# 2023-2024 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

Engagement, focus, collaboration. These are staples of the ESF community. Our commitment is to advance the knowledge and skills necessary to promote scholarship and stewardship of natural and designed environments. Our students are driven to act both locally and globally to improve our world. They choose our institution because they are not only determined to make a difference, to be part of solutions, but also to serve as a connecting force between ideas and action.

At ESF, the essence of our mission is clear: Improve Our World. We are a community of like-minded individuals who share a deep-rooted passion for generating positive impact. With more than a century of dedicated work studying the environment, we grasp 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.

There is critical relevance in the work we do at ESF. Work we can't do alone. New York State's Climate Act has some of the most ambitious climate laws.

in the nation, and it is worth noting that it was informed heavily by ESF faculty. We continue to craft actionable plans to strengthen sustainability, at and beyond our campus.

Over the course of the 2023-24 academic year, ESF has seen an increase in new students, a consistent tide of groundbreaking research, an expansion of student-centered initiatives, and continued concentration on enhancing the campus experience. These initiatives are integral to one another and are just a few of the many our community holds dear.

Please join me in celebrating the continued accomplishments of our College community. We remain committed to environmental stewardship, to empowering our students, and to paving the way for a more sustainable future. Let us not stop asking how we can improve our world.

Joanne M. Mahonev

President, SUNY College of Environmental Science and Forestry





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 2023, the College began implementing the action points of our five-year strategic plan. Built with a focus on three pillars (Growing Opportunity & Excellence for Student Success; Transdisciplinary Scholarship & Research Expansion; and Intentional Cultivation of Community & Belonging), the ESF Strategic Plan houses these goals, themes, and principals with a model supported by inclusion, diversity, equity, access, and social justice.



#### **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.



# 3,541 First-year applications





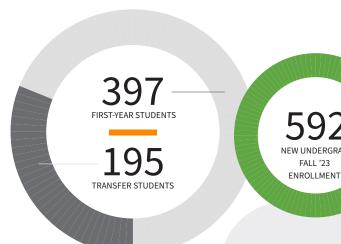
**74% NYS** 

26% Out of State

#### **Fall 2023 Transfer Students**



80% from SUNY **Community Colleges** 



#### **Campus Life**

- 27 undergrad programs
- graduate programs
- 13:1 faculty ratio
- average class size
- student clubs and organizations

### **Top Reasons Students Choose ESF**

1. Specialized focus on the environment

FALL '23

- 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



#### **Dr. Tristan Brown Recieves Exemplary Researcher Award**

Associate Professor in Sustainable Resources Management, Dr. Tristan Brown, received ESF's 2024 Exemplary Researcher Award for his exceptional work in sustainable energy law and policy, bioenergy systems analysis, technoeconomic analysis, and climate policy. Brown served as the principal investigator on \$2.3 million of externally funded grants and advised government officials at the international, federal, and state levels on U.S. energy policy.

#### Dr. Yagi You Receives NSF CAREER Award

Dr. Yaqi You's research aimed at combating the transmission of antibiotic resistance genes in the environment and prevent their transfer to pathogens has earned her the National Science Foundation (NSF) CAREER Award, the most prestigious grant that NSF offers to early-career faculty. Dr. You is an assistant professor in the Department of Environmental Resources Engineering. The CAREER program is designed to support promising young faculty in becoming academic role models in both research and education, as well as in advancing the mission of their department or institution.

### **Dr. Chuck Kroll Named SUNY Distinguished Teaching Professor**

Professor Chuck Kroll in the Department of Environmental Resources Engineering was named a SUNY Distinguished Teaching Professor. The honor is conferred upon faculty having achieved a distinguished reputation for commitment to teaching. During his 28-year career at ESF, he has been a dynamic instructor, dedicated mentor, respected colleague, and innovative researcher. He has taught more than a dozen different classes, serving students in the first year of their bachelor's program through those taking advanced graduate courses.

#### **Assistant Professor Jean Yang Named SUNY Civic Education and Engagement** and Civil Discourse Fellow

Assistant Professor Jean Yang in Landscape Architecture, was named a SUNY Civic Education and Engagement and Civil Discourse Fellow. The Fellows aim to bolster SUNY's dedication to civic engagement as a fundamental aspect of higher education, fostering civil discourse among students, faculty, and staff across campus communities. Yang's research includes analysis, design, and advocacy for public spaces in historically marginalized areas.

