping Plover populations in the Eastern Lake Ontario Dune system at Sandy Island Beach State Park (Pulaski, NY). Although Piping Plovers are classified as endangered in the Great Lakes region and threatened in the Northern Great Plains/Atlantic Coast, the Eastern Lake Ontario shorelines are lucky enough to have a few adults that return to the area for breeding. Makayla's work will predominantly include surveying and monitoring the shorebirds while also participating in habitat restoration and public education through on-beach activities with visitors and participating in events at local zoos, schools, nature centers, and libraries.
- **Ian Davis '26 (BS in Biochemistry): European Research Institution for the Biology of Ageing (ERIBA), Groningen, Netherlands:** Ian will intern with the European Research Institute for the Biology of Ageing (ERIBA), an internationally recognized organization in the Netherlands focused on researching aging (senescence) in biological systems. Ian will be involved in a project designed on the identification and validation of novel anti-senescence compounds. In specific, the project aims to derive the proof-of-concept that calcium channel blockers (CCBs) currently used for treatment of hypertension, can be repurposed to selectively eliminate senescent cells. Due to the multidisciplinary nature of Dr. Demaria's lab, Ian also hopes to acquire additional bioinformatics experience including single-cell RNA sequencing and analysis.
- **Melia Kanaovicz '26 (BS in Environmental Biology); St. Lawrence County Department of Health, Canton, NY:** In this internship, Melia will work with the St. Lawrence County Department of Health to develop and implement mosquito sampling and identification efforts in areas near past cases of Equine Encephalitis (EEE). Early season detection of specific species of vector

mosquitoes can serve as a predictor for the magnitude of vertebrate EEE cases, which peak in August/September. Working with this multi-interdisciplinary team, Melia will also help to develop public health outreach/education strategies based on surveillance efforts for St. Lawrence County residents and visitors.

- **Kaylee Lupowitz '27 (BS in Conservation Biology); Wolf Mountain Nature Center, Smyrna, NY:** This summer, Kaylee will be working with Wolf Mountain Nature Center. They are a non-profit organization focused on observing animal behaviors and providing objective educational programs about Gray Wolves, Eastern Coyotes, Gray and Arctic Foxes, as well as fostering an appreciation and understanding of the intrinsic value of these animals and their relationship with natural systems. Kaylee will support animal care tasks such as feeding, watering, creating suitable enrichment, and maintaining enclosures. In addition, Kaylee will also assist with the planning of the new fox enclosure in alignment with the species' safety and habitat needs. Kaylee's responsibilities will also include providing education to visitors regarding the importance of the various canid species they work with, the challenges faced by their counterparts in the wild, and the larger environmental factors that are at play to cause them. This will be done through tours, sessions, and creating an educational aide to be used at the Center.
- **Molly McGarity '26 (BS in Environmental Education and Interpretation); USA Girl Scouts Overseas (USAGSO), Taipei City, Taiwan:** Molly's internship will be with USA Girl Scouts Overseas (USAGSO), a branch of Girl Scouts USA that provides support and programming to US citizens living abroad. This summer, they are hosting a one-week sleepaway camp in Taipei City, Taiwan, that will provide USA Girl Scouts living in Asia the chance to go take part in an American style summer camp and connect with local Taiwanese Girl Scouts. Molly's position will combine general camp counselor work with a focus on STEM programming and design, specifically increasing the focus to be more ecology-based. Molly will be creating a STEM learning outcome survey to be administered to campers at the start and end of the week-long session. This measure will be used to determine how participating in STEM programming at camp helps girls achieve STEM confidence, STEM competence, STEM interest and STEM value (in alignment with GSUSA STEM program standards). The data analysis and qualitative data will in part be used for marketing materials that can be used as supplemental materials for grant/partnership applications.
- **Alonzo Newton '27 (BS in Sustainable Energy Management and Environmental Science: Renewable Energy); PEACE, Inc., Syracuse, NY:** Alonzo will be working with PEACE Inc's Energy & Housing division this summer, which has been serving the local community in Onondaga County for over 25 years. This organization provides the means necessary for county residents to access important aid which helps lower their energy costs through multiple programs. During the internship with PEACE, Alonzo will be coordinating with the team to conduct initial assessments and home audits with single and multi-family homes. This will involve collecting data from buildings and intake information from clients. In addition, Alonzo will be conducting contractor pre-bid meetings

and supporting construction projects to ensure the work meets program standards. Finally, Alonzo will conduct some field work such as installing water conservation materials, and air sealing units. Finally, Alonzo will learn more about the administrative side of these programs and how energy systems work in practice.

- **Alyse Quidone '28 (BS in Forest Ecosystem Science); World Fellowship Center (WFC), Albany, NH:** This summer, Alyse will intern with the World Fellowship Center (WFC) in Albany, NH. Alyse will work on a variety of buildings and grounds projects during her internship including removing invasive species, creating informational plaques for notable trees and other woodland features, and planning of trails. Furthermore, Alyse will be helping to finalize and collect inputs on their new forest management plans. Alyse will also be supporting summer programming that is aligned with her expertise and interests including their annual BioBlitz, an event that works to identify and record the types of plants, fungi, and animals at WFC.
- **Scarleth Salgado '26 (BS in Environmental Resources Engineering); UNAH Instituto Tecnológico De Tela and the Universidad Rey Juan Carlos of Madrid, Tela, Honduras:** Scarleth will complete a summer internship with UNAH Instituto Tecnológico De Tela and the Universidad Rey Juan Carlos of Madrid to work within the local community and educate students from middle to high school about water systems in Tela, Honduras. Scarleth will teach students about water systems, specifically about the water cycle, measuring flow, water conservation, and pollution in the water. Due to the limitation of drinking water because of pollution and the water system in that area, Scarleth's work is important to motivate students early to explore and expand their knowledge of their local water systems and encourage them to engage with their environment.
- **Aidan Watts '27 (BS in Chemistry: Natural and Synthetic Polymer Chemistry); Lab of Dr. Wouter Hoogkamer, University of Massachusetts, Amherst, Amherst, MA:** Aidan will complete an internship this summer at Dr. Wouter Hoogkamer's lab at the University of Massachusetts, Amherst. Dr. Hoogkamer is one of the leading experts and the only one in the United States focused on footwear research, including implementing a foamed polymer to enhance performance properties. Aidan will work with undergraduate and graduate researchers on data collection, analyzation, aid in human trials, and calibrating and operating equipment used in sports equipment research. The projects Aidan will contribute focus on how marathon shoes affect joint mechanics during intense running; how muscles, joints, and energy change hopping on different surfaces; impact of energy by 3D-printed midsole shoes during running with a materials testing machine; and how walking on uneven surfaces affects movement in healthy and post-stroke individuals.