



The College of Arts and Sciences has undertaken an intensive self study to define the institution we want to be in 10 years. Using information gathered through departmental self studies, structured interviews of key University stakeholders and iterative discussions in retreat with College leadership, we developed a shared vision for the College to 2030.

We identified the knowledge and resources we have to address important societal problems through both education and research, and we recognized three constellations of intellectual strength that have impacts and synergies across the University. The three constellations are:

**Digital Revolution and Beyond** - While ensuring digital literacy of our students and faculty, we are developing the next technologies that go beyond the digital using quantum science. In addition to applying these technologies, we recognize the need to anticipate the ethical, political, economic, and societal consequences of their use.

Global Processes, Connections and Flows - Environmental disruption on a global scale is creating health disparities, economic and power inequalities, stresses on natural resources, and migration crises. Stony Brook faculty and students across disparate disciplines are converging to provide technological and social solutions to these complex problems.

**Scholarly Creativity and Exploration** - Our College is the incubator for knowledge creation. We must continue to explore new ideas and communicate complex issues in ways that challenge our students to imagine solutions to future problems using a multitude of disciplines. This constellation respects the individuality of every discipline while identifying themes that run across disciplines, which students can use as a navigational aid for education and career preparation.

These constellations of excellence are guiding our research to be more convergent in order to achieve even greater impact than in the last decade. We are undertaking curriculum innovations that will educate our outstanding students to help secure the well being of present and future generations.

A narrative of the shared vision process and our activities to date is provided in the following pages. We have harmonized recommendations from across the University to generate principles for investment and development that will ensure we continue to provide the best education for our students and engage them in important research questions. You may learn more about our work on the College website, which includes videos and updates on current progress.

Thank you for reading,

Nicole S Sampson

Distinguished Professor

Nicola Ssamp

Dean, College of Arts and Sciences

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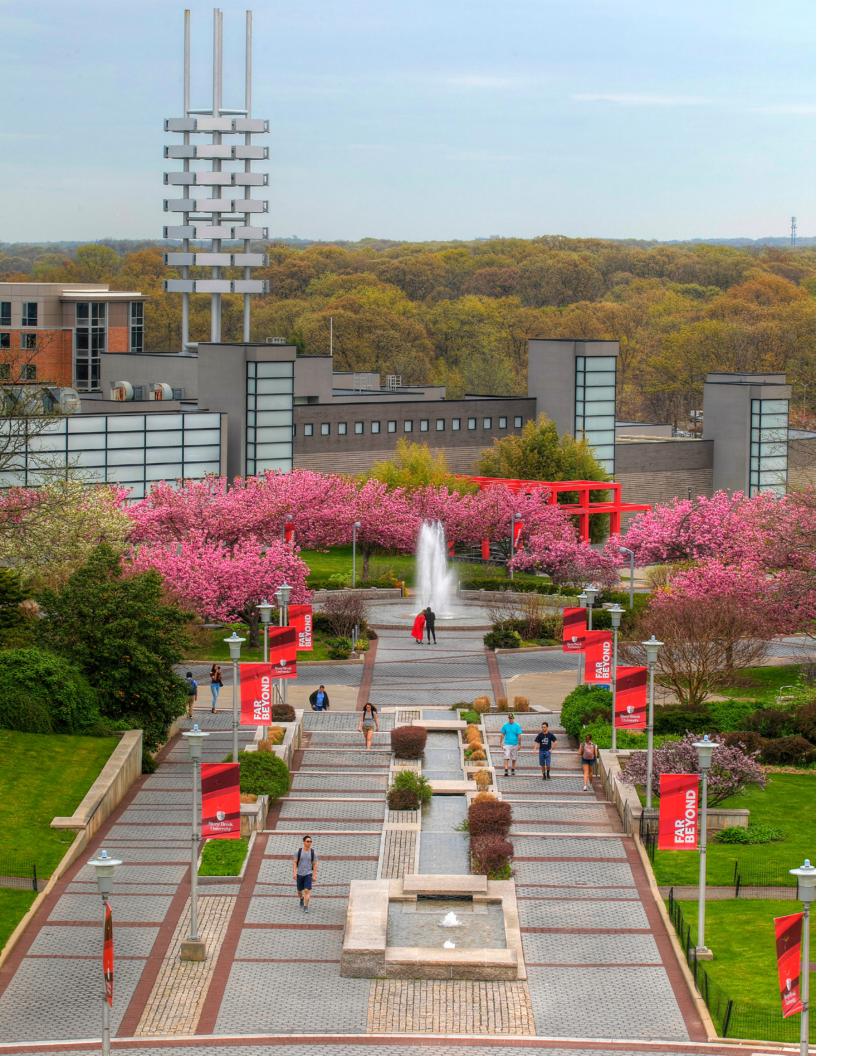
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Glenn Page, Sustainametrix, Inc.

