

Stony Brook University
**NYSUNY 2020
CHALLENGE GRANT
APPLICATION**





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I. EXECUTIVE SUMMARY

Driving the Long Island Economy

Stony Brook's annual economic impact of **\$4.65 billion** represents a **2,300 percent return** on the State's direct annual allocation of \$207.2 million in tax dollars—an economic gain of **\$23 for every \$1** the State invests. Nearly **60,000** direct and induced jobs result from the University's daily operations. Its economic development programs have assisted some **500** companies through almost **2,250** projects, enabling these companies to create or retain more than **17,000** private sector jobs.

Governor Cuomo's new economic development initiative, NYSUNY 2020, is designed to make SUNY a leading catalyst for job growth in New York State while strengthening the academic and research programs at SUNY's four University Centers—Stony Brook, Binghamton, Albany, and Buffalo. The program awards \$35 million in construction capital to each Center whose long-term economic development and academic enrichment plan has been approved. Additional operating revenue for the Centers will be generated through increased tuition rates and fees. Each plan leverages private sector resources, encourages strategic public/private partnerships, and carries the support of community stakeholders.

Stony Brook University educates nearly 25,000 students and is the only public research University in the Long Island/Metropolitan New York region. Nobel laureates, Guggenheim fellows, and MacArthur grant winners teach on our campus, making it a magnet for outstanding students. Membership in the prestigious Association of American Universities (AAU) places Stony Brook among the top 62 research institutions in North America. Stony Brook University co-manages Brookhaven National Laboratory, and is in an elite group of universities that run federal research and development laboratories. For years, Stony Brook's economic development initiatives have been key drivers of the Long Island economy, and this plan builds on the University's proven record of technology transfer and job creation. Stony Brook's strength is in commercializing cutting-edge technology, such as cloud computing.

This document details Stony Brook's plan for the \$35 million Challenge Grant and the increased operating revenue derived from a \$300 tuition increase each year for a five-year period for New York State residents and a

10 percent tuition rate increase for out-of-state undergraduate students, plus a \$75 academic excellence fee increase each year for a five-year period. **The plan fosters economic growth and creates jobs while increasing student access to a high-quality, affordable education. Most important, every Stony Brook student will benefit from this plan.**

Economic Growth and Job Creation

The Stony Brook NYSUNY 2020 plan uses the State's \$35 million Challenge Grant to jump-start the construction of a translational medical research center, which is tied to key economic development initiatives. Constructing the building will create an estimated 4,200 construction-related jobs: nearly 1,900 direct jobs and 2,300 indirect jobs.*

Stony Brook University's goal is to meet a 20 percent minority- and women-owned businesses and enterprises (M/WBEs) participation rate in its NYSUNY 2020-related contracts. Stony Brook will expand its efforts to assist M/WBEs to increase their participation in the University's procurement activities associated with the Medical and Research Translational building. Under our plan, procurement staff will reach out to vendors and help them get certified as M/WBE vendors; facilities staff will work with project consultants and managers to encourage participation of known M/WBE vendors; and we will work with the on-campus Small Business Development Center to assist M/WBE vendors through mentorship and outreach programs.

Additional revenue generated under the NYSUNY 2020 program at Stony Brook will be invested in:

- 267 faculty hires
- 400 new staff hires
- 80 clinicians

*Based on the New York State Department of Transportation's estimates for jobs created for federally authorized projects.

- More than 1,000 jobs will be created from the drawing down of more than \$50 million in State, federal, and private research grants annually
- Creating nearly 1,000 jobs through research partnerships with private industries that bring new ideas to the marketplace

The full plan targets research investment in three key areas—**energy, information technology, and medical/health science**—that will create the next generation of well-paying knowledge-based jobs desperately needed in a high-cost region like Long Island.

Increased Student Access

The additional revenue will enable Stony Brook to hire more faculty, offer more classes, and improve graduation rates for students.

The infusion of additional revenue generated through higher tuition will allow **267 more faculty to be hired** over the next five years and enable Stony Brook to **admit an additional 1,200 students** during that same period. And, under terms of the recently enacted statute, financial assistance will be given to students eligible for the New York State Tuition Assistance Program (TAP), enabling the University to maintain its commitment to ensure access for its most economically disadvantaged students. Under terms of this statute, the State Higher Education Services Corporation will calculate a tuition credit based upon the level of a student's TAP award. In addition, Stony Brook will fund an institutional needs-based scholarship program to supplement the statutorily required tuition credit so that TAP-eligible students whose family income is \$75,000 or less will be held harmless from the \$300 annual tuition increase. Stony Brook also has created a merit-based scholarship for students maintaining a 3.0 GPA and whose family income is between \$75,000 and \$100,000. These two new programs will ensure that higher tuition does not put a Stony Brook education out of reach.

