

2022-2023 Annual Report

State University of New York
College of Environmental Science and Forestry





Table of Contents

Message from the President.....	3
This is ESF.....	4
ESF by the Numbers	6
Academic Excellence	8
Exceptional Student Focus.....	10
Student Impact	12
Research Excellence.....	14
Campus Investments.....	16
Community Impact.....	18
Inclusion, Diversity, Equity, and Accessibility	20
Alumni Relations.....	22
Sustainability	24
ESF College Foundation Impact.....	26
Future Outlook.....	28





Message from the President

The commitment and passion that students bring to ESF are unmatched. Students are driven by their recognition of the global climate crisis and desire to take meaningful action. They choose our institution because they are determined to make a difference, to be part of the solution, and to serve as stewards of both natural and built environments.

At ESF, our mission is clear: Improve Our World. We are a community of like-minded individuals who share a deep-rooted passion for making a positive impact. With more than a century of dedicated work studying the environment, we have never been more aware of the urgency of our mission. Our faculty are thought leaders and pioneers in their fields; our graduates are climate champions working to make the world a better place. As SUNY's premier environmental college, we embrace our role with pride.

It is encouraging to see some policy-makers acknowledging the significance of the climate crisis. New York State's Climate Act is among the

most ambitious climate laws in the nation, and it is worth noting that it was informed heavily by ESF faculty. This underscores the critical importance of the work we do.

Reflecting on the past year, we have achieved great successes at ESF. We have seen an increase in new students, led groundbreaking research, launched new student-focused initiatives, and enhanced the overall campus experience — just to name a few initiatives.

Please join me in celebrating the accomplishments of our College community. Together, we will continue to push the boundaries of environmental stewardship, empower our students, pave the way for a more sustainable future, and Improve Our World.

A handwritten signature in black ink that reads "Joanne M. Mahoney".

Joanne M. Mahoney
President, SUNY College of Environmental
Science and Forestry



This is ESF



One of the nation's premier colleges focused on the study of the environment, developing renewable technologies, and building a sustainable future.

We work to address the Earth's most pressing problems — and students come here because they want to **be part of the solution.**

In 2022, the College's Strategic Plan Steering Committee completed its task of producing a five-year strategic plan, which currently has 46 specific goals to be implemented beginning in Fall 2023.



Our Community

We're a small college with BIG ideas. Our students, faculty, staff, and alumni make a global impact improving and sustaining the environment. We offer a world-class education among a close-knit community of more than 2,000 scholars with common values and a shared sense of purpose.



Our Campus

ESF is centered alongside Syracuse University in the heart of Central New York. We have a system of properties (across 25,000 acres) that broadly represent New York state's rich ecological diversity for scientific study and instruction.



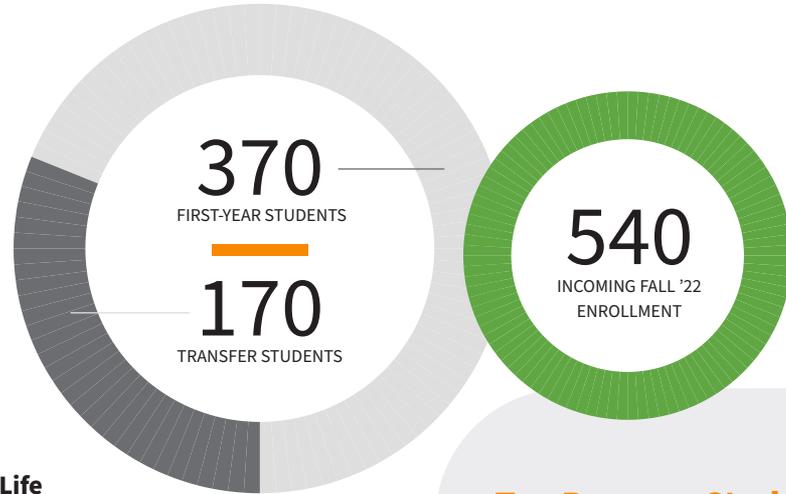
Our Mission

To educate future environmental leaders of all backgrounds, advance knowledge and skills necessary to promote scholarship and stewardship of the natural to designed environments, and act both locally and globally to Improve Our World.



ESF by the Numbers

2,467 +9%
 First-year
 applications



Fall 2022 First-Year Students



76% NYS

24% Out of State

Fall 2022 Transfer Students



72% from SUNY
 Community Colleges

Campus Life

27 undergrad programs

29 minors

30 graduate programs

14:1 faculty ratio

12 athletics teams

40 student clubs
 and organizations

Top Reasons Students
 Choose ESF

1. Specialized focus on the environment
2. Reputation for excellence in academics and research
3. Affordability and value
4. Sense of community
5. Strong outcomes and job placement after graduation
6. Hands-on research, lab, and studio opportunities
7. ESF's relationship with SU
8. Support from faculty and staff



Academic Excellence

Dr. Robin Kimmerer Receives National Recognition

Dr. Robin Wall Kimmerer was named a 2022 MacArthur Fellow, receiving an \$800,000 Genius Grant for her dedication and impact. She was also elected to the U.S. National Academy of Sciences for her distinguished and continuing achievements in original research.