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# THE CRITICAL DECADE AHEAD

Higher education's challenges are not going to disappear, and the next 10 years will be as complex and dynamic as the last for Stony Brook University. We will continue to use this opportunity to push innovation and reshape higher education, leapfrogging our competitors. An integrated College of Arts and Sciences will be nimble and surefooted and will thrive where others may not survive. Over the course of the last 18 months, we have worked collaboratively with all members of our community to develop a shared vision, guided by three constellations of scholarship and education. With these defined, we move forward into the new decade prepared to work together to bring this vision into being while supporting faculty, ensuring student success and diversifying our community.

Our unified vision for the College is to transform navigation through the college experience; we will encourage ourselves and our students to transcend disciplines by finding connections between areas that may have previously been obscured. As a strong research entity, we are deepening the integration of our research with student education. We are in the middle of a conversation about our future students and what their education should be in a global, dynamic, diversified world.

In order to continue to navigate this journey, we are guided by principles for decision making. The following page describes **eight** principles that emerged through our shared vision process. The principles for the College provide transparency for understanding operational decisions ranging from personnel hiring, staffing and course prioritization to communication and philanthropic priorities. By leading with these principles, we will continue to build momentum for a potential institution-wide strategic plan that will lead to an institution-wide master plan.

# THE PRINCIPLES THAT GUIDE OUR NAVIGATION



## **Empower Scholarly Convergence**

We will work to ensure sufficient investment to navigate the future using our three constellations of faculty and student scholarship. We will use landmarks that are disciplinary and that span the disciplines. This navigation entails integrating knowledge, methods, and expertise from different disciplines and forming novel connections to catalyze discovery and innovation to address society's biggest challenges.



### **Appreciate the Disciplines**

Our College's disciplines provide rigor and depth of experience essential for future discovery and innovation. The disciplines provide a gravitational pull as we orbit and explore new galaxies. We will continue to support exploration and evolution of our disciplines while relying on their moorings to foundational knowledge.



### **Enable an Innovative Culture**

Creating convergence by networking intellectually-diverse scholars will develop novel ways of framing research questions and open new research vistas. Larger convergent teams are the present and future, and we will develop effective ways of engaging across disciplines in ways such as supporting seed grants, workshops and team teaching.



## **Master Planning for Convergence**

We are committed to master planning our human capital, buildings and grounds in a way that supports our innovative culture and allows fluid and integrated staffing, research, outreach and education. For example, we will embrace state and federal goals of clean and sustainable energy and build with principles of regeneration.



### **Adaptively Learn**

We are navigating uncertain terrain. We need to be agile and willing to fail in order to learn. The current map is not the only path. We will assess, pivot and reset direction when necessary because new ideas, knowledge and stars lead to new directions. This requires maintaining perspective and ongoing reflection.



## **Develop Competencies**

New competencies are required for navigating a dynamic and rapidly changing higher education system. We will support continued personal, academic and professional growth for students, staff and faculty that includes exploration of knowledge, theories, tools and methods, data analysis and communication technologies as they become increasingly requisite in the search for transcendent answers to society's challenges.



### **Chart Our Path Collaboratively**

We will map future actions with core stakeholders, such as federal, state, and local officials, University leaders, business partners, the private sector and alumni. This collaboration will allow us to motivate and secure investment in support of our constellations and institutional future.



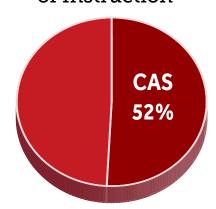
### **Sequence and Prioritize Mindfully**

We are conscious that pace, direction and speed are all critical for transformational change. Everything cannot be done at once. This mindful approach requires balance between operating in the current system and succeeding in transforming systems for the future.



Charles B. Rangel **Graduate Fellows** 

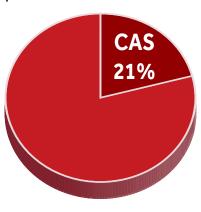
359,614 Credit Hours of Instruction





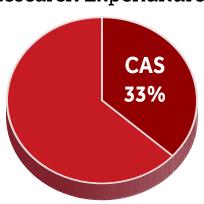
2019 NSF Graduate Research Fellows

\$54MM Endowment



Data from stonybrook.edu/irpe and SBF

\$55MM College Federal Research Expenditures



**DEPARTMENTS** 

**PROGRAMS** 

CAS

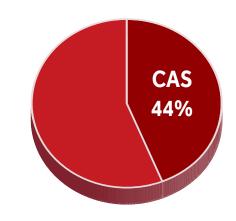
60%

1295 Arts and Sciences

**Doctoral Students** 

**Goldwater Scholars** 

452 T/TT FTE Faculty





2019 Fulbright Fellows

120,000 Alumni

**Endowed Chairs** and Professors

CAS 67%

## **NAVIGATING** THE NEXT **DECADE**

The Stony Brook College of Arts and Sciences, like many colleges of arts and sciences across the AAU, has faced a number of challenges in the past decade. We find ourselves at a pivotal moment for research universities as we must move away from the 19th and 20th century models of how we educate, create new knowledge and solve societal problems. State governments, in general, are reducing investment in public higher education. Yet it is the mission of state universities to continue to provide affordable access to an excellent education that enables our graduates to thrive in our changing world. Public higher education is at a critical juncture, and the reality of budgets at Stony Brook University show that we, too, are at this juncture.