Every Student Benefits

This plan is not just about creating jobs and enhancing Stony Brook's research capabilities—although it will accomplish both of these goals. **The most important aspect of this plan is that every student at Stony Brook University will benefit from NYSUNY 2020:**

- Faculty will be added to every single school or college at the University.
- Students enrolled in every degree program will benefit from the increased number of faculty and course sections.
- An additional 400 undergraduate research placements will be created.
- Additional faculty will improve Stony Brook's current four-year graduation rate by 8 percent.
- The six-year graduation rate will improve by 10 percent.
- The student-to-faculty ratio will improve from the current 28 to 1 to 22 to 1—equal to the public AAU average.

Long Island's Fragile Economy Will Get a Much-Needed Infusion

Long Island's economy is fragile. A recent report by the Office of the New York State Comptroller found that Long Island's economy is growing at a slower rate than that of any other region in New York State, except for Binghamton. Long Island has lost a significant number of well-paying jobs during this recession, and recent employment figures show that the new jobs being created are low-wage jobs. High-cost areas like Long Island cannot afford to replace well-paying jobs with low-paying ones. This plan will create the well-paying jobs that the Long Island economy desperately needs to climb out of the recession.

Stony Brook will adhere to strict standards of accountability and transparency in the implementation of this plan. Stony Brook



University's Challenge Grant project will be subject to the terms of the Stony Brook Foundation's Conflict of Interest Policy, which states that:

Each member of the board of trustees has a fiduciary obligation to act in the best interests of the Foundation. A member of the board of trustees may not participate in any deliberation or vote on any matter relating to current or proposed Foundation business with any individual with whom, or entity with which, the board member has a direct or indirect personal or financial interest that may conflict with the proper discharge of the member's board duties. Board members having a direct or indirect personal or financial interest that could create a conflict of interest with any Foundation agreement, transaction, or relationship shall disclose that interest to the chair of the Governance Committee and chair of the board who shall disclose same to the board for resolution. Any trustee, other than the conflicted trustee, may move for a resolution that the conflict be waived. A conflict may

be waived by a vote of two-thirds of the trustees present at the meeting during which the vote is taken. Once the issue of a conflict of interest is raised, the trustee involved may not participate in any vote with respect to the matter involved. However, the trustee involved may participate in discussions with respect to the matter if the conflict is waived. Commencing with the first day of each fiscal year, a trustee who has not filled out and returned a Conflict of Interest disclosure form may not vote at any meeting of the board of trustees until such trustee has filled out and delivered such form to an officer of the Foundation.

In addition, the Stony Brook Foundation intends to amend this policy to include a provision requiring a board member or officer to advise the chair of the Foundation or its affiliated corporation of the board member's or the board member's relative business interest in any such existing or proposed vendor with the Foundation or its affiliate.

II. NYSUNY 2020 CHALLENGE GRANT

Translational research is the conversion of basic science discovery into practical diagnostic applications, therapies for medical care, and development of new drugs. Basic science discoveries will be hypothesized, tested, and submitted into trial all within a Medical and Research Translational (MART) building, after which they will be used at the patient's bedside as FDA-approved health care treatment options.

Stony Brook University will invest the \$35 million NYSUNY 2020 Challenge Grant to help construct a **state-of-the-art MART building** that will be the new headquarters for cancer research, advanced medical imaging, and cancer care. The eight-level, 250,000-square-foot building will be located on Stony Brook University's Academic Medical Center campus, adjacent to the Hospital and Health Sciences Towers. New parking facilities are planned for this area and will support the additional traffic anticipated when the building is fully operational. This project will incorporate sustainable design strategies to achieve the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) certification.

Cancer Research and Treatment

Stony Brook has a proven track record in translational medical research. Among the latest basic science discoveries made at Stony Brook, in April 2011 Stony Brook researchers published an important discovery of a potential biomarker for breast cancer in *PLoS ONE*, a pre-eminent scientific journal that features reports of original research from all disciplines within science and medicine. Similar work will be done in the MART building, taking discoveries from the basic science laboratory and studying whether similar biomarkers are present in humans who develop breast cancer, and finding ways those biomarkers could be applied to treatment and prevention.

