2017-2018 Annual Report
During my time working in administrative positions, first as the vice president for research at SUNY Upstate Medical University, and now as the interim president of ESF, I have developed a favorite catchphrase: “I see nothing but opportunity.”

This expression reflects that I am fundamentally an optimist, but I use it in two different ways. The first is retrospective and reflects my belief that the organization has tremendous potential — we just need to do things better or differently to unlock that potential. The second way is prospective in recognizing new opportunities to advance the mission of the College.

As I have begun to learn about the outstanding and diverse programs at the Syracuse and regional campuses and meet the remarkable faculty, energizing and bright students and dedicated staff, I see that there are boundless opportunities for ESF to increase its already large local, regional and international impact and reputation in environmental science. I believe this optimistic outlook is reflected in this Annual Report.

With the arrival of a new president, there is an opportunity to move beyond the difficulties of the past and refocus our collective efforts to eliminate friction points that frustrate and limit the success of our faculty and students. To facilitate progress, I have prioritized restoring and developing campus relationships with upper administration so we can harness our collective insight and creativity to advance the goals of the College in service to its strong mission. To help refocus the campus, SUNY Chancellor Kristina Johnson has asked us to identify several cross-cutting priority areas for additional investment from SUNY. These focus areas will help position the College for growth and greater impact in research, education and outreach.

We call this process the ESF Discovery Challenge.

Initiatives will be identified, with strong faculty input and ownership. I expect these initiatives to arise organically. They will leverage our strengths and position us to address the issues of the future. These initiatives will provide opportunities for fundraising beyond the initial investment from SUNY. The ESF Discovery Challenge will be driven by three advisory groups to the president: The Discovery Advisory Group will identify up to five target areas for investment. The People Advisory Group will examine our human resources (faculty, staff and students) and how they should be supported. The Ways and Means Advisory Group will draft a sustainable financial plan for the College. These advisory groups will convene this fall and are expected to complete their work by the end of the academic year.

One of the realities of the day for a small, doctoral-granting college such as ESF is that it is difficult to go it alone. For our entire history, ESF has had a very strong, high quality and mutually beneficial relationship with Syracuse University. Chancellor Kent Syverud and I are actively re-invigorating this relationship and our collaborative programs and services. In addition, over the coming year, we will examine additional opportunities to establish regional partnerships in education and research, but also to look at our operations to increase efficiency and quality of the services we deliver by establishing shared or cooperative regional service hubs.

I am proud and honored to have been welcomed into the ESF family. ESF’s work literally changes the world and in the process educates the next generation of global leaders in environmental science and sustainability. My door is open. My mind is, too. I am ready to listen and learn but, most importantly, I am ready to move forward to advance the goals of this great College.

I see nothing but opportunity.

*Dave Amberg*
On Campus

Amberg Named Interim President
Dr. David C. Amberg was appointed interim president of ESF by the State University of New York Board of Trustees, effective July 1, 2018. Amberg has served as vice president for research at Upstate Medical University since December 2014, overseeing the clinical, translational and basic research portfolios of the campus. During his tenure, Upstate Medical has seen three consecutive years of growth in research expenditures and a severalfold increase in clinical trial expenditures.

College Expands Reputation for Excellence
ESF continued to grow its reputation for excellence, earning a place on top-college listings issued by U.S. News & World Report, Forbes and The Princeton Review. ESF was included among the nation’s top “Cool Schools” by Sierra magazine, the national magazine of the Sierra Club. Sierra ranked the College at No. 4 among more than 200 schools surveyed. The Princeton Review echoed that sentiment, listing ESF as No. 2 among the nation’s “Green Colleges.” Money magazine gave a nod to the value of an ESF education, ranking ESF among the “Best Colleges for Your Money.”

Honors for Local Stewards
ESF honored two community stewards with the 2017 Sol Feinstone Environmental Award. The honorees were J. Andrew Breuer, principal of Hueber-Breuer Construction Co. Inc.; and Virginia Robbins, an attorney at Bond, Schoeneck & King.

Faculty, Staff Earn Recognition
Several members of the College community were honored for their accomplishments and contributions to their fields:

- Dr. James Gibbs of the Department of Environmental and Forest Biology and director of ESF’s Roosevelt Wild Life Station, was named a SUNY Distinguished Professor.
- Dr. Ralph D. Nyland received the 2017 Barrington Moore Memorial Award from the Society of American Foresters.
- Dr. Timothy Volk, senior research associate in the Department of Forest and Natural Resources Management (FNRM), was named the College’s Exemplary Researcher for 2018-19.
- Dr. John Wagner, a professor in FNRM, received the 2018 ESF College Foundation Award for Exceptional Achievement in Teaching.
- Six ESF employees received the SUNY Chancellor’s Award: Ron Giegerich, instructional support specialist for the Roosevelt Wildlife Collection; Dr. Karin E. Limburg of the Department of Environmental and Forest Biology (EFB); Timothy R. Toland, of the Department of Landscape Architecture; Jane Verostek, associate librarian; Dr. Alexander Weir of EFB; and James Wheeler, clerk 2 in the Office of Business Affairs