This level of disruption provides an opportunity for transformative change. Stony Brook has been immensely successful since its founding in 1957. We have a reputation for outstanding research and affordable excellence and seek to continue to do so in the current global landscape in which we find ourselves. Examples of global vistas include:

- Agenda 2030 Sustainable Development Goals on the global horizon
- the National Science Foundation has defined the Ten Big Ideas
- on the regional near-horizon, the New York State Climate Leadership and Community Protection Legislation has targeted using 50% renewable energy by 2030.

This document is a navigational aid for building our reputation in specific areas of existing strength within this landscape. As a College, we have prioritized the intellectual areas that we want to pursue as three constellations of convergence representing our academic vision. We cannot pursue everything at once, but there is willingness from many in the College to think in new ways and pursue high quality collaboration. What follows is a history of the process the College has undertaken to navigate through these stormy times toward new horizons that include how we educate, research and mentor in a convergence culture to address global priorities and challenges.



In July of 2018, the new College Dean inherited a situation rife with mistrust, anger and fear. The undergraduate majors in Pharmacology, German, Theater Arts, Comparative Literature and Cinema and Cultural Studies had been suspended, along with the Cultural Analysis and Theory and Cultural Studies graduate programs. An unhappy merger of the Cultural Studies and Comparative Literature, European Languages, Literatures and Cultures and Hispanic Languages and Literatures departments was paused. In preparation for a new leader, the College's departments produced selfstudies. While incredibly informative, their production had made the already siloed departments even more so.

Recognizing the urgency of dismantling the silos and rebuilding trust in College leadership, the Dean deliberately built a faculty <u>leadership team</u> that drew from across departments and disciplines. Through a multi-month process of listening and collaboration, this new leadership team identified numerous challenges and recognized that the College can transcend these challenges, thriving when it is integrated, innovative, and nimble.

The College is confronting these challenges in the context of a wider, national crisis in public higher education. For example, in the last few years, enrollment issues have closed departments and small colleges across the country. In January 2019, the Modern Language Association did a review of languages in higher education and found that, as of 2017, more than 650 language programs had closed. Languages are not the only departments facing such challenges, and indeed, colleges and universities are likely to see lower enrollments across the board. Demographic data shows that the population of college aged children is declining, particularly in the Northeast. Finally, public support for higher education is at a historic low. The changes we are proposing are vital for the success of the College.

In this context of both national and College-wide upheaval, the leadership team set about establishing clear communication among all stakeholders of the College and University with the purpose of developing an integrated mission. Over the course of Fall 2018-Spring 2019:

- the Dean held small group interviews with four chairs at a time, which allowed the chairs to hear the challenges, stories, anxieties and opportunities of other departments while sharing their own
- the Dean's leadership team organized and held three full-day chairs' retreats that allowed the chairs to develop a shared vision for the future built on the history and present of the College
- the Dean's leadership team undertook focused and facilitated interviews with University-wide leadership that allowed the entire team to identify points of synergy across the University beyond the College's disciplinary boundaries
- the operations of the College were examined and charted, and the resulting information was shared with departmental leaders
- in March 2019, the Dean presented the College's initial vision to the University Council, asking for support and investment at the Presidential level
- to engage all stakeholders and reach beyond administrative structures, working groups of faculty at the junior, mid and senior level were formed. They were given an intentional structure to develop the constellations of concepts that had emerged from departmental leadership retreats and self-studies. Their reports became the map for this document. Because this is a forward-looking and aspirational process, we intentionally engaged junior faculty so they could shape the Stony Brook landscape where they will be senior researchers 10 to 20 years from now.

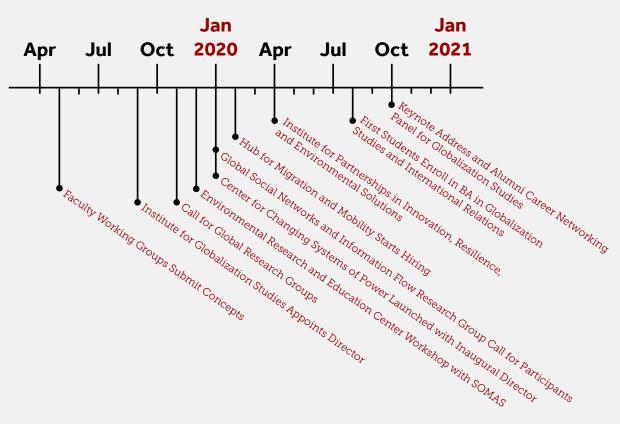


Through this listening and reflective work came the shared vision for the College and a rebuilt sense of trust. By the end of the 2018-2019 academic year, the faculty working groups had each produced concept papers and many reported out via <u>video</u>. The Dean's leadership team further harmonized these materials to articulate the three constellations of the College. It is these three constellations that will guide us to 2030.