Kimmerer, a SUNY Distinguished Teaching Professor of Environmental Biology, is also the director of the Center for Native Peoples and the Environment at ESF. She brings to her scientific research and writing her lived experience as a member of the Citizen Potawatomi Nation and the principles of Traditional Ecological Knowledge (TEK). Her research interests include the role of traditional ecological knowledge in ecological restoration and the ecology of mosses. Her book “Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teaching of Plants” has been a fixture on The New York Times Paperback Nonfiction Best Sellers list since February 2020. The book is a collection of essays weaving TEK with scientific knowledge to examine the relationship people have and can have, with the living environment.

Dr. Chang Geun Yoo Receives NSF CAREER Award

Developing ways to increase the sustainability of the paper industry and potentially drive down the cost of biofuels has earned Dr. Chang Geun Yoo the National Science Foundation (NSF) CAREER Award, the most prestigious grant that NSF offers to early-career faculty. Dr. Yoo is an assistant professor in the Department of Chemical Engineering. Yoo was awarded approximately \$570,000 to develop new areas of research and student education.

ESF Appoints New Department Chairs

Dr. Margaret Bryant was appointed chair of the Department of Landscape Architecture. She brings extensive experience and enthusiasm for teaching and research to the department, along with exceptional leadership.

Dr. Stephen Teale was appointed chair of the Department of Environmental Biology. He brings a wealth of experience to the department and leads faculty and students in their academic and research pursuits.

Expanded Interdisciplinary Faculty Clusters

ESF faculty clusters help the College meet its strategic goals of developing a more diverse team of academic experts to help solve global environmental challenges. This creates a pathway to advance ESF’s mission of highly impactful research on environmental sustainability while helping to address the College’s enrollment goals and commitment to diversity, equity, and inclusion. ESF expanded the initiative adding two new clusters: Tree and Ecosystem Restoration and Indigenous Environmental Science.

ESF Scientists Ranked Among Best in the World

A Stanford University study included 13 ESF faculty members on its list of the World’s Top 2% Scientists for 2023, based on citations of their work. It also identified 11 ESF faculty among the World’s Top 2% Scientists, based on research spanning their entire careers.

ESF Receives Funding for New Programs

SUNY awarded ESF a grant of \$500,000 to develop majors in the field of Quantitative Science, and another \$462,000 to develop microcredentials aimed at non-traditional students.



Exceptional Student Focus

Supporting Mental Health

The transition from high school to college is difficult, but better mental health treatment and resources help make it easier. ESF invested federal relief funds to introduce several new resources to support student mental health:

- 10 Seasonal Affective Disorder lamps are available for check-out through the ESF Counseling Center
- Massage chairs are available in three student-centric locations on campus
- Zen Booths in the library are pods that allow for a private and quiet workstation, allowing for a comfortable and optimal place to focus and get your work done.

Helping Students Find Jobs and Internships

ESF launched Handshake, an app to help students search and find internship and job opportunities. Students can customize their profiles with ESF branding and find targeted opportunities — and the College can have better data on outcomes and engagement.

Boosting the Orientation Experience

The undergraduate class of 2026 participated in a week of orientation activities to help them acclimate to college life, including New Student Convocation; sessions on wellness, academics, diversity, and sustainability; activities and games; and a food truck rally. The week ended with the College's traditional Saturday of Service when students engage in community service projects to help students make an early connection with Syracuse.

To improve the experience for students, we:

- Doubled the number of Head Orientation Leaders to better share the workload
- Increased the number of Orientation Leaders by one-third
- Offered more robust training for Orientation Leaders
- Increased collaboration with Resident Assistants in Centennial Hall
- Revamped a number of programs to drive more engagement

Increased Graduate Assistant Stipends

ESF values our master's and doctoral students, and the important research they do for our institution and to advance knowledge in their respective fields of study.

We have worked to steadily increase graduate student funding packages to continue to attract the very best applicants and ensure their success. Last year, we increased our master's and Ph.D. G.A. annual stipends by \$2,000, increasing them to \$16,000 and \$18,000 respectively. These 10-month stipends are based on a maximum of 20 hours per week per academic year. The stipends will continue to include a tuition scholarship and health insurance for qualifying students.





Student Impact

Students leave ESF well-trained to improve the world — and their expertise has never been more in demand. Our high placement rate means students are prepared to transition from an ESF undergrad to full- or part-time employment or graduate study. ESF alumni have a wealth of opportunities and get jobs all over the world related to their majors.