The MART will house **25 cancer biology-oriented laboratories**. Each laboratory will provide workspace for a principal investigator and five to ten staff, totaling **250 to 300 new jobs** with competitive compensation packages, enabling Stony Brook University to expand the number of highly specialized jobs available for researchers, graduate students, postdoctoral researchers, and technicians by adding **20 new cancer clinical investigators** and a **ten-person biomedical informatics**

department. The MART also will house so-called "wet labs," where investigators conduct cell, tissue, and other cancer biology research. Additional dry lab space will be created to enable statistical research, work on biomedical informatics, and clinical study.

Two floors of the MART will be dedicated to providing cutting-edge cancer care. An enhanced new outpatient cancer center will include a **30-room cancer clinic** and **30-station clinical infusion center** to address a growing demand to triple the Medical Center's current clinical capacity for cancer care.

Biomedical Imaging

The new Stony Brook University Biomedical Imaging Program also will be located in the MART and will be home to **four new faculty** who will work alongside six dual-appointed faculty from Brookhaven National Laboratory. The biomedical imaging research center will be located next to the new radiology wing so that basic scientists and imaging specialists can work closely together. Stony Brook already has expertise in medical imaging and has had preliminary discussions with industry leaders including **Philips, Siemens, and Toshiba** regarding possible collaboration and contributions to the facility.

Academic Benefit

Plans for the building also include an auditorium, which will provide space for teaching and lectures, with breakout rooms for smaller conferences. The building's design and location adjacent to the Hospital will foster collaboration among scientists and clinicians, whereby they can study basic science in the laboratory and help to develop solutions to clinical questions that arise in the Hospital for physicians seeking new cures or treatments for health problems. The MART will be part of the Medical Center campus.

The Medical and Research Translation (MART) building will be connected to the Medical Center campus.



Rendering

Additional academic benefits include:

- Increased work-study opportunities for undergraduates in cancer center labs
- More opportunity for Medical School residents to practice in a specialized setting
- Expanded research opportunities for undergraduates, graduates, medical students, residents, and fellows

Community Benefit

The new cancer treatment facility will address an unmet need for cancer care on Long Island. Currently, 37 percent of Suffolk County residents who need inpatient cancer care receive that care outside of the county. On the outpatient side, the MART will enable Stony Brook University Medical Center to add 100,000 outpatient visits to the current 83,000 cancer and radiology visits and will enhance inpatient cancer care on Long Island.

Cost

The MART is estimated to cost \$194 million and create approximately 4,200 construction-related jobs—nearly 1,900 direct and 2,300 indirect—over the lifetime of the project.

The University has identified private donations and institutional funding of

\$159 million to match the State’s \$35 million NYSUNY 2020 Challenge Grant as follows:

Source of Funds	Capital
Challenge Grant Funds	\$ 35 million
Private Funds	\$ 50 million
Hospital Capital and Revenue Funds	\$ 89 million
School of Medicine Funds	\$ 20 million
Total	\$194 million

How Funds Will Be Used

Professional Fees <i>(design and contract management)</i>	\$ 20 million
Construction	\$124 million
CON Fees ¹	\$ 1 million
FF&E ²	\$ 30 million
Contingency ³	\$ 19 million

Construction Timeline

Schematic design and site development will begin in summer 2012. Construction of the building will begin in fall 2013 and be completed by spring 2016.

¹CON Fees are Certificate of Need fees; ²FF&E stands for furniture, fixtures, and equipment; ³Contingency represents money set aside for unforeseen conditions

III. BUILDING ON EXISTING INFRASTRUCTURE

Additional operating revenue generated by the enhanced tuition plan will allow us to build upon innovations already underway. The 246-acre Stony Brook Research and Development Park, directly adjacent to the campus, is perfectly aligned to augment and exploit the new talent and capital resources envisioned for Stony Brook's NYSUNY 2020 plan. The work in the R&D Park will be expanded upon under the enhanced tuition plan and complements "Accelerate Long Island" initiatives. The research and incubator facilities already completed in the R&D Park—the **Center of Excellence in Wireless and Information Technology (CEWIT)** and the **Advanced Energy Research and Technology Center (AERTC)**—are state-of-the-art. They contain both research-oriented and industry-driven infrastructure, and serve two of the three industry sectors targeted in this plan. The conceptual design for the third building planned for the R&D Park complements the key research focus of the MART building for cancer treatment and research and advanced medical imaging. It will provide both collaborative lab space for industry partners seeking to commercialize research outputs and incubation space to nurture start-up companies based on these new technologies. Through existing programs, economic development initiatives, new research faculty and graduate student appointments, and ongoing education, training, and research in highly marketable fields of advanced energy and wireless technology, Stony Brook is manufacturing a tremendous momentum that will continue driving the regional economy.