## GLOBAL PROCESSES, CONNECTIONS AND FLOWS

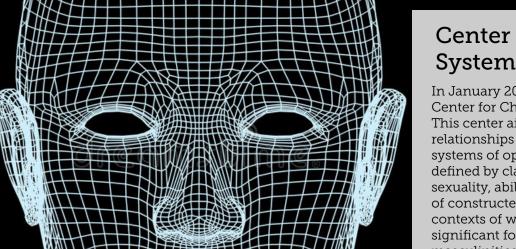
Our graduates and future generations will face the consequences of environmental disruption on a global scale that is already creating health disparities, economic and power inequalities, stresses on our natural resources and migration crises. To address the causes of disruption and to deal with its devastating ethical and logistical consequences, students of the 21st century need to be educated as global citizens with the intellectual and experiential wherewithal to understand the interconnectedness of political, ecological and social systems, to compete successfully in the global marketplace, and to engage as responsible citizens of the world. Stony Brook faculty and students will converge across disparate disciplines to provide technological and social solutions.



## BA in Globalization Studies and International Relations

In Fall 2020, the College will admit the first majors in the new Globalization Studies and International Relations major. This innovative interdisciplinary BA program combines academic perspectives from the humanities, social sciences, natural sciences and engineering to study, research and create knowledge on globalization and transregional issues. As part of the major, students will complete a set of core courses that each combine theoretical and experiential components. Students are required to either participate in a semester Study Abroad program or to complete a semesterlong internship in an institution, business or government agency that engages directly with the student's area and issues specializations. This cutting-edge program will educate leaders in globalization issues, international service, diplomacy and activism, in addition to preparing students to pursue graduate study in a wide variety of fields, from diplomacy and consulting to research journalism and social entrepreneurship.



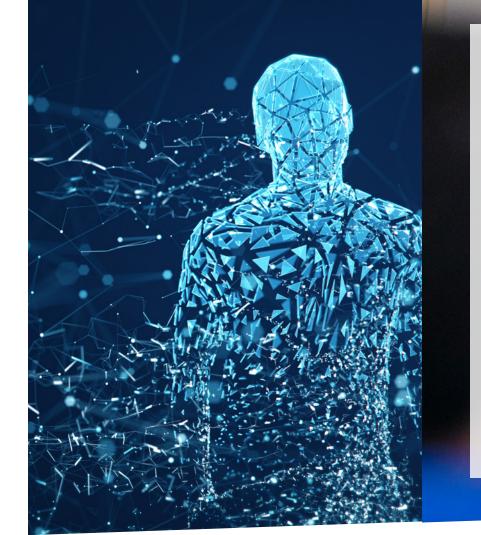


# Center for the Changing Systems of Power

In January 2020, the College launched the Center for Changing Systems of Power. This center aims to illuminate interlocking relationships between inequality and multiple systems of oppression, axes of domination defined by class, gender, race, ethnicity, sexuality, ability, geography, and other markers of constructed difference as embedded in contexts of wealth, poverty and power. A significant focus will be on studying men and masculinities, the impact of patriarchy along with misogyny, and hegemonic behavior and the resulting inequality, oppression and domination. It will provide a place on campus for discussion and research on activism, social justice, and inequality.

# DIGITAL REVOLUTION AND BEYOND

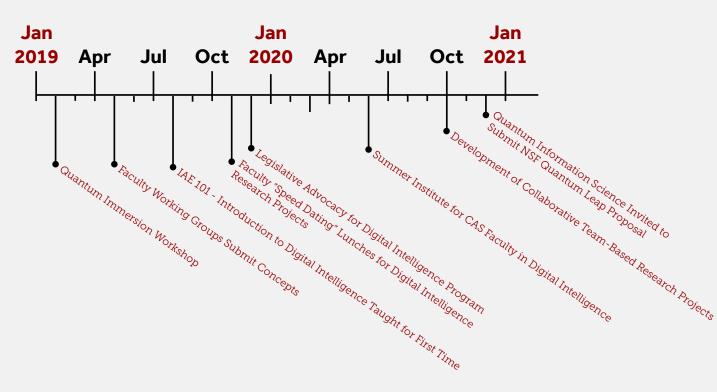
Our students, staff and faculty must be digitally literate. New computational tools have the potential to answer fundamental questions in the disciplines as well as in transdisciplinary areas. Our stars in quantum information science and quantum materials are driving the next revolution in technology. Our cross-disciplinary convergence is crucial for moving fundamental computational discoveries into applications that allow fresh approaches to problems, and for understanding the ethical, political, economic and societal issues surrounding the technologies at hand.