Students Recognized by Chancellor

Two students received the 2023 Chancellor's Award for Student Excellence, the highest honor bestowed upon a graduating student by SUNY. Hadar Shimshon and Alexandra Walls were awarded for demonstrating the integration of academic excellence with other aspects of their lives, which may include leadership, campus involvement, community service, or the arts.

Three Students Named Finalists in National Environmental Storytelling Competition

Accessibility to water in one of the driest areas of the country, access to healthy foods in low-income areas, and cultivating a passion for environmental activism on college campuses are topics that earned three ESF students the title of PlanetForward Storyfest finalist. Eden Gardner, Eva Sideris, and Owen Volk are among the 37 finalists in the annual competition. The Planet Forward Storyfest Awards highlight the voices of students seeking to understand and illuminate their own innovations for how to best care for the earth.

SUNY Recognizes Grad Students for their Environmental Research

Recognized as outstanding student researchers, Elizabeth Clippard and Abby Webster each received \$5,000 in flexible funding for research expenses, professional development, and stipend supplements. Clippard works in ESF's Climate and Applied Forest Research Institute, where she is in the early stages of a project on remote sensing of the emerald ash borer, an invasive beetle that has decimated ash trees along the eastern United States. Webster's research focuses on harmful algal blooms, which threaten the use of freshwaters and coastal environments worldwide

Might Oaks XC Teams Repeat as National Champs

Mighty Oaks women's and men's cross-country teams won the United States Collegiate Athletic Association's (USCAA) national championship. This is the second time both teams have secured national championships in the same year.

Vogue Profiles Undergraduate Environmental Activist

After Hurricane Maria devastated Puerto Rico and brought a sense of urgency to the effects of climate change, Isabel Valentín began speaking up and asking the hard questions of those in charge. Isabel, an environmental studies major, is featured in Vogue for environmental activism. The profile tells the story of how her family influenced her passion for the environment and how her ESF education is going to help her change the world.





Research Excellence

Fueling Impactful Research

Sponsored research at ESF has continued to grow in volume, diversity of projects, and impact. During 2023, research expenditures across all sponsored grants and contracts was \$20.4 million, a 13% increase over last fiscal year. This continues last year's double-digit growth and in total represents 30% more research activity since 2021, the greatest level in ESF's history. Prestigious federal grant funding increased by 72% over this same period, and the number of projects managed increased by 35%. More undergraduate and graduate students are engaged in research than at any time in the past five years.

NSF Awards \$1 Million to Transform Economy

Upstate 2.0, a partnership between ESF and Cornell University that aims to bolster economic development in upstate New York, received a \$1 million development award from the National Science Foundation's Regional Innovation Engines. The collaboration seeks to transform upstate

New York into an innovative bioeconomy, where biological resources are sustainably converted into goods and services to reverse the impacts of climate change and ensure environmental justice. This includes maximizing opportunities in food systems, forestry, robotics and fossil fuel replacement.

Chancellor's Summer Research Excellence Fund Benefits 30 ESF Students

ESF was one of five SUNY campuses selected to offer paid summer internships, with 30 undergraduates engaged in applied research in the fields of environmental biology, chemical engineering, and landscape architecture. The new program was designed to expand access to research opportunities for undergraduate students with financial need, first-generation students, and others who may face barriers to securing research experiences.