College Bestows Honorary Degree, Fetes Alumni
Dr. Eleanor J. Sterling was presented with an honorary degree during Commencement ceremonies in May. Sterling is the chief conservation scientist at the American Museum of Natural History’s Center for Biodiversity and Conservation, and an affiliated professor at the museum’s Richard Gilder Graduate School. During the December Commencement, Graduate of Distinction Awards were bestowed upon Thomas Balsley ’68, Dr. Thomas Moorman ’91 and Dr. Isabel A. Munck ’02.
ESF Creates Office for Experiential Learning and Outreach

In January, ESF created the Office for Experiential Learning and Outreach (OELO) headed by Director Ann Moore. The office has added professional management of ESF’s Sponsors for Educational Opportunity partnership and the Puerto Rico service-learning initiative with SUNY this summer. OELO oversees existing and potential academic opportunities that prepare students for real-world experiences at the community level, while supporting student growth and engagement activities that provide the skills sought by employers.

College Creates Office of Inclusion, Diversity and Equity

In February, ESF created the Office of Inclusion, Diversity and Equity (IDE), led by the College’s inaugural chief diversity officer, Dr. Malika Carter. The new office absorbed the Student Diversity and Inclusion Office in addition to adding ESF’s first Title IX coordinator and Affirmative Action officer, Amy I. McLaughlin. The IDE office handles IDE issues across all ESF campuses and communities.

Sustainability: Hallmark of ESF

ESF takes a holistic approach to sustainability, including environmental, societal and economic considerations, not just environmental sustainability or financial sustainability. Sustainability is not an add-on obligation at the College. It is a strategy to achieve existing goals, not a goal in and of itself. The American Association for Sustainability in Higher Education’s Sustainability Tracking, Assessment and Rating System (STARS) is ESF’s primary roadmap and the most comprehensive sustainability framework for institutions of higher learning. ESF has achieved a STARS Gold Rating, putting the College in the top tier of institutions in the country. ESF remains on the “Path to Platinum” status, aiming for the highest STARS level.

Recent major sustainability accomplishments have included the following:

- Reduced energy costs by 50 percent.
- Put a combined heat-and-power system into operation.
- Formed a rapid-response Energy Conservation, Development and Controls Unit.
- Installed more than 10,000 LED lights.
- Installed Lucid, a new building-level energy management system.
- Launched a new waste management and recycling system.
- Embarked on development of the College’s first energy master plan.
- Committed to participating in a SUNY large-scale renewable energy project.
- Received funding for a geothermal study for the Syracuse campus.
- Hosted the first SUNY Leaders’ Sustainability Summit.
- Helped draft SUNY sustainability goals.

ESF Leads Fight against Harmful Algal Blooms

Governor Andrew M. Cuomo visited the ESF campus in December to announce a $65 million, four-point initiative to aggressively combat harmful algal blooms (HAB) in Upstate New York. In March, the College hosted one of four regional HAB Summits to bring together experts, stakeholders and community members to develop tailored action plans to address the problem. The College continues to be active in HAB research with several projects ranging from molecular ecology to lake modeling currently underway.
SUNY CHANCELLOR KRISTINA M. JOHNSON SPOKE IN OCTOBER AT THE SUSTAINABILITY SUMMIT.

INTERIM PRESIDENT DAVE AMBERG TOOK OFFICE JULY 1.
**Academic Offerings Expand**

In line with ESF’s institutional strategic goal of developing academic offerings that strengthen the College's mission, while contributing to long-term sustainability, several new degree programs went through the SUNY and New York State Education Department (NYSED) approval process. A major success story is the approval of a new online B.S. degree program in sustainability management. This program illustrates both ESF's expanding offerings in the sustainability subdiscipline and the College's improving online education capacity. Other new degree programs approved by ESF Academic Governance and now undergoing review by SUNY and NYSED include a Master of Engineering in environmental resources engineering; M.P.S., M.S. and Ph.D. programs in bioprocess engineering, paper engineering, biomaterials engineering, wood science and construction management; and a Professional Science Master's-qualified M.P.S. in sustainable engineering management.

**Partnerships Grow**

The development of an international footprint is one of ESF's strategic objectives. In the last year, a multiyear 3+1 collaborative articulation agreement was signed with Beijing University of Chemical Technology (BUCT) in Beijing, China. This covers a B.S. degree program in bioprocess engineering at ESF. The first group of about 40 students from BUCT arrived in August 2018 to spend a full academic year at ESF.

