

ESF Discovery Challenge: Pathways to a Sustainable Innovation Strategy

September 10, 2018

From late 2014 through early 2016, the ESF community engaged in extensive efforts to define a new strategic plan that moved past the last strategic plan “Vision 2020,” adopted by the College in 2003. Although this recent process did not result in a new, formalized strategic plan, a tremendous amount of work and insight from faculty, staff, students, and administration led to a number of information-rich documents, finally culminating in the document titled: “VISION 2020 UPDATE, Bridging From 2016 - 2020 and Beyond.” This “Bridging” document identified eight Environmental Challenges and extended seven visionary goals originally identified in the 2003 “Vision 2020 Plan,” with the addition of an eighth goal to focus on diversity and inclusion.

In his capacity as ESF’s Interim President, and in preparation for the next phase of ESF’s future, Interim President Amberg has been asked by SUNY Chancellor Kristina Johnson to lead a process by which the campus – with strong faculty leadership and ownership – will identify three to five cross-cutting challenges/initiatives (Discovery Challenges) designed to build on the College’s strengths, assets, and partnerships to position it for future growth, enhanced prominence, increased funding streams, new academic/industry/government relationships, and true global impact. Chancellor Johnson introduced this concept to the ESF community at a Syracuse campus Town Hall meeting on June 6, 2018. She has asked Interim President Amberg to expedite this process, largely in consideration of the College’s fiscal needs.

These Discovery Challenges will engage a broad spectrum of College stakeholders to drive inter-disciplinary approaches that integrate research, education, and outreach in creative ways that will amplify the impact across ESF’s mission, and further distinguish ESF as **The** College of Environmental Science and Forestry; a premier destination for environmental scientists and the best students interested in becoming tomorrow’s visionary leaders in environmental, conservation, and sustainability research, education, practice, and policy.

Three advisory groups will be established over the coming weeks to advise Interim President Amberg, who will be an ex-officio member of each group. These groups will identify and develop strategies to support and actualize several priority areas:

- **Discovery Advisory Group:** This group will have the responsibility of identifying a set of cross-cutting initiatives that will further distinguish the education, research/scholarship, and outreach portfolios of the College and position ESF for growth, excellence, and impact.
- **People Advisory Group:** This group will look at the human assets of the College, as well as its educational programs and how they are supported, its faculty and research staff and what is required to maximize their competitiveness, and what ESF needs to improve to retain and recruit the most talented faculty, staff, and students.
- **Ways and Means Advisory Group:** This effort will build a financial strategy for wise investment of the College’s resources to maximally empower faculty, staff, and students to undertake the most creative scholarship and learning.

Proposed areas of investment will be cross-cutting and prioritized based on their grounding in the strengths of the College, its faculty and partners, and the “opportunity space” they create. Opportunity space is multi-faceted and includes:

- 1) How investing in this area will prepare ESF’s students to be successful future leaders in environmental sciences and engineering, management, practice, and policy;
- 2) The availability of external funding to support and drive research that addresses pressing real-world problems and that will inform policy;
- 3) The ability to create new opportunities for inter-disciplinary collaborative partnerships with other academic institutions, governmental agencies, nonprofit organizations, and private industry;
- 4) The ability to engage environmentally conscious philanthropists;
- 5) Enhancement of the reputation and stature of ESF; and
- 6) Global impact to create sustainable environments in which human populations can thrive.

The Discovery Advisory Group

Building on prior work, a Discovery Advisory Group will prioritize three to five Discovery Challenges as strategic areas for initial investment by SUNY Administration. Each of these areas will be targeted for an investment of up to \$200,000 per year for three years from SUNY with additional efforts being employed to attempt to match these dollars. This group will use the criteria outlined above to rank the Discovery Challenges in order of impact, relevance, and importance to ESF and its constituents, with a focus on global impact. Interim President Amberg also asks that this group go beyond these three to five areas – as the group sees fit – to rank and identify additional Discovery Challenges to seek future additional funding to support.