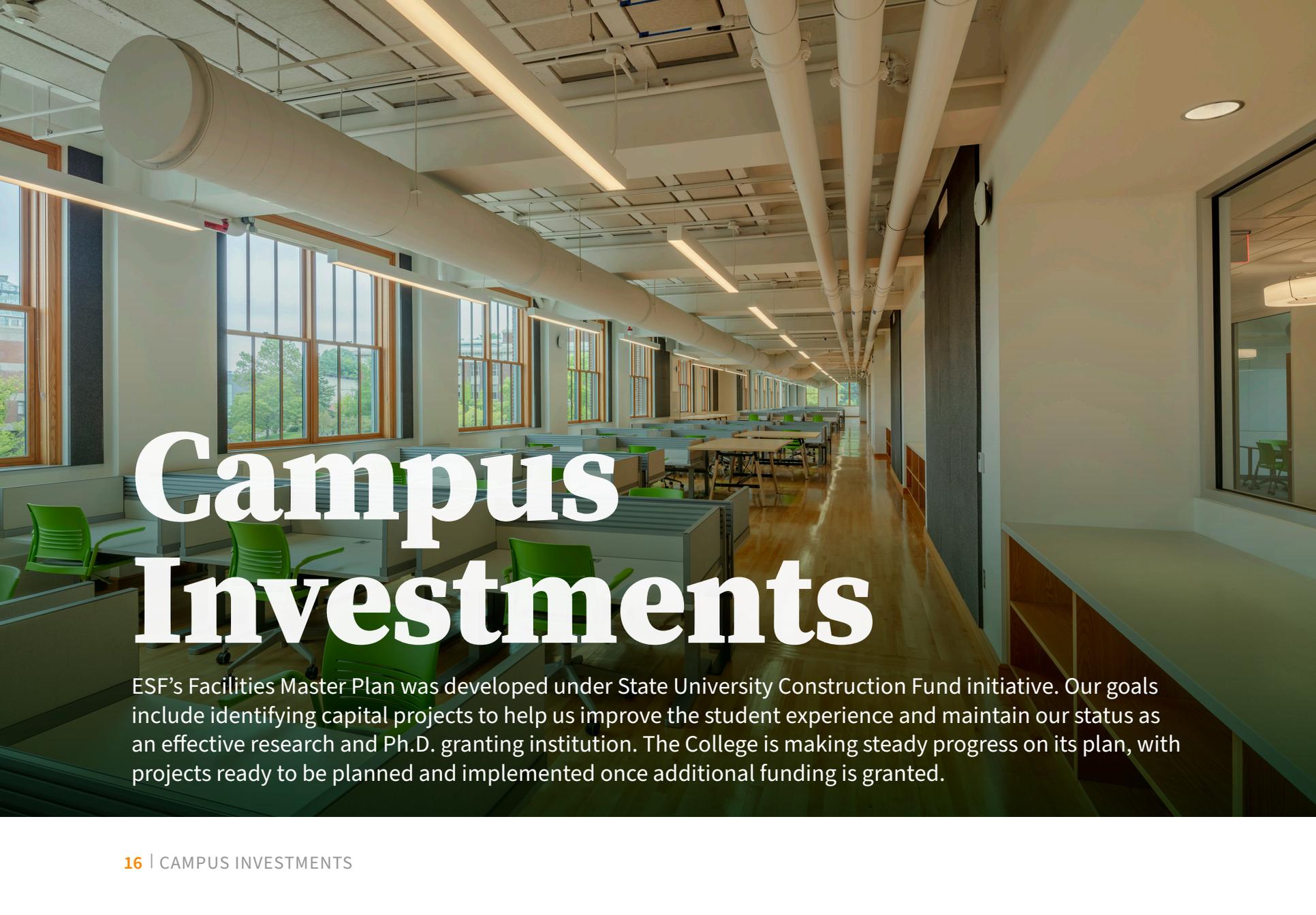
ESF Partners with State Agencies to Promote Climate-Smart Farms and Forests

ESF is partnering with the New York State

Department of Environmental Conservation (DEC), Department of Agriculture and Markets, and colleagues at Cornell University, Syracuse University, and other organizations to help landowners and farmers implement more climate-smart solutions.

The project — promoting the use of agricultural and forestry practices that reduce greenhouse gas emissions or sequester carbon—is being funded under the initiative NYS Connects: Climate Smart Farms and Forests Project, which was awarded a \$60 million grant under the first round of the U.S. Department of Agriculture Partnerships for Climate-Smart Commodities. NYS Connects is one of 70 selected nationally from more than 450 submitted project proposals. The initiative will help agriculture producers and forest landowners implement climate-smart agriculture and forestry practices in pursuit of the decarbonization targets of the state's Climate Leadership and Community Protection Act, as well as build connections between landowners and companies with a growing demand for commodities produced using climate-smart strategies.





Campus Investments

ESF's Facilities Master Plan was developed under State University Construction Fund initiative. Our goals include identifying capital projects to help us improve the student experience and maintain our status as an effective research and Ph.D. granting institution. The College is making steady progress on its plan, with projects ready to be planned and implemented once additional funding is granted.

Satellite Properties Facilities Master Plan

ESF finished its comprehensive Facilities Master Plan for the College's regional satellite properties across New York State. Modeled after ESF's Syracuse campus Facility Master Plan, it is designed to serve as a roadmap for possible investments and provide long-term strategies for recruitment, retention, and fund development. The College's regional properties include:

- **Thousand Islands Biological Station:** Hosts an aquatic research program on ecology, conservation, and management of the St. Lawrence River with an emphasis on fisheries, faunal habitat, wetlands, limnology, and invasive species.
- **Cranberry Lake Biological Field Station:** Surrounded by Adirondack Wild Forest and Wilderness lands, this is a research hub for Environmental Biology students and faculty.
- **Adirondack Ecological Center:** Located on ESF's 15,000-acre Huntington Wildlife Forest for research on the natural and cultural systems of the Northern Forest.
- **Heiberg Memorial Forest:** 3,800 acres that serve as an outdoor classroom and laboratory for teaching, research, and demonstration. Features 18 miles of roads and trails, five ponds, and a scenic overlook.