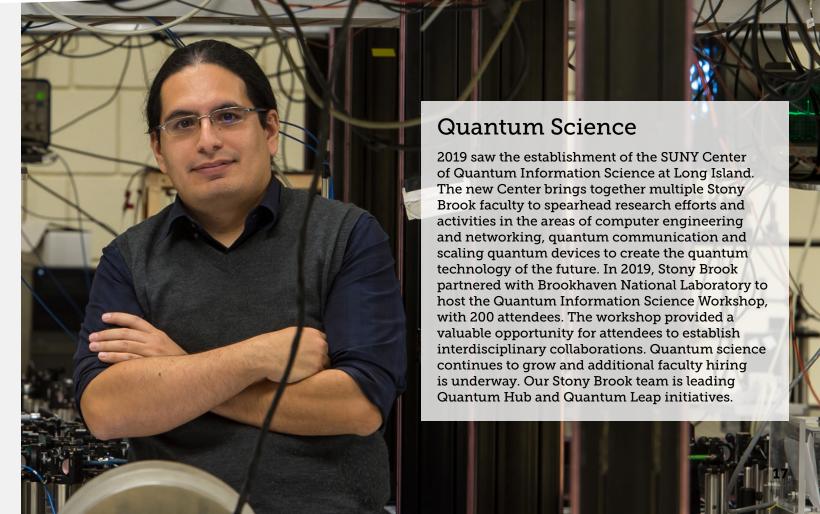


# IAE 101: Introduction to Digital Intelligence

In Fall 2019, the Digital Intelligence training program, a collaboration between the Colleges of Arts and Sciences and Engineering and **Applied Sciences** and the Institute for Advanced Computational Science, launched its introductory course, IAE 101: Introduction to Digital Intelligence. The first of its kind in New York State, the Digital Intelligence training program is designed to educate students in preparation for today's high tech marketplace by creating new programs that cross the engineering and arts divide through the incorporation of arts, humanities and social sciences disciplines. The interdisciplinary approach of IAE 101 blends emphasis on technological aptitude, data literacy and the human touch - creativity, empathy and ethics - thereby providing today's technologyfocused students the broader skill set required for today's high tech jobs. The course was well-received in its inaugural offering; one undergraduate Psychology major stated, "IAE 101 gave me a wider perspective on how humans and technology are guided by each other."







## SCHOLARLY CREATIVITY AND EXPLORATION

In an increasingly complex academic world, the most creative thought is not bound by a single discipline. A critical task of the College is to nurture such creative thought in the faculty of today and the future, and to teach and communicate complicated ideas to our students. We will educate students by engaging them with problems within a discipline, as well as helping them transfer knowledge from one domain to another. This constellation respects the individuality of every College discipline while identifying themes that run across those disciplines. We are using these themes to provide our students, both undergraduate and graduate, navigational aids for their education, research, and career preparation.



### **Pathways**

Stony Brook proudly provides social movement for students from low-income families, first generation students and under-represented students. Perpetuating this requires investing in our undergraduates and providing them innovative ways to move through the College and to connect them to opportunities to make a difference once they graduate.

To ensure our continued excellence in this area, we are restructuring aspects of undergraduate education. We are actively defining pathways through the College's general education requirements (the SBC curriculum) that integrate the arts and humanities with STEM education to improve student success. For many of our undergraduates, the SBC requirements can seem like a laundry list of disconnected courses. As educators, we recognize that the most effective learning happens when our students make connections between the disciplines, seeing for the first time the relevance of their English class to a course they are taking in Neurobiology.

To facilitate moments of inspiration, we are supporting a number of initiatives that are based on strengths already present on campus. These curated pathways include themes such as Mind/Body/Brain, or Food, Taste, Culture. In drawing on our existing courses and faculty research strengths across the disciplines, our hope is to make education more legible for our students while promoting further growth among our faculty and providing incubators for intellectual development.



# 

### Origins and Exploration

Recent advances in mapping the sky and probing the Universe beyond Earth, both with large sky surveys from the ground and space and with targeted satellite missions, have revolutionized our understanding of the Universe and its planetary systems. This has created a new interdisciplinary arena of research that pushes the envelope of observations, technology, data management and analysis, and theoretical physics. Universities with appropriate facilities and faculty who are poised to compete in the analyses of these samples will be at the forefront of planetary sciences and exploration - analogous to the situation when Apollo samples were returned some 50 years ago.

Ensuring that recent investments in laboratories at Stony Brook remain at the cutting edge, building on those investments and forging collaborative connections may provide the vehicle for Stony Brook to participate, and indeed be a leader, in this endeavor. In addition, the search for life elsewhere in our solar system and plans for expanding human exploration to the Moon, Mars, and perhaps beyond open up important questions related to issues such as ethics, international law and human behavior that are well suited for a truly interdisciplinary approach.





In 2018, a new fiscal year had just begun. The organization of the next academic year was set, and a hiring freeze was in effect. Thus, we had the opportunity to imagine longer term solutions to challenges as we reoriented our processes. Throughout year one's listening and visioning process, we recognized systemic and organizational challenges that would impede the implementation of the vision we were developing. Some of these challenges were expected, some were surprises, some were unique to Stony Brook, and some were part of larger national trends. These challenges were the sparks that inspired the College to come together and the fuel for our collective creativity.