#### Dr. Karin Limburg Honored with the **Distinguished Career Award**

Dr. Karin Limburg, Distinguished Professor in Environmental Biology, was honored with the Distinguished Career Award at the International Otolith Symposium in Viña del Mar, Chile.

#### **ESF Appoints New Leaders**

Dr. Zora Thomova was appointed Associate Provost for Academic Affairs and Dean of the Graduate School. Dr. Lindi Ouackenbush was named Interim Vice President of Research. Dr. Darshini Roopnarine was named Director of ESF's Open Academy.

#### **SUNY Chancellor Honors ESF Faculty, Staff**

Five ESF employees were honored by Chancellor John B. King, Jr. for outstanding service to the State University of New York. Honorees are Janine DeBaise for Excellence in Teaching; Mark Hill for Excellence in Professional Service; Jody Larabee for Excellence in Classified Service; Dr. Brian Leydet for Excellence in Faculty Service; and Dr. Timothy Volk for Excellence in Scholarship and Creative Activities.







#### **TimelyCare Launched**

ESF implemented TimelyCare, a virtual health care platform designed specifically for higher education with hundreds of partner colleges and universities. TimelyCare launched in January 2024 and offers a range of services, all free of charge and available 24/7 to our students, including scheduled and on-demand medical and mental health care, health coaching, and basic needs support. TimelyCare providers will write prescriptions and refer ESF students to local care providers as appropriate. More than 350 visits have been initiated since TimelyCare was launched, almost equally divided between medical and mental health, and 578 ESF students are registered to utilize TimelyCare.

#### **ESF Family Connection**

Parent and family engagement is key to student success. To assist in that effort, ESF Family Connection was launched in December 2023 and was the third-most engaged platform of more than 400 partner colleges and universities utilizing the same service. ESF Family Connection keeps parents, family members, and other supporters informed about what's happening at ESF, which can lead to meaningful conversations with students. Important dates and deadlines, opportunities for student engagement, and activities and events provide conversation starters that go beyond the always challenging "what's new?"

#### **Class of '23 Outcomes**

90% are employed or attending graduate school

86% are working in a job related to their degree

98% found a position within six months

**71%** are employed in NY

48% work in Central **New York** 

72% secured their position through a campus connection



#### **Students Recognized by Chancellor**

Two students received the 2024 Chancellor's Award for Student Excellence, the highest honor bestowed upon a graduating student by SUNY. Lynzee Morris and Jade Nguyen were honored for demonstrating the integration of academic excellence with other aspects of their lives.

**ESF Students Part of SUNY Climate Corps Internship Program** 

Three ESF students are among the inaugural class of paid student interns from the SUNY Climate Corps Internship Program. Thirtysix SUNY students from eight campuses were selected for immersive, real-life work experiences in research and policy at state agencies with environmental and sustainability missions and SUNY System Administration.

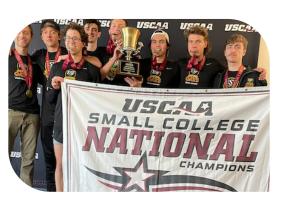
#### **Students Named to New Sustainability Advisory Council**

ESF students Isabel Valentín, '24, and Eden Gardner, '25, were appointed to the

Sustainability Advisory Council by SUNY Chancellor John B. King, Jr. The Council will accelerate SUNY's leadership on sustainability and climate action and focus on ways to reduce SUNY's environmental footprint, promote green workforce development programs, spur research and innovation on advanced climate issues, and encourage other applied learning methods.

### **Mighty Oaks XC Teams Make USCAA History** with Three-Peat Championships

The Mighty Oaks men's and women's cross country teams successfully defended their 2021 and 2022 USCAA national cross country titles at



the national championships in Lemont Furnace, Pa. becoming the only school in USCAA history (all sports) to win three consecutive titles in the same sport, both genders.

### **ESF Women Claim USCAA Track and Field National Championship**

The Mighty Oaks dominated the 14-team field at the 2024 USCAA Women's Outdoor Track and Field Championship at American International College in Springfield, Mass.





Sponsored research at ESF during 2023-24 reached \$21.5M and continues to grow dynamically in volume, diversity of projects, and impact. ESF has a Carnegie Research Classification of "High Research Activity." ESF is the smallest R2 institution nationally by numbers of students, and the only R2 school among the SUNY campuses.