This advisory group will be co-chaired by Dr. Chris Nomura, Vice President for Research, and Dr. Don Leopold, Chair, Environmental and Forest Biology, and Dr. Tim Volk, Forest and Natural Resource Management. Interim President Amberg asks that Academic Governance choose two members to represent Academic Governance and help advise him on additional faculty members from a list of faculty thought-leaders on campus. We seek to obtain faculty representation from each of the eight departments with gender and identity balance, and representation from both junior and senior faculty levels. He also asks the Academic Department Chairs to nominate two Chairs from the Council of Chairs, and that the Undergraduate Student Association and Graduate Student Association each nominate one member from their ranks. Additional Administrative members will participate, but this group will consist of a majority of faculty members.

The Discovery Advisory Group will be convened in the month of September and is expected to submit a report and recommendations to Interim President Amberg prior to the December holiday break. The group report should contain the following sections for each proposed area of investment:

- 1) A description of the discovery opportunity;

- 2) A discussion of each of the faculty members who will be engaged in the opportunity, and how they will contribute and the prior work they have done that positions them to push the initiative forward;
- 3) Detail regarding how the initiative will engage these faculty members in cross-cutting, trans-disciplinary, and collaborative projects;
- 4) A description of degree and graduate programs that will be impacted, the opportunities for new degree and graduate programs, and how these will better position ESF students for career advancement and leadership in environmental science, practice, and policy;
- 5) A list of agencies, partners, and funding entities either currently interested in funding research, education, and outreach projects in the initiative area or anticipated to become interested in funding in the initiative area in the future;
- 6) A description of how the initiative will either expand current partnerships or create new partnerships with other academic, government, and private organizations;
- 7) A description of how the initiative will increase the utilization of ESF assets including, and in particular, properties beyond the Syracuse campus;
- 8) How investment in the initiative will positively affect ESF's reputation and have global impact including how the College's work in the area would inform policy decisions; and
- 9) A description of new investments required to move the initiative forward over a three-year period leading to financial sustainability by year four.

The People Advisory Group

The greatest asset of any academic institution is its people: alumni, faculty, staff, and students. The framework of the institution exists to empower its people to reach their full potential for performing and supporting cutting edge research, education, and outreach that has a global impact. That framework includes facilities, programs, infrastructure, and staff expertise. The task of the People Advisory Group is to focus on the things that will empower the College's faculty and students to achieve at the highest levels and that will position ESF to recruit the most innovative faculty, staff, and students to drive ESF to be the leading College focused on the health of the planet.

Areas of inquiry, focus, and advisement for this group include the following:

- **Facilities:** Does ESF have the modern educational and research facilities needed to tackle current and emerging challenges in environmental basic and applied science that integrates with the educational imperatives of the College? If current facilities are lacking, what should be the priorities for rehabilitating space and/or should additional facilities be constructed? Are current facilities being optimally used for the benefit of research and education, including the College and College Foundation properties and holdings beyond the Syracuse campus? If some facilities are under-utilized, develop strategies for increasing utilization. Do ESF students and researchers have access to the latest technology through instrumentation and core facilities and are those facilities adequately supported by knowledgeable staff or faculty? Are the facilities optimally configured to engage and educate the public and other stakeholders (private and governmental) on the activities and impact of ESF

through outreach programming? Are there additional opportunities to share facilities, equipment, or space with partners?