- **Tully Field Station:** 60 acres that support experimental plantings and research.
- **Lafayette Road Experiment Station:** 50 acres used for teaching and research of dendrology, silviculture, and forest ecology.
- **Ranger School:** Students learn and train on 2,800 acres of Adirondack forest, the Ranger School contains classrooms, five laboratories, a student lounge, faculty and staff offices, a library, food service/dining hall and residential spaces.
- **Pack Demonstration Forest:** 2,500-acre property used for demonstrating good forestry methods to the public and to the owners of forest properties; to provide the best facilities for the training of forestry students in the woods; and to furnish a field laboratory for various lines of forest research, especially in the economic field.

On-Campus Improvements

ESF entered the final stage of an extensive renovation of Marshall Hall, which houses the College's Departments of Environmental Studies and Landscape Architecture and serves as a primary teaching location.

The College also completed partial renovation of Moon Library, creating a new, functional, and pleasing entry, and a new café. With coffee from a

local roaster, a focus on New York state products, and some grab-and-go food choices, Café at Moon moved into a former conference room. The café is incorporating sustainability goals as much as possible, and offers after-hour coffee vending for late-night study sessions.

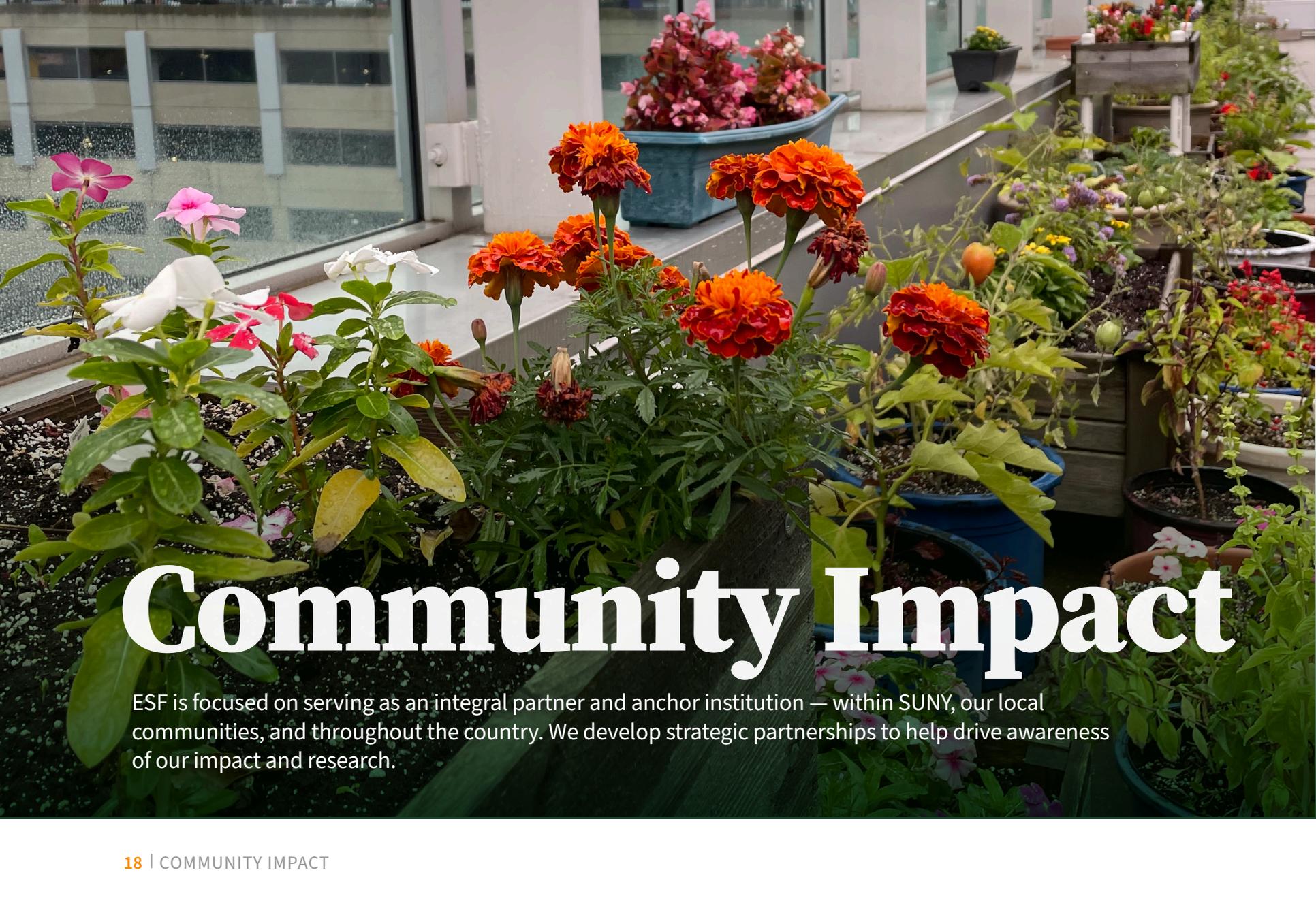
The College also upgraded important heating and ventilation systems in several buildings, including the important fourth floor of Bray Hall (the oldest building at the College), which provides workspaces for graduate students.