#### **Early Career Highlights**

Dr. Mohammad Uzzal Hossain, Assistant Professor in the Department of Sustainable Resources Management (SRM), received a \$745K Environmental Protection Agency (EPA) grant to boost sustainable building practices. Hossain's team is developing templates and a detailed inventory to help builders understand the environmental benefits of using salvaged materials.

Dr. Jamie Shinn, Assistant Professor in Environmental Studies, is leading a team who received \$787K from the National Science Foundation (NSF) for its work to help drive climate-change adaptation in communities affected by flooding. The team will provide online flood risk, floodplain management, and comprehensive disaster preparation resources to help residents in flood-prone areas of central Appalachia.

Dr. Jiajue Chai, Assistant Professor in the Department of Chemistry, received two NSF grants totaling nearly \$700K to advance research on improving air quality in large cities through understanding the presence, source, and impact of specific pollutants on air quality and climate.

#### **Technology Transfer and Science-Based Decision Making**

Dr. Gyu Leem, Associate Professor, Chemistry and, Dr. Chang Geun Yoo, Associate Professor, Chemical Engineering received NSF funding to collaborate with partners in Texas to further research on carbonneutral alternative sources for value-added chemicals currently sourced from petroleum and other fossil fuels.

Dr. Wendong Tao, Professor in Environmental Resources Engineering, received seed funding through the Technology Accelerator Fund. Tao invented a patented system that strips ammonia from wastewater and uses the recovered chemicals to produce fertilizer. His VaSATM technology combines vacuum, heat, and chemical reactions to convert ammonium in wastewater into fertilizer while also improving the efficiency of biogas production and ensuring the treated wastewater is safe for use in agriculture.



#### **The American Chestnut Restoration Project** Received a \$636K Grant

The American Chestnut Restoration Project received a \$636K grant from the USDA National Institute of Food and Agriculture Biotechnology Risk Assessment Grants program, which supports development of new information that will assist federal regulatory agencies in making evidence-based decisions about the effects of genetically engineered organisms on the environment. The grant will be used to monitor the dispersal, fitness, and deployment of the genetically engineered American chestnuts developed by ESF researchers.









#### **On-Campus Improvements**

During the 2023-24 fiscal year, several significant investments were made across the campus to enhance infrastructure, support academic activities, and improve the overall campus environment. Some highlights from this work included:

Marshall Hall: Open and fully operable

Moon Library: 24/7 student access to the lower level

Syracuse Campus: Phase 1 of the campus wayfinding project

Warrensburg: Stabilization of the Lodge roof and winterization of the building

Campus-wide: Auto operator repairs for improved accessibility

Lafayette Road: Lighting improvements for Timber Sports facilities

Newcomb: Assisted with bridge replacement project in Arbutus and in rebuilding some of the culverts and road sections that were damaged by the 2023 summer flood

Cranberry Lake Biological Station: Rebuild of wooden bridge for a minimal cost

Gateway Welcome Center: Enhancements to the main level

Ranger School: Bathroom and flooring renovations in the main building

Wanakena campus: Trail maintenance on Rand Trail, replacing six culverts

Additionally, Facilities, in partnership with the Office of Sustainability, is actively pursuing the WELL Equity Rating certification as part of our broader commitment to environmental design and inclusion goals.

#### IT Infrastructure Enhancements

Network rebuilds for Cranberry Lake Biological Station, systems-wide implementation of new enterprise applications, and new cybersecurity measures were completed.





### **DEC Announces Nearly \$2 Million** Partnership with ESF to Study Impacts of Urban Heat Island Effect on **Disadvantaged Communities**

New York State Department of Environmental Conservation (DEC) Interim Commissioner Sean Mahar announced nearly \$2 million awarded to ESF to help identify, model, and map urban heat islands; assess extreme heat impacts and responses; and support climate actions to address urban heat island effects and extreme heat in disadvantaged communities across the state.

### **ESF Becomes Nation's First Higher Ed Institution to Achieve Campus-Wide TRUE Precertification for Zero-Waste Operations**

ESF is the first higher education institution in the country to be awarded Total Resource Use and Efficiency (TRUE) precertification for its campus-wide policies and actions to reduce waste and prioritize sustainability. The College intends to achieve full TRUE certification in the future.