ESF also explored partnerships with local institutions of higher education, expanding the College's reach beyond its long-term relationship with Syracuse University. An exchange in academic registration for accessory instruction was conducted with Le Moyne College, where a pilot “Passport” program was completed in the spring of 2018. This program involved cross-registration of Le Moyne students in ESF courses, and ESF students in Le Moyne courses, without exchange of fees.

**Initiatives Launched**

Activities in the Office of the Provost and Executive Vice President included the following major initiatives:

- Established the Council of Department Chairs to facilitate decision-making on academic issues, while enhancing communications between senior administration, department chairs and faculty. This initiative has been well-received and has been successful in engaging chairs and ensuring the input of chairs and faculty in the academic decision-making process.

- Consolidated all ESF’s General Education (Gen Ed) offerings in mathematics, social sciences, humanities, mathematics and English language writing in a new Gen Ed unit under the Department of Environmental Studies. This initiative will streamline the administration of ESF’s Gen Ed offerings for enhanced academic quality, efficiency of delivery, effectiveness and broadening of offerings.

- Initiated an “all funds” budget-planning process in the Division of Academic Affairs to improve budgeting efficiency while capturing all sources of funds for effective financial planning and funds utilization.

- Developed a strategy for increased research output and productivity in close collaboration with the vice president for research. The strategy includes initiatives to attract top graduate students (particularly Ph.D. students) in support of faculty research, streamlining ESF’s research portfolio by developing niche areas that take advantage of defined areas of strength and competitive advantages, attracting faculty with excellent promise in research and scholarship, increasing extramural funding, and increasing international collaboration and partnerships in research and scholarship.
ESF Researchers Publish 200+ Articles, Abstracts
As testament to ESF’s commitment to research, faculty and staff combined for some impressive numbers during the 2017-18 fiscal year. ESF researchers:

- Published more than 200 peer-reviewed journal articles and abstracts.
- Obtained three patents.
- Submitted three new technology disclosures.
- Had nine patents pending.
- Were involved in 347 sponsored projects with more than $14.3 million in research expenditures.

In addition, ESF was awarded more than $15.6 million in new funding for research. Dr. Kim Schulz, a biological limnologist in the Department of Environmental and Forest Biology (EFB), has received $362,065 to research and monitor invasive species in freshwater systems across New York state. This research will help to provide essential information to New York state as it develops strategies to deal with invasive species.

ESF faculty and staff participated in projects with researchers around the globe in locales including Italy, Canada, Greece, Mongolia, Mexico, Russia, Ecuador, French Polynesia, Haiti, Kuwait, Sweden, China, Namibia, Japan and New Zealand.

The following are among the outstanding ESF research projects that garnered attention both within New York state and around the world and were featured in media:

- Dr. James Gibbs is participating in efforts to **restore the Floreana giant tortoise** — a species that drew interest from Charles Darwin and that was long believed to be extinct — in the Galapagos National Park. Gibbs is an ESF conservation biologist who is also co-director of the Giant Tortoise Restoration Initiative coordinated by the Galapagos National Park Directorate and Galapagos Conservancy.

- The endangered **Chittenango ovate amber snail** is being helped back from the brink of extinction by an ESF project. The snail is found exclusively alongside Chittenango Falls in Central New York. Research technician Cody Gilbertson is part of an effort, involving funding from state and federal agencies and two zoos, in which snails are raised in an ESF lab and the population at the falls is monitored.

- A **synthetic protein** that disrupts the ability of bacteria to perform basic life functions could be a key to fighting infectious disease and preventing bacteria from evolving into drug-resistant pathogens. Dr. Benjamin R. Lundgren, a postdoctoral researcher at ESF, and Dr. Christopher Nomura, a professor of chemistry and vice president for research at ESF, contributed to a study published in the journal Scientific Reports.

- Two members of the ESF community — undergraduate Mike Jorgensen and Dr. Jose Giner, an associate professor of chemistry — published a paper in the prestigious Journal of the American Chemical Society that **reported a discovery** with the potential to help advance the field of medicine, particularly the study of cancer.

- Dr. Karin E. Limburg of EFB was part of a team of scientists from GO2NE (Global Ocean Oxygen Network) that published a **paper in Science** asserting that the world needs to rein in both climate change and nutrient pollution because of decreasing oxygen levels in the world’s oceans.
THE CHITTENANGO OVATE AMBER SNAIL IS THE SUBJECT OF RESEARCH AT ESF.

PROFESSOR JAMES GIBBS (R) AND TEAM MEMBERS WORK WITH GALAPAGOS TORTOISES.
INTERNATIONAL EDUCATION TOUCHES 60 NATIONS
The Office of International Education (OIE) represented ESF in more than 60 countries around the world during the 2017-18 academic year.