ESF makes continued progress on facility upgrades at the Ranger School and Thousand Islands Biological Station.

Prioritizing Health

ESF committed to participate with the International WELL Building Institute's WELL at Scale (portfolio) standard, which would eventually result in all the College's major facilities achieving WELL certification. ESF is one of the first higher education institutions to join like-minded companies from across the globe committed to enhancing buildings and communities to help people thrive.





Community Impact

ESF is focused on serving as an integral partner and anchor institution — within SUNY, our local communities, and throughout the country. We develop strategic partnerships to help drive awareness of our impact and research.

Celebrating 10 Years of Connecting Veterans to Nature

A rooftop space transformed into an outdoor garden at the Syracuse VA Medical Center by ESF has been impacting the lives of veterans for 10 years. Started by ESF faculty member Dr. Lee Newman and her graduate student Dan Collins, the garden is used to help improve the health and well-being of veteran patients, including their psychological outlook.

EOP Students Meet NYS Officials

ESF welcomed the New York State Lieutenant Governor, Sen. Rachel May, Assemblyman Bill Magnarelli, and Assemblyman Al Stirpe to campus to meet with our EOP students. It was a great chance for our students to hear about the Lieutenant Governor's path and ask him questions.

Collaboration with the Rockefeller Institute

In partnership with the Rockefeller Institute for Government, ESF brought more than 100 people to campus for a free day-long conference on green policy solutions. The event featured panels of experts from ESF, the DEC, NYSEDA, Onondaga County, and more — providing attendees with the opportunity to learn how to implement change for a more sustainable planet, and network with policymakers and experts. DEC Commissioner Basil Seggos gave the lunch keynote.

Inspiring Future Scientists

ESF worked with the Syracuse Museum of Science and Technology to bring back Summer Science Week, a camp for rising 9th graders to learn about sustainability and developing ways to combat climate change locally. A total of 40 teens from across Onondaga County participated.

Exposing Youth to STEM

ESF brought 40 students aged 6-13 to campus through the Syracuse Police Athletics/Activities League STEM Camp. Campers engaged in a variety of activities that showed a range of ESF education and programs, including: a greenhouse tour, examination of animals in the Roosevelt collection, demonstrations in the hydrology lab, construction and decoration of birdhouses and pinecone bird feeders, and a game about evolution and natural selection focused on birds and beak types.



ESF
SUMMER SCIENCE
WEEK

2023



Inclusion, Diversity, Equity, and Accessibility

At ESF, we welcome and celebrate people of all backgrounds.

Our diversity sparks our creativity, makes us stronger, fuels our success, and drives our innovation. Our campus is a place where we encourage students, faculty, and staff to be their authentic selves. We remain committed to further increasing the diversity of our student body, faculty, and staff through a number of initiatives.



ESF Appoints New CDO

ESF appointed Danushi Fernando to Chief Diversity Officer to promote and advance the College's diversity, equity, inclusion, and accessibility goals and objectives. She will also serve as ESF's Affirmative Action Officer and Deputy Title IX Coordinator. The CDO role is critically important to help us create a welcoming and inclusive community at ESF for people from every background. Danushi puts an emphasis on developing personal relationships, building trust, and empowering others to make positive changes.

ESF Launches New STEM Program for NYC Youth

A new innovative and immersive program created by ESF introduces climate science, offers career exploration, and addresses issues of access from an equity and justice perspective for high school sophomores and juniors from New York City.

The Timbuctoo Climate Science and Careers Summer Institute (Timbuctoo Institute) provides opportunities for students while focusing on environmental and social justice issues through the lens of climate change. ESF partnered with CUNY Medgar Evers College to bring 48 high school students to the Adirondacks and Syracuse for three two-week summer sessions.

The Institute's goals include creating a pipeline of awareness and access to academic and professional careers at institutions, organizations and agencies focused on the environment. This includes working with partners, including the New York State Department of Environmental Conservation, and many of their divisions, such as education, Equity and Justice, and Public Protection, home of Forest Rangers and Environmental Conservation officers.



Alumni Relations

The ESF Alumni Association has served ESF alumni since 1925. Association programs attract the support and participation of our more than 22,000 alumni.

The Association exists to engage, connect, and support alumni, students, and the College community.