#### **Community Touchpoints K-12 and Beyond**

Through partnerships in Open Academy, ESF hosted a Youth Climate Summit for 7th-12th graders, an event for the Syracuse City School District's Refugee School Impact Program, the STRATUS conference, focusing on how drones are being used for sending and mapping both environmental and social work, and Eastside PEACE Inc., a community action agency serving clients throughout CNY.





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

The student body led the creation of MOSAIC, the intersectional collective of the governing student body, MOSA. MOSAIC is an umbrella organization for cultural, affinity, and intersection clubs and works to amplify voices of historically marginalized students.





#### **ESF Implementations and Highlights**

- Student leaders undergo an anti-bias training each year
- ESF provided interpreting services and Communication Access Realtime Translation for events
- ESF will hire a Learning Strategist to provide direct support for students with disabilities
- IDEA programming added to first-year orientation and seminar courses
- Hosted Inclusive Excellence welcome and graduation ceremonies
- First-ever Transfer Student Week featuring programs to recognize transfer students — game night, tree planting, and swag swap events
- A DSA staff member was appointed to serve as the campus homeless liaison to assist students facing housing insecurity/homelessness

#### **ESF Continues STEM Program for NYC Youth**

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

The Timbuctoo Climate Science and Careers Summer Institute focuses. 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 over the summer. 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.



# 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.







#### **Creating Connections**

Each of ESF's admitted students — more than 2,000 — received a handwritten postcard from ESF alumni. The notes of congratulations were an impactful and personal way to congratulate students on their admission to ESF and share a personal experience of their time at ESF.

#### **Strong Alumni Ties to Job Market**

Through an enhanced program, alumni can provide students with an externship/internship opportunity; offer informational interviews; or have a presence at an ESF career fair.

#### **Supporting Students Financially**

Alumni-sponsored grants and scholarships support students through financial assistance based on different qualifications. This past year, ESF distributed \$39,000 in support to those who exhibited strong potential and need.





## The Office of Sustainability struck a balance between planning and implementation during the 2023-24 academic year.

Programs this year envisioned the ESF of the future, modernized programs to achieve higher levels of sustainability, and made visible changes to campus. This work enables community members and visitors to experience what makes ESF different than what is typically expected or seen elsewhere.







#### **Development of ESF's Sustainability Action Plan**

The Office of Sustainability led the development of ESF's first institution-wide Sustainability Action Plan (SAP) during the 2023-24 academic year. Over 90 campus stakeholders were interviewed as part of the process and the SAP Social was attended by more than 150 individuals, producing 4,100 tallies to help prioritize actions and generating over 170 comments detailing nuanced feedback.

#### **Launch of the ESF Resource Exchange**

The Exchange allows ESF faculty, staff, and graduate students to view all surplus property available for reuse on campus in real time and to post items that are no longer needed but have reuse value. The Exchange replaced an antiquated, inefficient email-based system. During the two-month period following its launch, 133 items were exchanged, 5,300 pounds of material were diverted from landfill and incineration, \$35,000 in value was recaptured, and 5,700 kg of CO2e was avoided.

#### **Pollinator Habitat Expansion**

The Office of Sustainability partnered with the Restoration Science Center to plan and install a number of pollinator habitats on the Syracuse campus during the 2023-24 academic year and summer. During the fall, over 500 pollinator friendly plants were installed along a main campus road. This planting was designed to host species adapted to gravelly and poor soils and features many unique and underutilized northeast natives like showy aster, broomsedge, and flax-leaved stiff aster.



# In January 2024, the offices of alumni relations, career services and development were aligned to form a new Division of Advancement.

The Division also includes the affiliated organizations of ESF College Foundation, Abby Lane Housing Corporation and ESF Alumni Association. The mission is to engage external audiences to promote and philanthropically support the institution and to provide resources for ESF students and academic programs.

#### **Strong Financial Growth**

As of June 30, 2024, total assets of ESF College Foundation equaled \$87 million as compared to \$81 million for the previous fiscal year. This 7.4% increase in asset growth is due to strong investment return coupled with nearly record fundraising results. The Foundation recorded cash donations of over \$5.4 million in fiscal year 2024, a 20% increase over fundraising results in 2023.