Medical Research and Technology

The R&D Park will provide facilities for the arduous process of turning the inventions and discoveries created by the faculty and programs housed in the MART building into commercial products. This activity will find comprehensive programmatic support in

the Center for Biotechnology (CFB), one of the campus' two New York State Centers for Advanced Technology (CATs).

The mission of the CFB is to accelerate the translation of basic biomedical sciences into diagnostic and therapeutic technologies, foster new company formation, and support industry growth in New York State. Some of the more innovative community partnerships supported by the CFB include:

- **Long Island Innovation Boot Camp**, a means of supporting entrepreneurial faculty interested in launching companies based on technology they have invented
- **Fundamentals of the Bioscience Industry Program**, a workforce development initiative that facilitates the transition of scientifically trained graduate students and postdocs into multidisciplinary careers in the bio-science industry
- **BioStrategies Sessions Program and Technology Commercialization Clinic (TCC)**, which offer business development, strategic planning, and market analysis services to entrepreneurial faculty and local biotechnology companies

From 2001 to 2009, the total economic impact generated as a result of the Center for Biotechnology is **\$840 million**, which includes:

- **688 new jobs**
- **\$531 million** in corporate revenue
- **\$18.1 million** in corporate savings
- **\$180 million** in leveraged funds

Advanced Energy Research

Some of the new research faculty that will be hired under the NYSUNY 2020 plan will focus on energy research and will build on the energy research programs currently in the process of populating the new Advanced Energy Research and Technology Center

(AERTC), which officially opens in late 2011. Energy research on campus already spans more than 70 projects, including:

- **\$17 million** U.S. Department of Energy-funded Energy Frontier Research Center in Chemical Energy Storage (focused on lithium-ion batteries)
- Cybersecurity and energy forecasting aspects of the **\$12.4 million Smart Energy Corridor**
- **Smart Grid Demonstration Project**
- **NSF Industry-University Cooperative Research Center for BioEnergy Research and Development (CBERD)**

AERTC will house a unique Virtual Smart Grid Test and Validation Facility, enabling energy industry vendors and their utility customers to perform pre-deployment testing of new Smart Grid technologies before installing thousands of devices at utility customer sites. It provided the impetus for the New York State Smart Grid Consortium (NYSSGC), whose membership of energy producers, utilities, universities and research institutions, regulators, vendor companies, and government agencies constitutes the most diverse group in the country focused on the biggest technology revolution in the energy industry in more than 100 years.

The New York Energy Policy Institute, a NYSEDA-funded collaboration of 18 New York research institutions based at AERTC, is mandated to provide the best impartial expertise to New York's policymakers across the waterfront of energy issues, including the evaluation of new energy technologies.

Two additional NYSEDA-funded AERTC programs are highly relevant to the goals of Stony Brook's NYSUNY 2020 plan. The mission of the Clean Energy Business Incubation Program (CEBIP), which manages AERTC's incubation space, is to help companies start up and grow around new energy technologies from Stony Brook, Brookhaven National Laboratory, and other sources. The Stony Brook Energy Companies

Initiative, a Small Business Development Center program, is tasked with identifying and supporting small companies at any stage of growth that are seeking to develop and market new energy technologies.

Together AERTC's programs provide a formidable resource to capitalize on the increased energy research activity that NYSUNY 2020 will foster, and make the advanced energy industry sector a major driver of the regional and State economies.

Wireless and Information Technology Research

The ability to hire research faculty focused on information technology will build on Stony Brook's formidable infrastructure in IT, showcased in the Center of Excellence in Wireless and Information Technology (CEWIT).

Opened in 2009, CEWIT provides a model for the translation of early stage and collaborative research through "productization," business modeling and business planning to commercialization and product launch. Its R&D programs are organized into five multi-disciplinary divisions: Network, Medical, Software, Communications and Devices, and Infrastructure. New York's \$50 million investment in its construction, plus an additional \$5 million in operating funds, has leveraged an impressive record of accomplishment. Since its inception, CEWIT has:

- Collaborated with **94 companies**
- Helped companies create or retain some **950 jobs**
- Generated more than **\$200 million** in private and federally funded R&D activity
- Generated more than **\$12 million** worth of venture investment in partner companies
- Produced **117 invention disclosures**, which have been filed by researchers
- Secured **43 issued patents, 19 of which have been licensed** to industry

Through its international research and

business advisory boards, CEWIT builds strategic alliances and business partnerships among the academic, scientific, and business communities. Its partners include some of the IT industry’s most sophisticated companies, among them **Cisco Systems, CA Technologies, and IBM.**

The additional talent resources secured under Stony Brook’s NYSUNY 2020 plan will promote new technology development

both in IT itself—which has moved through the mainframe, desktop PC, and mobile device revolutions, and is now entering cloud computing—and in the myriad industries that depend on it. CEWIT researchers are deeply involved in Smart Grid research and development, for example, and are already exploring new biomedical technology potentials.