A Personal Welcome

Each of ESF's newly admitted students — more than 2,000 — received a handwritten postcard from ESF alumni. The postcards were an impactful and personal way for alumni to congratulate students on their admission to ESF and share a personal note about their own experience at ESF. As prospective students contemplated their final decision, this initiative was designed to offer them a personal endorsement of ESF to help recruit a strong incoming class.



Strong Alumni Connections

ESF Connections is a program designed to connect alumni to undergraduate students to assist with career exploration and the development of their professional persona. Through the program, alumni can provide students with an externship/internship opportunity; offer informational interviews; or have a presence at an ESF career fair. Our alumni connections are so important to help future graduate success!

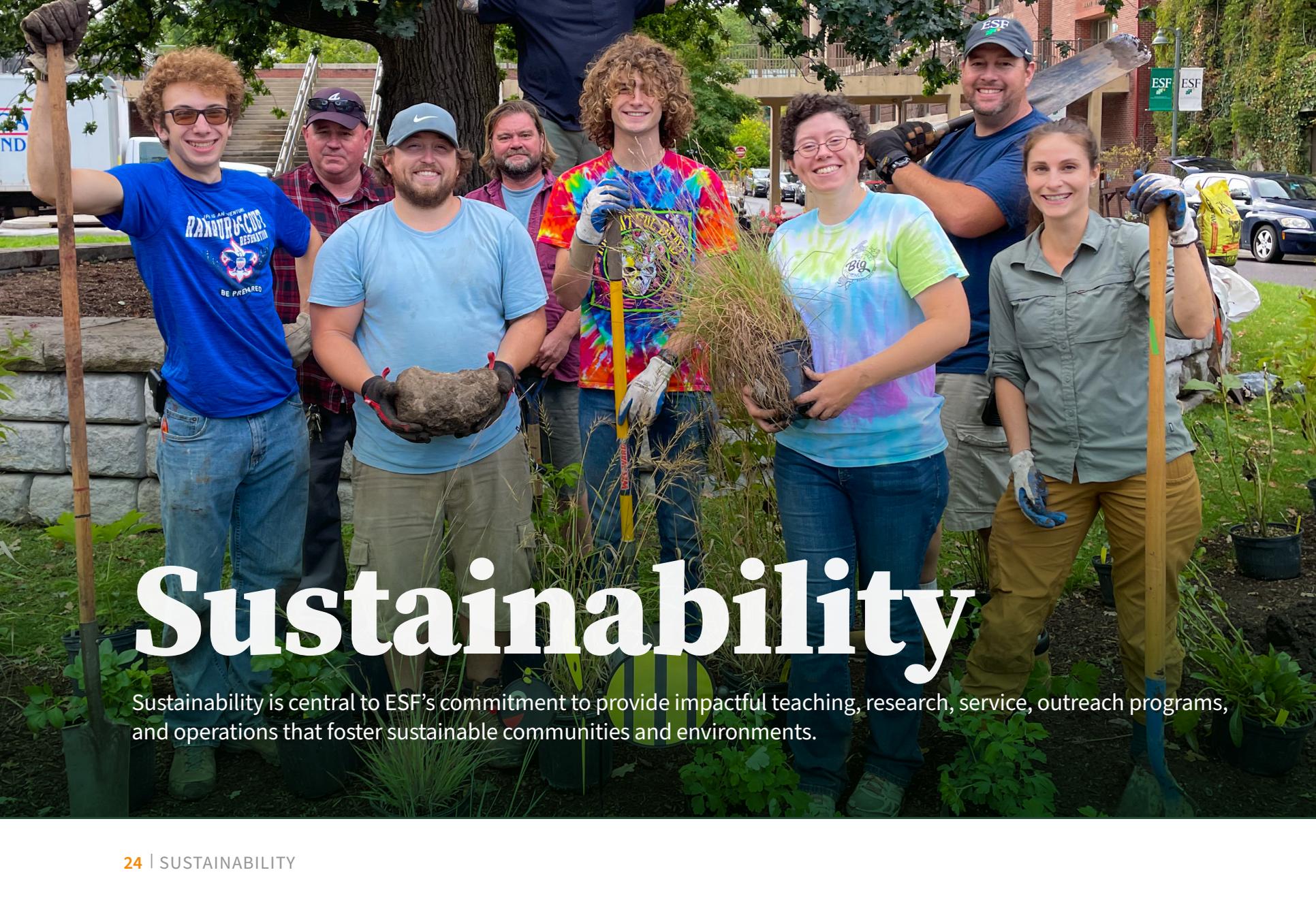


Supporting Students Financially

This past year, alumni-sponsored grants and scholarships have provided \$39,000 in support to those who exhibit strong potential and need.

Supporting Alumni

This past year, we hosted 16 alumni events across the country and two alumni trips — all of which help to foster relationships and keep the College connected to our valued alumni!