- **Faculty:** Does ESF have the faculty it needs to drive impactful research and educational programs that will solve current and future environmental problems, train tomorrow's environmental leaders, and inform/impact global environmental policy? What can ESF anticipate in regards to future faculty retirements and how should this be addressed by a succession plan? Is there excess teaching capacity within the faculty that could allow for reductions in the reliance on visiting professors and instructors? In what areas should ESF focus for future faculty hires keeping in mind the areas proposed by the Discovery Advisory Group? What is a reasonable package to offer to new faculty candidates so that ESF can compete for the best talent with other academic institutions? What are the needs for faculty development in research, education, and public engagement as well as promotion practices and incentives that drive excellence? What does ESF need to do to retain its star faculty and what is being done to groom faculty to be prepared to assume leadership positions within the College? What should the College do to ensure that ESF provides an accepting and supportive environment for its faculty with diverse identities?
- **Students:** What does ESF need to do to position and market itself to attract the brightest and most creative students interested in environmental science, practice, management, engineering, and policy from across the country and the world? Does the College have the correct constellation of degree and certificate programs that match the interests of today's learners and that will position them for career success? What are potential new degree and certificate programs that ESF should consider establishing that will increase the success of its students and attract the best students to the College? Is the curriculum being delivered in the most efficient and effective manner? How can the College increase its engagement with distance learners through on-line offerings and what programs are well positioned to provide on-line offerings? How well is the College retaining its students and what should it do to increase retention? Is the College environment conducive to individual satisfaction, performance, and good health—mental and physical? What should the College do to ensure that ESF provides an accepting and supportive environment for its students with diverse identities?
- **Staff:** Enterprise-wide, is the staff right-sized to support the expectations to maintain and sustain a world-class environmental education and research institution? What can ESF anticipate in regards to future staff retirements and how should this be addressed by a succession plan? Is compensation competitive for retaining and recruiting talented and dedicated staff? Is the organizational structure optimized to provide clear direction, accountability, and high responsiveness? Does ESF provide the right job training and career advancement opportunities for staff? Are College facilities supported by staff with the proper technical skills? Is ESF ensuring the health and safety of staff?

The People Advisory Group will proceed in concert with the Discovery Advisory Group, beginning its work in September with a target date for completion prior to the December

holiday break. This group will be co-chaired by Dr. Nosa Egiebor, Executive Vice President and Provost, Dr. Lindi Quackenbush, Chair ERE, and Dr. Jacqui Frair EFB. Dr. Malika Carter, Chief Diversity Officer; Dr. Anne Lombard, Vice Provost and Dean for Student Affairs; and Erin Craig, Associate Provost for Enrollment and Marketing will further represent Administration, but other Administrators might become involved as needed to advise on specific areas of concern. The Council of Chairs is asked to nominate two members from their ranks. Academic Governance is asked to choose two members to represent Academic Governance and help advise on additional faculty members from a list of faculty thought-leaders on campus. We seek to obtain faculty representation from each of the eight departments with gender and identity balance, and representation from both junior and senior faculty levels. The group will include two members from classified and two members from non-classified staff units. The Undergraduate Student Association and the Graduate Student Association are each asked to nominate two members. The report from this group should address the four areas outlined above, and the questions enumerated in each area. It is expected that a summary will be produced for the current state of each area, the desired end-state within a three- to five-year window, and a set of recommendations to drive ESF to that desired end-state. Finally, the group should summarize how these recommendations and changes will positively impact the College's proposed efforts in the five Discovery Challenges proposed by the Discovery Advisory Group.

The Ways and Means Advisory Group

The Ways and Means Advisory group is charged with mapping and projecting a pathway to a sustainable financial future for ESF that simultaneously invests in and empowers the faculty, staff, and students to engage in innovative research, education, and outreach. Integral to this process will be identifying and analyzing options for the range of student services ESF provides, including those currently provided to ESF students by Syracuse University. This group is encouraged to be particularly creative in identifying potential new regional partners for faculty, staff, and student services including the potential to realize savings for services currently provided solely by ESF through regional partnerships. Possible second-party relationships include with Cornell University, Lemoyne College, Onondaga Community College, SUNY Oswego, SUNY Upstate Medical University, Syracuse University, and others. In addition to shared services, other areas of focus for this group include:

- Developing a proposal to take the campus to an all-funds budgeting process and enterprise-accounting system with centralized authority and control under the President, Chief Financial Officer, and Executive Vice President and Provost. This includes a comprehensive understanding of all sources of expenditures and revenue so that the College can get to a transparent, fair, and supportive process for the allocation of resources.
- Creating a plan for sustainable growth of undergraduate and graduate programs that simultaneously anticipates the pressure points in those academic units and facilities (labs and classrooms) impacted. This plan needs to be well-informed in right-sizing faculty and facilities expansion to ensure students continue to have a high-quality experience and the faculty have the resources they need to support those students. Programs that may be under-subscribed but that have a high potential for career and workforce development should be targeted for growth. A

perfect example are the programs in Paper and Bioprocessing Engineering. The Interim President seeks enrollment growth across all departments and programs of the College.