### **Budget**

The budget crisis was not new and could not be solved with a singular injection of funds. We had to change the way we were doing business. We recognized the process for developing a budget and allocating funds had to be a transparent partnership, and all our departments needed individualized, realistic, measurable and achievable goals.

### **Enrollments**

Declining enrollments in the arts, humanities, and lettered social sciences is a nationwide trend that all institutions must address. At the moment, these trends have been exacerbated at Stony Brook, widely known for its excellence in the STEM fields. As our shared vision emerged, it became clear that our most visionary faculty came from **all** departments. The constellations were unidentifiable without the inclusion of the entire College, and to support the College, enrollments must be balanced.

# Economics Diversity Doctoral Fellowship

Thanks to the generosity of an Economics alum, we are starting a Graduate Fellowship Program for qualified underrepresented students whose immediate academic plans include obtaining a doctoral degree in Economics. Stony Brook is deeply committed to the recruitment. retention, and success of diverse students in its competitive graduate degree programs. The immediate mission of the Fellowship program is to increase the representation of students of diverse social backgrounds traditionally underrepresented in Economics, including women, in Stony Brook's Economics graduate program. The long-range goal of the Fellowship is to encourage Fellows to assume their responsibilities as future leaders, educators and researchers here in the United States.

The Fellowships offer an additional \$75,000 of support over five years and a reduced teaching load after Advancement to Candidacy. This support includes summer research support, moving expenses, computers and books.

### **Centers**

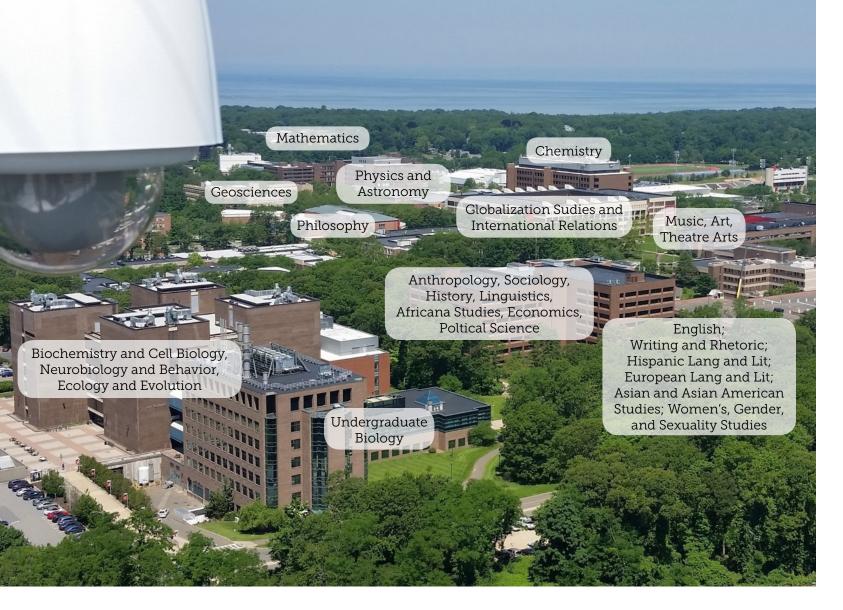
Our numerous centers are a valued part of the College and home to convergent research. Yet, we saw several entrenched problems amid centers affiliated with the humanities and social sciences departments. Among these, we identified a lack of communication among the centers, minimal staff support, variable student engagement and an isolation of center directors allowing for precarious single points of failure.

### **Diversity**

The face of Stony Brook's student body is incredibly diverse, and it is a point of pride for the institution. The faces of the faculty, however, do not reflect this diversity. This is a national issue in academia; the "leaky pipeline" problem is well documented, as are its impacts on research productivity and student success. This lack of diversity simultaneously grew out of existing challenges and created new ones.



In the following pages, you will read how we met these challenges head on, applied our navigational principles, and never lost sight of our constellations. Though no single challenge is solved, our map is drawn and our path forward is clear.



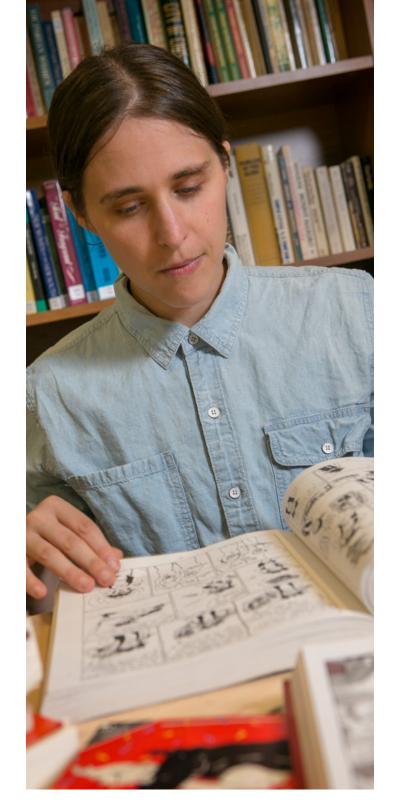
## **BUDGETS**

In summer of 2019, the College received an investment of central funds to support our new initiatives and address a structural deficit. However, we recognized this injection would not solve longer-term issues with the budget. Up until now, the budget had been reactive rather than proactive, in large part because fiscal planning was annual. To address this, we have developed a three-year budget projection model.