### **Engaging Alumni, Donors, and Corporate Partners**

Alumni Relations had nearly 24,000 interactions with alumni and the wider ESF

community. Social media, publications, events, and volunteer activities, highlighted the achievements of alumni, students, and the innovative research conducted by faculty. Donor stewardship activities continued to communicate the positive impact of philanthropy through program reports, events, and video. The annual Dale Travis Lecture Series brought over 250 campus and community members together to highlight FSF researchers. Career Servies increased the number of employers at our multiple career fairs. For the first time ever, Career Services hosted a campus engagement event to highlight the College's longstanding partnership with DEC, historically one of our largest employers and state-agency partners.

#### **Increased Support for Students and Academic Programs**

The Foundation awarded over 1,200 student scholarships totaling over \$1.7million and provided over \$2.6 million in funding for academic salaries, fellowships, travel, publications, and equipment. Career Services connected with more than 50% of ESF students through a record number of individual advising appointments and classroom presentations. The Fink Career Development Program provided students over \$65,500 in funding for career exploration activities.



Over the course of the 23-24 academic year, ESF moved forward with a plan to assess and advance the goals of our 2030 Academic Strategic Plan (found on the following page).

The pillars and initiatives associated with this plan are representative of ESF's focal points. The synergy of these goals, accompanied by continued collaborative and interdisciplinary events and actions, will continue to guide us in owning and living our mission.

We look forward to another successful year in 2024-25, with new student and employee initiatives and resources that help make ESF mighty.

### **ESF Strategic Plan**

The mission of ESF is 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.

VERSION 08/31/2023



#### IDEA+SJ & Sustainability: Meeting the Future

#### **Growing Opportunity & Excellence** for Student Success

- Institutionalize enrollment planning and develop a financial aid strategy
- 2. Grow enrollments in URM communities
- 3. Develop international student recruitment plan
- 4. Enhance the graduate student community
- 5. Increase access and affordability for all students
- 6. Increase retention rates and reduce time to degree
- 7. Establish transition programs for URM and 1st gen students
- 8. Establish lifelong learning opportunities in Open Academy with online degrees, certificates, and microcredential programs

- 1. Expand learning opportunities for a wide range of learners
- 2. Develop new programs in high-demand areas
- 3. Create a community of faculty with diverse pedagogies
- 4. Increase global fluency through expanded international opportunities
- 5. Develop customized student success supports
- 6. Provide experiential learning
- 7. Build partnerships with industry and gov't labs to promote professional grad degree programs
- 8. Rebuild ESF's assessment infrastructure. Revise CLOs to reflect what an ESF student is.

#### Transdisciplinary Scholarship & Research Expansion

- 1. Increase effectiveness of faculty research time
- 2. Grant-making success and research funding
- 3. Redesign and improve grad student funding process
- 4. Use the cluster hires to facilitate and encourage transdisciplinary scholarship and research opportunities.
- 5. Incentivize transdisciplinary scholarship and research productivity
- 6. Develop and maintain collaborative and reliable databases
- 7. Build partnerships with industry and gov't labs to enhance scholarship and research
- 8. Recruit more international Ph.D. students

- 1. Increase effective utilization of existing resources
- 2. Enhance the effectiveness of functions in HR, Business Office, CNS, and ORP
- 3. Increase revenue streams 4. Create a set of guidelines for instructional faculty teaching in non-degree programs to be based in the Open Academy
- 5. Establish a culture that allows faculty to stay on track for promotion and to grow external visibility
- 6. Create clearinghouse for all ESF funding for grads and undergrads to make sure nothing is left on the table
- 7. Identify resources to pay graduate assistants (GA/TA) a competitive wage

#### Intentional Cultivation of Community & Belonging

- 1. Make the ESF campus a welcoming environment
- 2. Enhance the ESF student experience
- 3. Make ESF a top place to work
- 4. Address deferred maintenance (SWOTs)
- 5. Build career advancement and leadership opportunities for faculty/staff
- 6. Promote and establish an inclusive workplace culture
- 7. Continue to explore work adaptation to the remote and hybrid concepts increasingly becoming common in the modern workplace

- 1. Advance commitment to external community connections
- 2. Grow sustained STEM career pathways in K-14
- 3. Create opportunities for civic engagement
- 4. Unite student outreach activities by reintroducing the ESF Science Corps umbrella
- 5. Enhance and engage in industrial and government partnerships
- 6. Increase ESF's visibility and external communication
- 7. Broaden community engagement through more frequent projects embedded in neighborhoods
- 8. Tie broadening community engagement to frequent open houses on campus

# 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.