The College enrolled 161 international students while serving a total of 214 international students/scholars. International students made up 29 percent of the graduate student population. International students came to ESF from 47 countries in Asia, Europe, North America, Central America/Caribbean, Australia/Oceania and Africa.

ESF sent its highest-ever number of students abroad — 144 — in 2017-18. ESF students were diversified in where they chose to study abroad, with more than 20 countries represented.

For 2018-19, OIE expects 60 to 70 new international students to enroll in the College.

ESF RESPONDS TO DISASTER RECOVERY
ESF has been active in disaster-relief efforts across the Caribbean region.

Students formed Acorns2Action (named for the campus mascot, Oakie Acorn) in October 2018 to support communities affected by natural disasters. They donated cash and supplies to communities in Dominica, and to the Mexican Red Cross, Regrow Puerto Rico, the St. John Community Foundation in the U.S. Virgin Islands, and ViequesLove in Puerto Rico.

Mark Lichtenstein, ESF chief of staff and chief sustainability officer, presented testimony to the U.S. Congress and U.S. Virgin Islands Senate about the status of disaster response and recommended disaster debris management. Lichtenstein is a member of SUNY Chancellor Kristina Johnson’s Puerto Rico Task Force and was invited on an advance team visit to Puerto Rico in February to develop collaborative opportunities for SUNY with universities in Puerto Rico. He also attended a select gathering of the Clinton Foundation for the launch of the Clinton Global Initiative, Post-disaster Recovery Network in Miami in April and led a discussion about waste and debris management.

STUDENTS HELP REBUILDING EFFORTS IN PUERTO RICO
More than 25 ESF students traveled to Puerto Rico this summer to join rebuilding efforts after last year’s hurricanes. They contributed more than 1,000 hours of service work.

In May, an ESF contingent joined students from SUNY Albany and SUNY Maritime College as part of the New York Stands with Puerto Rico Recovery and Rebuilding Initiative inspired by New York Gov. Andrew Cuomo. The group traveled to Puerto Rico aboard SUNY Maritime’s training ship Empire State IV and was housed aboard the ship during the four-day stay on the island.

In addition, ESF hosted the first of SUNY’s five, two-week service trips. Ten ESF students worked at the Toa Baja site helping the relief organization All Hands and Hearts with deconstruction and demolition. One student worked on roofing in the mountain municipality of Barranquitas.

SUSTAINABLE COMMUNITY BUILDING IN HAITI UNDERTAKEN
ESF is part of a statewide collaboration on a sustainable village and learning community in Haiti that will provide resources and services for the town of Arcahaie.

The W.K. Kellogg Foundation awarded SUNY a nearly $800,000 grant to develop educational, economic and social programs, resources and services through a multi-organizational process. Third-year landscape architecture graduate students in a design studio co-taught by associate professors Maren King and Emanuel J. Carter Jr. completed a master plan for the 40-acre site. The students’ work provided a foundation for a final master plan being developed by an interdisciplinary team that includes members of the ESF faculty.
ESF students Billie Holecek (L) and Rachel Lynn Juritsch use rocks to help rebuild a bridge in Puerto Rico.
Chancellor’s Awards Honor Outstanding Students
Two ESF undergraduate students were honored with the 2018 Chancellor’s Award for Student Excellence. Jet’aime “Jet” Lewis of Murrieta, California, and Benjamin “Ben” Taylor of Panama, New York, received the award. Lewis majored in environmental biology; Taylor majored in environmental resources engineering.

Division of Student Affairs Meets Needs
ESF’s Division of Student Affairs strived to meet the needs of students not only academically, but socially, mentally and professionally.

The Peer Tutoring program provided a record number of tutoring hours (4,192) during the fall 2017 semester and near-record numbers (2,076) in spring 2018. The program provides individual/small-group tutoring and large-group tutoring by qualified undergraduate and graduate students.

ESF students’ commitment to community service continues to grow with 2,298 students participating in some form of service through clubs and service-learning. ESF has partnered with more than 160 community organizations, allowing the College to offer a wide array of opportunities to students while providing an invaluable service to the Onondaga County community.

Student Affairs continues to assist students with career development. The 2018 Environmental Career Fair was ESF’s largest to date, with 94 employers attending to talk with students about internships and recruit for their respective organizations and companies. More than two-thirds of the employers were represented by ESF alumni, which allowed the students to see themselves in a specific career.

Since its inception in the fall of 2016, ESF’s Counseling Services has seen a substantial increase in demand for services. From spring 2017 to spring 2018 there was a 23 percent increase in office visits and a 50 percent increase in walk-in crisis appointments. To meet the students’ needs, a third full-time counselor was added to the College’s Counseling Services this semester.