Thanks in part to the investment of funds, as well as accumulated attrition savings, the College achieved budget neutrality in the 2019/2020 fiscal year. This status has enabled us to partner with the departments in responsible fiscal planning. Department chairs have been provided explicit savings and revenue goals and transparent tools for budgeting. Because each department has its own set of opportunities and constraints, goals were set carefully, department by department, to allow for individualized fiscal strategies. Departments were provided with all data on existing expenditures across the College, and revenue streams available to them, along with a computational tool that helps them to project three years into the future how various changes in each category will affect their budget.

Self studies revealed that staffing across the College, both technical and administrative, is below that of our peers. Faculty productivity in research and teaching can be enhanced by optimizing staff support. This does not mean replacing existing positions: our faculty need higher-level staff support and our staff need greater advancement opportunities. For example, if we hire a data analytics expert to create a Data Analytics Hub in collaboration with the Division of Information Technology and the Institute for Advanced Computational Sciences, more of our faculty would increase their use of big data analytics to expand their scholarly reach and impact. This type of investment by the College can be leveraged with philanthropic interest in centers of excellence to create a greater synergy. Such strategic staffing will work hand in hand with smart staff development, so that staff have a growth future for themselves at Stony Brook. The best faculty in the world cannot get the grant or publish the book without the right person running the data analytics, operating the machine, or balancing the budgets.

The Stony Brook brand is strong, and we have wind in our sails. Stony Brook's first major capital campaign was completed in Summer 2018, and the College exceeded its goal of \$60 million as part of the University's \$600 million campaign. The College's endowment now includes multiple chairs and professorships. We have continued to build our advancement and fundraising team. We have several major gift officers who each have a convergent portfolio of departments with whom to partner on alumni outreach and gift proposal writing, and an officer assigned to work with alumni and friends of the centers. In addition, our College's Assistant Dean for Advancement manages the advancement officers for Centre Val Bio and the Turkana Basin Institute, part of Stony Brook's global footprint formed with College faculty. Our constellations are a navigational guide to engage alumni in the current iteration of their alma mater and to inspire philanthropic investment.





## **ENROLLMENTS**

The College faces the same challenge that institutions across the country face: enrollments in the arts, humanities, and lettered social sciences are declining. While research shows that the return on investment from a degree in these disciplines is actually greater than that of a STEM degree, STEM degrees do often offer technical skills that are easily marketed post-graduation. Rather than attempting to simply re-brand our arts, humanities, and social science programs for students, we reconceptualized what we offered as part of the package.

Digital literacy for everyone must be our first goal. Without it, our current and future students cannot be successful. In support of this, we partnered with the College of Engineering and Applied Science to co-created a large format (250-student) introductory course. We are doubling our offering of Introduction to Digital Intelligence (IAE 101) in September 2020. This innovative course, co-taught by faculty from arts, humanities and social science departments on the one hand and computer science faculty on the other, integrates technical/digital skills with those traditionally considered "soft."

We have begun establishing project-based interdisciplinary courses to allow students to pursue these projects at upper levels, and we expect these offerings to grow in the coming years. We believe these projects represent an opportunity for workforce development through micro credential-based masters level programs. Because faculty also need to expand their digital literacy, we will be establishing an Annual Summit for building interdisciplinary research and providing technical training to interested faculty, simultaneously supporting their teaching and research goals. As we increase the digital literacy on campus, we will deploy our faculty and students to address some of the crucial social implications of the Digital Revolution; we need to understand the ethical, political, economic and social implications of these technologies.

In support of these initiatives, we have been working with our NY State delegation and colleagues across the country to pursue legislation that expands eligibility for DOE GAANN grants. We are also looking to strengthen our faculty community through philanthropic investment in our research and scholarship institutes and strategic hires of prominent people that influence multiple departments. Most recently, we have partnered with the Institute for Advanced Computational Science on multiple faculty searches spanning sociology to chemistry.

Not all skills are technical in nature. We live in a globalized world. Accelerating climate change and the movement of people and goods is creating ruptures like none humanity has ever faced. To understand these challenges and find solutions, research cannot remain siloed and students must be trained to become global citizens. Our BA in Globalization Studies and International Relations offers students the chance to study across the disciplines, building skills in global literacy, language and lived experience that will enable them to succeed. This degree program is housed in the Institute for Globalization Studies, which serves as a governing body to coordinate course offerings between multiple departments.