- Completing a survey of space including its current functionality, how it is allocated, and its utilization. Given that space is at a premium, a fundamental principle must be that all space is College space, and that the goal should be to maximally utilize space for the good of all of programs and activities. A short- to medium-term plan will be developed with recommendations for space allocation, including a transparent process that allows the College to make nimble decisions.
- Developing a plan for rehabilitating space to meet the current needs and to support the initiatives that will be identified by the Discovery Advisory Group. The research and education space needs will be mapped into the next 5 to 10 years that correlates with the College's growth strategy. This plan could include a proposal for new construction. In addition, the plan should address investment in new technology and instrumentation to provide the faculty and students with access to and training in state-of-the-art approaches.
- Analyzing the size and organizational structure of Administration using data and information from comparably sized, highly functioning academic institutions, while also recognizing the unique nature of the Ph.D.-granting, and research-focus of ESF. The group should make recommendations for right-sizing and an organizational structure that supports accountability, transparency, and inclusion as well as fast-paced yet, high-quality decision-making.
- Building a planning and financing strategy for the three to five initiatives identified by the Discovery Advisory Group. The initial SUNY investment is up to \$200,000 per year for three years for each targeted area, but the financial plan needs to plot a course to sustainability by year four. This group will also need to interface with the People Advisory Group to incorporate into the financial strategy the investments required to meet the human resource needs for each initiative.

The Ways and Means Advisory Group will initiate its work in October when a Chancellor's representative member to the group will become available. This group will be co-chaired by Dr. David Newman, Professor of Resource Economics and Policy, Dr. Gary Scott, Professor of Paper and Bioprocess Engineering and Director Division of Engineering, and Joseph Rufo, Chief Financial Officer and Vice President for Administration. Academic Governance will be asked to choose two members to represent Academic Governance and help advise on additional faculty members from a list of faculty thought-leaders on campus. We seek to obtain faculty representation from each of the eight departments with gender and identity balance, and representation from both junior and senior faculty levels. The Council of Chairs will nominate one member from their ranks. Representation will be sought from the Foundation, Development, and Business offices. Additional Administrative members will participate as required to address specific issues of concern. The Undergraduate Student Association and the Graduate Student Association are each asked to nominate one member each. Other *ex officio* members will be drawn from potential academic partners (Lemoyne College, Onondaga Community College, SUNY Oswego, Upstate Medical University, and possibly others) as needed

for specific meetings and topics. The Interim President asks this group to complete their charge by May 1, 2019.

At the time of completion, the intended purpose of this information will be related to the depth and breadth of our activities and responsibilities that will inform the campus community, alumni, friends of SUNY ESF, and state leaders of the efforts underway to reaffirm our commitment and service to various constituencies, while critically examining our challenges and aspirations.

Expected Outcomes for All Advisory Groups

For each proposed action, each Advisory Group should provide the following:

- *Suggested administrative oversight for each action:* Each action item should have attached to it the suggested office(s)/person(s) that are responsible for initiating and providing oversight of the action.
- *Resources and/or source of resources for each action:* These include cost estimates of both fiscal and human resources needed for the implementation of each action.
- *Outcomes implied for each action successfully completed:* Each action should be followed by an identified potential outcome, suggesting that if the action is successfully completed that the stated outcome will be achieved.
- *Actions relation to information attained in the assessment:* Each action should include a note regarding how the action relates to any specific challenges identified.
- *Progress to date:* An action item should be marked with an asterisk (*) if the action is proposed for implementation or with a check mark (✓) if the action is currently supported by ESF.
- *Timeline:* The timeframe should indicate when – in measurement of year(s) – an action will be completed.

It is expected that there will be a number of targeted sub-groups formed including faculty, staff, students, and others that will look at specific issues. The work of these subgroups will feed into one or more of the aforementioned advisory groups. A complete overview of this Discovery Challenge process, advisory group members, group reports, related resources, co-chair contact information, frequently asked questions, final reports and other appropriate links will be found at <http://www.esf.edu/president/>