Under the leadership of Senior Assistant Dean Mary Triano, ESF received a three-year $300,000 grant from the Office of Violence Against Women to focus on sexual assault reduction strategies.

Athletics Charts Successes
Cross-Country – The men’s and women’s cross-country teams both placed second at the USCAA National Championships. Junior Marissa Lathrop was fifth overall, qualifying for the USCAA All-American First Team. Freshmen Mark McClanahan and Tom Keenan finished 11th and 12th overall, earning spots on the USCAA All-American Second Team.

Soccer – The ESF men’s and women’s soccer teams both qualified for the USCAA National Championships. The women played in the tournament semifinals. They won the Hudson Valley Intercollegiate Athletic Conference Championships for the second year in a row and finished the season with a 13-3 record. The men’s team lost both games in group play. The men finished the season with a 12-6-1 record and were the HVIAC regular-season champions.

Basketball – The men’s basketball team finished its season with a 5-14 record but wrapped up the year in a big way with a game in the Carrier Dome against Davis College.

Timber Sports – The ESF Woodsmen’s team, which competes in traditional timber sports, finished first at all three competitions this past spring. The men’s team finished in second place at Dartmouth.

Bass Fishing – ESF anglers Patrick Durand and Ben Schultes finished 11th at the YETI/FLW Eastern Conference Collegiate Qualifier and earned a spot in the FLW National Championships this summer.
SHANNON GORDINIER (L) AND MARISSA LATHROP RECEIVED THE SUNY CHANCELLOR’S SCHOLAR-ATHLETE AWARD.

BEN TAYLOR WAS THE STUDENT SPEAKER AT THE 2018 COMMENCEMENT.
ESF College Foundation and Office of Development Report Growth

The ESF College Foundation was the beneficiary of another strong year of increased contributions and investment return. As of March 31, 2018, total assets of the Foundation equaled $75.9 million, a 6.5 percent increase in assets over the fiscal year that ended June 30, 2017. The Foundation’s endowment now stands at over $37 million.

The Foundation was pleased to welcome two new development staff members this year. Leah Tuck joined the staff as an additional major gift officer in September. Tammy Schlafer was hired in November to fill the newly created development officer position focused on annual giving.

The efforts of the development staff resulted in an increase in giving this year. The Foundation recorded approximately $3.3 million in donations in fiscal year 2017-18 as compared with $2.3 million the previous year. Notable gifts included a $1.3 million unrestricted alumnus estate bequest, over $600,000 in support for the American Chestnut Research and Restoration Project, over $300,000 for waterfowl and wetlands conservation, and over $100,000 for student career fellowships.

In 2017, the Foundation completed a $1 million fundraising effort to create a named endowed professorship in wildlife science. A search was completed this year for the inaugural Camp Fire Conservation Fund Professor. Dr. Jerry Belant will join the ESF faculty this fall.

The Foundation development program compares well among SUNY peers. A recent SUNY Fundraising Report ranked ESF 12th among 32 comprehensive colleges for total dollars raised in fiscal year 2015-16. The same report cited the Foundation as having the fourth-lowest percentage of income spent on operating expenses among SUNY campus-related foundations. This indicates that the majority of funds raised provide direct benefit to ESF students and academic programs.

The Foundation’s subsidiary organization, Abby Lane Housing Corp., completed a bond refinancing project for the ESF student residence, Centennial Hall. By achieving an independent credit rating through S&P, the housing corporation was able to lower the overall debt service and move to a fixed rather than variable rate debt payment. This effort was undertaken to maintain reasonable housing costs for ESF students.

Roosevelt Wild Life Collections Education and Research Center Nears Completion

The Roosevelt Wild Life Collections Education and Research Center, under construction in the Gateway Center to provide secure, modernized and expanded facilities for ESF’s renowned Roosevelt Wild Life Collections, is nearing completion.

Supported by $2.2 million in state funding and $610,000 in grants from the National Science Foundation and the Institute of Museum and Library Services, the 5,000-square-foot facility is expected to be finished this year. Dr. Rebecca Rundell of the Department of Environmental and Forest Biology and head curator, is the principal investigator on both grants, which will also be used to fund the training of students in modern museum and biodiversity research techniques.

The center contains a classroom to accommodate 24 students in hands-on activities, with museum cabinets to safeguard specimens used in biodiversity research and organismal biology classes. The center also has a lobby/gallery area, laboratory space, and a collections and examination space. Visitors and students will be able to watch from a viewing area in the hall as Ronald Giegerich, collections manager, and undergraduate and graduate student trainees work on bird, mammal and parasite specimens.