Sustainability

Sustainability is central to ESF's commitment to provide impactful teaching, research, service, outreach programs, and operations that foster sustainable communities and environments.

ESF Earns High Marks for Sustainability Curriculum, Initiatives

ESF is recognized as a Top Performer in the 2023 Sustainable Campus Index based on the Sustainability Tracking, Assessment & Rating System (STARS). The College was measured in 17 sustainability impact areas, resulting in Top Performer status in four categories, including a Top 10 ranking for doctoral-granting institutions.

- **No. 1** in sustainability curriculum
- **No. 1** for Sustainable Investment
- **No. 2** in public engagement
- **No. 9** for water-use reduction and rainwater management
- **No. 8** for doctoral granting institutions

EV Truck Added to University Police Fleet

ESF added an EV truck to its University Police Department fleet, making our campus the first within SUNY to have an EV vehicle — a Ford F150 Lightning Pro — in its UPD fleet. ESF's entire fleet currently features six hybrid vehicles and 14 vehicles that are 100 percent electric.

ESF Ranked Top 3 Green College for 2023

Princeton Review Top 50 Green Colleges

Reducing Campus Waste

Since 2018, ESF campuses (including the residence hall) have reduced the amount of material sent to landfill and incineration by a whopping 41%. This improvement has coincided with an increase in the campus-wide diversion rate (compost and recycling) from 29% to 52%. For reference, the national diversion rate is about 32%. At the Syracuse campus alone, during this same time, material sent to landfill and incineration was reduced by 61% and the diversion rate increased from 31% to 66%.

Sustainability Ambassadors

The Sustainability Ambassadors program invites a designee from each office, division, or department to spend a few hours of (paid!) time each month serving as their group's sustainability educator and point person. The program's goal is to facilitate sustainable practices on campus through faculty and staff peer-to-peer education and action. Each month, the Office of Sustainability leads a kickoff meeting around a theme and Ambassadors are asked to educate their colleagues about this specific topic in a different, fun way each week for the rest of the month.

Buzzing about Bees

ESF became a Bee Campus USA affiliate in April 2022, pledging to protect wild pollinators and the critical services that they provide to our planet. In response, ESF established a Bee Campus Committee to:

- Continually plan and lead volunteer on-campus planting opportunities to expand pollinator habitat.
- Create and adopt an integrated pest management plan designed to reduce and/or negate the use of pesticides on campus.
- Work with faculty members to offer and expand coursework and continuing education opportunities that incorporate pollinator conservation.
- Update pollinator educational signage on campus.





ESF College Foundation Impact

The ESF Development Office and ESF College Foundation are committed to helping the College achieve its mission of education, research, and public service through resource development and fund management.

We build lasting relationships with alumni, parents, friends, students, faculty, staff, and other benefactors and partners whose support positively impacts thousands of ESF students every year.

Strong Financial Support

The ESF College Foundation was the beneficiary of another strong year of philanthropic support. As of June 30, 2023, total assets of the Foundation equaled \$81 million, as compared to \$77 million for the previous fiscal year. This 5% increase in asset growth is due to investment market rebound and continued strong fundraising results. Between fiscal years 2020 and 2023, the Foundation's 3-year fundraising goal of \$9.2 million was exceeded by 54% with actual fundraising results of \$14.2 million. The Foundation recorded cash donations of \$4.5 million in fiscal year 2023, consistent with fundraising in 2022.

Donor Interests

We continue to see increased interest from donors in supporting academic projects. This fiscal year saw continued increases in philanthropic gifts from private foundations to support academic programs such as the Chestnut Restoration Project, the Center for Native Peoples and the Environment, and tree restoration. Funding from partners such as Templeton World Charity Foundation, the Sloan Foundation, and The Nature Conservancy are critical for advancing academic initiatives.

Student Scholarships

Providing funding for ESF students and academic programs continues to be the primary focus of the ESF College Foundation development program. This year the Foundation provided nearly \$1.7 million in scholarships, over \$2.6 million for academic salaries and fellowships, faculty start-up packages, travel, publications, and equipment.





Future Outlook



In 2022, ESF initiated a comprehensive strategic planning initiative to evaluate and update the College's mission and goals. This will serve as ESF's roadmap for all operations over the next five years.

The strategic plan also sets College goals, devises strategies to attain those goals, and identifies metrics to measure success. As a next step, an implementation committee has been appointed to help guide the activation of our goals, oversee our progress, and ensure that strategic planning becomes an institutionalized culture at ESF.

We look forward to another successful year in 2023-24, with new student and employee initiatives and resources that help make ESF mighty.

Thank you

Thank you to the students, faculty, and staff who work hard every day in contributing to our collective success and helping to *Improve Our World*. Our work has never been more important.