The Carbon Neutral Class Initiative will harness the ingenuity of students to strategize reducing their carbon footprint by 2025 and beyond. Students will compete to lower their carbon footprint—trading offsets, arranging carpools, monitoring energy waste—with scholarship awards going to the top performers. By engaging faculty and staff in the process and engineering ways to monitor and journal approaches to carbon reduction, we imagine generating excitement, community, educational opportunities, and energy savings as well as providing a distinctive reason to join the Stony Brook University student community. This initiative would be run by the proposed Institute for Partnerships in Innovation, Resilience, and Environmental Solutions (INSPIRES) and aligns with the New York State Climate Leadership and Community Protection Legislation Act of 2019 that mandates 40 percent emissions reductions in absolute terms from 1990 levels by 2030.

We believe these cross-cutting initiatives will help students identify the valuable and concrete skills learned in arts, humanities, and social science courses. We believe that in expanding the integration of digital tools and technologies within our core disciplines, we will be able to encourage the redistribution of enrollments across campus. We trust that in so doing, we are providing our future alumni waypoints for greater success.



# Student Recruitment and Support

The College offers a diverse range of financial incentives to both new and current students. For example, the Office of the Dean awards scholarships to numerous students meeting qualifications based on such factors as financial need and academic performance. Additionally, the Edward Guiliano PhD '78 Global Fellowship Program launched in 2019, provides undergraduate and graduate students with the transformational opportunity to broaden their perspectives by engaging with the world beyond Stony Brook University and their local communities. Hayley Rein, an undergraduate recipient of the Guiliano Global Fellowship, on returning from India where she conducted qualitative public health research, shared, "I am so grateful for the funding that allowed me to work on a project that undoubtedly shaped the type of work I plan to pursue and expanded my worldview."

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AT STONY BROOK UNIVERSITY



NSF Research Training Program Harnessing the Data Revolution

Quantitative Analysis of Dynamic Structures

We have a strong tradition of center development emanating from the science disciplines in the College. Recently, the Center for Frontiers in Nuclear Science was formed through philanthropic investment and center faculty were key members of the team who developed a proposal with BNL that resulted in the DOE funding the Electron Ion Collider at BNL. We are working with the School of Marine and Atmospheric Sciences to create an Institute for Partnerships in Innovation, Resilience, and Environmental Solutions. Spurred by the strong tradition of centers in the sciences, as well as unexpected crises and threats to center stability, we re-organized some of our centers affiliated with the humanities and social science departments to provide energy, synergy and support.

We established a Hub for Migration and Mobilities for many of our centers with related missions, organized around shared staff. The Hub is a staffing structure to support these previously understaffed and isolated centers that have high fundraising potential and that support diverse communities of students and researchers. The people staffing the Hub will improve coordination and communication between center faculty, staff, and directors; help develop grant proposals; and drive donor engagement.

To catalyze future projects, the Center for Changing Systems of Power is sponsoring research groups to address a critical question or challenge facing our global world. The conveners selected are gathering faculty to research together and receive, upon completion, research funds to support their work. The first groups are "Global Social Networks and Information Flow" and "Global Incarcerations, Migrant Detentions and Deportations."

























## **DIVERSITY**

We must devote energy and resources to diversifying our faculty. A faculty that looks like the students of today and tomorrow enhances student success and strengthens research programs, supporting the University mission on all fronts. Changing the face of the faculty will require a multi-pronged approach not just hiring under represented minorities but rethinking how we mentor and build community with the faculty that are here now.

We are formalizing a mentoring and professional development program across the College (rather than internally within departments) for new and existing faculty so they can see their place in the larger community. We are running the SUNY SAIL leadership workshop at Stony Brook in Spring 2020 and will do so annually to build a leadership pipeline.

We are also excited to expand our postdoc programs as a means to more rapidly diversify the academy and in some cases bridge departments' needs when they have unanticipated retirements and resignations. Supporting and valuing our current faculty means providing key faculty personnel, which we believe can double grant money, rejuvenate the workforce, increase faculty diversity, and allow us to gain parity with our AAU partners.

We must grow faculty and staff strategically. We have and will continue to leverage our faculty hiring with the **SUNY PRODIG** program. We do not make replacement hires for the sake of replacing, but rather invest thoughtfully in areas that improve the strength of the College as a whole and without regard for traditional departmental silos. This expands the potential for federal grants from agencies such as NSF, NIH, NASA and DOE, and will also excite further philanthropic investment nobody invests to preserve the status quo.

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# **ENVOI**

While the funding models for the academy are rapidly changing, at its heart, the faculty in the College will always be looking to make new discoveries and find new knowledge, and thus we continue to focus on scholarly creativity — asking questions, looking for new ways to connect our disciplines, and creating new disciplines. Our excellent scholarship will continue to ascend because we are willing to pivot as new evidence emerges. Researchers become faculty to explore big ideas in all disciplines, driving innovation and inspiration across all sectors of society. Students come to college to explore those ideas with their faculty, and for many of those future leaders, it is often the first opportunity they have had to confront creative thought. The best scholarship is often experimental, and we too are in the process of a number of different experiments to support the future of our most basic endeavors. We are confident our navigational approach will provide our students the best education possible.