The growing collections, which comprise more than 10,000 specimens, will be databased, moved to the new space and housed in new, state-of-the-art, compactorized museum cabinets. Freshwater and marine fishes, reptiles and amphibians will remain in the collection’s existing space in Illick Hall.
**Advocacy Efforts Succeed**

Several ESF advocacy efforts were successful in the 2018-19 New York state budget cycle, resulting in $620,000 in new funds to the college.

ESF’s Center for Native Peoples and the Environment, a project in partnership with the New York State Department of Environmental Conservation, received $350,000.

The College received $120,000 for a second year of legislative support of its Adirondack Interpretive Center in Newcomb. This project was in partnership with Paul Smith’s College, which also received funding for its Center.

Dr. William Powell’s American Chestnut Research and Restoration Project received $100,000. This is the fourth year of state funding for this project.

Dr. Melissa Fierke and Dr. Steve Shaw were awarded $50,000 through the state Senate’s Task Force on Lyme and Tick-Borne Diseases to monitor seasonal variations of ticks in Western and Central New York. The goal is to help provide a better understanding of how disease transmission risks are changing. The study will also provide public information to better explain the risks of tick exposure.

In addition to the new funds noted above, approximately $31 million was restored to ESF’s capital budget to support renovations to Marshall Hall, which are expected to begin within the next year.

**Inclusion, Diversity and Equity Marks Progress**

Inclusion, Diversity and Equity efforts involve three core drivers: pipelining, climate, and professional development and training.

Inclusion (climate) - After a year of IDE messaging and related campus activity, the University of Southern California’s Equity Institute will provide an eight-week institute for 20 ESF leaders that includes 90-minute virtual modules taught synchronously one day weekly. Modules include:

- Advancing Racial Equity in a Mostly White Context.
- Reducing Stereotype Threat and Microaggressions in the Classroom.
- Inclusive Pedagogy and Classroom Transformation.
- Reducing Implicit Bias in the Search and Hiring Process.
- Responding to Feedback on Being Perceived as Racist without Becoming Defensive.
- Dismantling Persistent Racial Equity Problems in STEM Diversity (professional development and training).

ESF’s president and chief diversity officer teamed up with the National Alliance on Mental Illness by signing on with the CEO Against Stigma campaign. The goal of this campaign is to create stigma-free, more productive learning and work environments, encourage understanding of mental health conditions and eliminate misconceptions and fear of disclosure.

Equity (pipelining) – ESF has made strides in increasing equitable pipeline talent. The summer of 2018 marked the inaugural Mercy Works SYNERGY Summer Internship Program. The strategic partnership between ESF and Mercy Works Inc. targets goal-oriented minority students from Syracuse who are enrolled in an undergraduate college program. Students learned skills to advance their academic and professional careers, and to contribute to the future of Central New York’s workforce and community. The program also encourages students to consider graduate study at ESF.

The College is working to enhance internship and research opportunities for a diverse student body.
LEGAL WORK FOCUSES ON PARTNERSHIPS, AUXILIARY
Kevin M. Hayden, associate counsel at ESF, handles all legal matters for the College, including reviewing procurement matters, contracts, affiliation agreements and Freedom of Information Act requests. He provides guidance on issues relating to employee grievances, disciplinary matters, Title IX claims and campus policies. He works to ensure compliance on topics involving revocable permits, website accessibility, high school education, vehicle and drone usage, and student health matters. His work during the 2018-19 academic year will include:

- Renegotiating the contract with Syracuse University.
- Working with the president’s team to identify and create agreements with other academic institutions.
- Reviewing, editing and negotiating international affiliation agreements with several foreign institutions.
- Continuing to identify and address areas of vulnerability on campus.

TECHNOLOGY UPDATES UNDERTAKEN
ESF began implementation of its $2.4 million Ellucian Banner Enterprise Resource Planning system to replace a number of the College’s home-grown and outdated information technology systems. This project will transition ESF to an integrated system that will enable students, faculty and staff to use the latest technologies that are consistent throughout the SUNY system, leveraging technology to enhance the student experience. The system will be fully operational by June 2020.

ENROLLMENT PLAN IMPLEMENTED
In an effort to help stabilize the College’s fiscal condition, several offices across campus embarked on a plan to increase the incoming first-year and transfer class. As a result, this fall the College enrolled an additional 75 students (a 13 percent increase) over the previous year, including 38 students as part of ESF’s partnership with Beijing University of Chemical Technology. This was accomplished without sacrificing student quality. Nearly 90 percent of the first-year students ranked in the top 25 percent of their class.

ESF welcomed 643 new students this fall, including a record first-year class of 392. The first-year students come from 22 states; 23 percent are students of color. An additional 201 students signed on as transfer students, with 50 students enrolling at the Ranger School.
Dr. Allison Oakes (L) works with Dr. William Powell on the American Chestnut Research and Restoration Project.

Cynthia Coleman (L), Rose Bear Don't Walk, Kaya Deerinwater and Annie Sorrell were among the ESF faculty, staff and students celebrating Indigenous People’s Day.
The Ranger School to Wrap Up SUCF Project
The Ranger School, in the Adirondacks, prepares students for field technician jobs in various environmental careers. Over the past four years, an average of 72 percent of students had jobs waiting upon graduation. The great majority of graduates find employment in New York state.

Led by Dr. Mike Bridgen as director, the Ranger School offers three programs: forest technology, land-surveying technology, and environmental and natural resources conservation, each with its own professional advisory committee. Ranger School programs are transferable into compatible B.S. programs at the ESF campus in Syracuse. The process of moving seamlessly into advanced forestry programs within the same institution is unique among forestry education programs in the United States.

A $2.3 million State University Construction Fund (SUCF) project that began in 2017 is expected to be completed in 2018. This will increase building security, and improve the infrastructure of storm and sanitary sewers and the energy efficiency of the physical plant building.

The Ranger School has a legacy of involvement in the community and region. That practice was exemplified in January, when U.S. military troops from Fort Drum conducted a training exercise on the Ranger School’s 2,800-acre Dubuar Forest. About 400 soldiers participated.

Cranberry Lake Biological Station Hosts Nearly 200 Students
During this past summer, ESF faculty and staff at the Cranberry Lake Biological Station facilitated two sessions with 158 students and another 36 students in electives courses. Winning projects for the EFB202 Shields awards are on the Moon Library Digital Commons website. They range from dispersal of a gall-forming mite to factors influencing presence of clubmosses. Nearly $10,000 in scholarships was awarded to nine students. The CLBS staff, led by Dr. Melissa Fierke, director and academic program coordinator, looks to continue raising funds for a sustained source of scholarship.

CLBS also hosted a one-week program for 14 high school students through OCM BOCES. The program is a condensed version of the three-week EFB202 class, with hands-on learning and a research project. The station also hosted graduate students from Indiana State University for a long-term study (32 years and counting) of white-throated sparrow genetics and behavior as well as two ESF graduate students, one studying bats and beavers and the other studying myrmecophilous plants.

A different view of CLBS is presented by Zoya Baker, who recently received her MFA at Hunter College. She studied ethnobotany with Dr. Robin Kimmerer in 2016. This short film has won a multitude of awards and is a lovely example of a summer at CLBS.
**Newcomb Campus: SUNY’s Field Station**

Adirondack Ecological Center – ESF operates “SUNY’s Field Station” at its Newcomb Campus in the Adirondacks. The Adirondack Ecological Center (AEC) partners with more than a dozen SUNY campuses in innovative research and education. At the Newcomb Campus, students experience hands-on learning and acquire 21st century skills in science and communication, and receive career training in natural resource management, land use planning and other topics related to environmental issues.

In the last year, AEC published more than 27,000 records on ecological phenomena at the Newcomb Campus. A National Science Foundation-funded Environmental Data Initiative fellowship enabled documented datasets for ecosystem change analyses. Acting on the knowledge that forest stewardship relies on cross-disciplinary thinking, an ESF biology and forestry team will help New York landowners sustainably manage for economic and ecological values, combat invasive species and maintain wildlife habitat.

For more than 45 years, the Newcomb campus has been a center of acid precipitation research and monitoring as part of the National Acid Deposition Program. The AEC is expanding to study global environmental change impacts on New York’s social, ecological, and economic systems and began a five-year, NYSERDA-funded project to assess atmospheric pollution, mercury and other parameters. Beyond the boundaries of the campus, the staff at the AEC, which is in the center of the Champlain-Adirondack Biosphere Reserve, organized and hosted a regional conference, attended a UNESCO meeting in Italy, and is developing a partnership with Canadian reserves. Through a program called Practical Ethics for Forestry Professionals and Students, ESF serves forestry career professionals across the Northeast; the AEC leads initiatives integrating ethics into required trainings at meetings, conferences and campuses and in the field.

**Huntington Wildlife Forest** – The Newcomb Campus recently completed a series of timber harvests to facilitate teaching, research and demonstration. Different management systems are demonstrated, showing methods that not only regenerate forests but also enhance growth rates for the future, all providing sustainably managed forests. The various management systems also provide numerous opportunities for researchers to study everything from forest regeneration to songbirds to small mammals, among other topics. The demonstration areas will serve not only as field sites for academic tours but also as sites for research and learning activities involving forest management.

**Warrensburg Campus Hosts DEC Camp**

Since 1997, ESF has partnered with the DEC to provide facilities at this campus' Pack Demonstration Forest for the DEC Environmental Education Camp. The long-standing partnership has been renewed for five years. The DEC provides programming to approximately 350 children, ages 11-15, each summer on an array of environmental topics. The DEC maintains the camp facilities; ESF manages the property for other teaching, research and demonstration activities.

**TIBS focuses on St. Lawrence River ecology**

The ESF Thousand Islands Biological Station (TIBS), on Governor’s Island in the St. Lawrence River, hosts a research program focusing on the aquatic ecology of the river, with an emphasis on fisheries, wetlands, limnology, invasive species and ecological perturbations. The TIBS research program advances scientific inquiry to guide management activities and understand impacts affecting the ecosystem. Faculty, staff and students from a variety of institutions are attracted to the unique nature of the river that is the natural outlet to the Laurentian Great Lakes. Graduate and undergraduate student projects, with the support of faculty, provide a diverse research portfolio supported by extramural grants. Local outreach activities maintain a strong ESF connection to the St. Lawrence River community and provide opportunities for information exchange.

Dr. John M. Farrell, TIBS director, manages more than $2 million in extramural funding that supports a postdoctoral fellow, staff and seasonal undergraduate student employees and six graduate student employees in the area of aquatic ecology and fisheries.

There were several significant research accomplishments in conservation of fisheries and aquatic habitats in 2017-18. Research support remains strong with a five-year contract with the DEC through the Environmental Protection Fund. Work with the DEC focuses on ecological monitoring, and understanding the effect of water levels on habitat, wetlands and fish reproduction. TIBS continues a three-year contract with the U.S. Fish and Wildlife Service Fish Enhancement, Mitigation and Research Fund. Work is proceeding on the Fish Habitat Conservation Strategy with the Fish and Wildlife Service. This is an effort to enhance fish populations through addressing reproduction bottlenecks with habitat restoration measures.
**Southern Properties**

ESF’s Southern Properties comprise a diverse array of ecosystems and facilities used for education, demonstration and research.

**Heiberg Memorial Forest** — The 3,800-acre Svend O. Heiberg Memorial Forest, 20 miles south of Syracuse, serves as an outdoor classroom and laboratory for teaching, demonstration and research by faculty, students and staff. It is frequently used for recreation by members of the public. Sustainable forest management is practiced year-round by a full-time staff that assists in producing a variety of forest products that generate a revenue flow for the College. These products include maple syrup, Christmas trees, firewood and sawlogs. The production processes are studied by the forest economics class each spring. In 2017-18, the College staff produced 660 gallons of syrup and sold 140 Christmas trees and 175 tons of firewood.

**Tully Field Station** — About 20 acres at the Tully Field Station hosts research on willow biomass crops, including the longest-running trial of willow in the United States. Willow research began at the site in 1986. Willow biomass crops are being developed as a sustainable source of woody biomass for the production of renewable heat, power, biofuels and bioproducts. In addition, research on shrub willow has focused on using these plants as living snow fences, and for stream restoration and remediation of former industrial sites. Tully is also the site of an annual timber sports competition hosted by the ESF Woodsmen’s Team, and will be the location of an athletics facility for the ESF Mighty Oaks, with a soccer field now under construction. The local high school hosts cross-country meets at the property.

The field station is also home to 2½ acres of plantings that are part of the American Chestnut Research and Restoration Project, headed by Dr. William Powell. The research team installed new fencing, worked to improve the irrigation system at the site and plans to soon nearly double the plantings, which are part of an effort to restore the magnificent tree to its native range in the eastern United States.

**Lafayette Road Experiment Station** — Located within the city of Syracuse, the Experiment Station houses the College arboreta and plays an important role for students learning to identify woody plants, regardless of their major. On-site glasshouses and a tree nursery provide facilities for graduate students and faculty to conduct research.

Powell and his chestnut team this year expanded plantings of American chestnut seedlings at the station; the researchers are now moving toward making improvements to the facility’s irrigation system.

The station is home to the ESF community garden managed by the Sustainability Office, which oversees a student work program and volunteers from the Green Campus Initiative group who maintain the garden. The site includes an organic vegetable garden, a small fruit tree orchard, a grape arbor and berry bushes. A unique permaculture planting contains more than 40 types of edible trees, shrubs and other perennial plants, grown together as a woodland ecosystem, or “edible forest garden.” Established in 2010, it is the first of its kind on a college campus in New York and one of the first nationwide. The garden is used for demonstration and teaching in ESF’s food studies minor and has served as a study site for several graduate and undergraduate research projects.

The field station also hosts the Woodsmen’s Team practices.
THE RANGER SCHOOL IN WANAKENA, NEW YORK, PREPARES STUDENTS FOR FIELD TECHNICIAN JOBS.