IV. STONY BROOK UNIVERSITY’S ACADEMIC VISION

Stony Brook’s signature strengths include eminent faculty in the STEM disciplines (science, technology, engineering, and mathematics), a diverse student body, and research collaborations derived from its singular proximity to the world’s most distinguished private biological sciences laboratory at Cold Spring Harbor Laboratory and a leading national energy laboratory—Brookhaven National Laboratory. These strengths have brought the 54-year-old University great recognition in a remarkably short time, including three Nobel Prizes, an Abel Prize, and membership in the prestigious Association of American Universities (AAU). **NYSUNY 2020 will help Stony Brook sustain this high level of excellence and remain competitive by enabling the University to offer academic excellence through recruiting**

and retaining the highest-quality faculty. New faculty hires will be concentrated in the science and engineering disciplines that underlie the **medical and health sciences, advanced energy, and wireless and information technology.**

They will receive an average starting salary of \$100,000 and support costs budgeted at \$120,000. Start-up costs are estimated at \$50,000.

Faculty will be hired in two phases over the next five years (assuming funding from the State remains at current levels):

147	new faculty hires in Phase I (2011-12 to 2013-14)
120	new faculty hires in Phase II (2014-15 to 2015-16)
267	total new faculty hires

V. REINFORCING STONY BROOK'S OPERATING BUDGET

Under terms of the new statute, the revenue generated through increased tuition and fees over the next five years will be invested

back into Stony Brook's academic mission—access, teaching, and research.

Stony Brook's Five-Year Faculty Hiring Plan FY 2011-16

\$300 Per Year Tuition Growth

In millions of dollars (non-cumulative)

Fiscal Year	11/12	12/13	13/14	14/15	15/16	Total
Revenue						
Tuition from increases in rates and enrollments	\$12.4	\$15.3	\$16.5	\$17.7	\$19.2	\$81.1
Fee Income	\$1.8	\$1.9	\$1.9	\$1.9	\$1.9	\$9.4
Total Additional Revenue	\$14.2	\$17.2	\$18.4	\$19.6	\$21.1	\$90.5
Expenses						
Faculty Salaries	\$4.1	\$5.1	\$5.5	\$5.8	\$6.2	\$26.7
Support Costs	\$5.1	\$6.1	\$6.6	\$7.0	\$7.4	\$32.2
Start-Up Costs	\$2.1	\$2.6	\$2.8	\$2.9	\$3.1	\$13.4
Needs-Based Aid	\$3.1	\$3.4	\$3.6	\$3.9	\$4.2	\$18.2
Total Expenses	\$14.4	\$17.2	\$18.5	\$19.6	\$20.9	\$90.5
Annual Balance	\$(0.1)	\$(0.0)	\$(0.1)	\$0.1	\$0.2	\$0.1
Faculty FTE Growth	41	51	55	58	62	267
Tuition Rate						
(Resident UG)	\$5,270	\$5,570	\$5,870	\$6,170	\$6,470	
Projected AAU						
Median Tuition Rate	\$8,774	\$9,212	\$9,673	\$10,157	\$10,665	

Assumptions:

- 1) Average salary of new faculty is \$100,000.
- 2) Support costs of \$120,000 per new faculty FTE. (Includes funding for a merit-based scholarship program for students who maintain a 3.0 GPA and whose family income is between \$75,000 and \$100,000.)
- 3) Start-up costs of \$50,000 per new faculty.
- 4) UG resident tuition to increase by \$300/year. All other rate categories to increase each year by percentage rate approved for 11/12.
- 5) \$75 fee to increase by \$75 for all five years.
- 6) Needs-based aid includes a hold-harmless scholarship for TAP-eligible students from families making less than \$75,000.
- 7) Assumed annual enrollment growth at 1.2% starting in year two.

VI. ENHANCING ACCESS WITH SCHOLARSHIP FUNDING AND HIRING MORE FACULTY

Stony Brook will invest the increased revenue generated under NYSUNY 2020 in new faculty, additional course offerings, and ensuring that higher tuition does not make a Stony Brook education unaffordable.

- More faculty will mean additional course offerings, enabling students to access the classes they need to graduate in a more timely fashion.
- Nearly half of Stony Brook’s students are eligible for financial aid under the New York State Tuition Assistance Program (TAP). The University is dedicated to ensuring access to all New York State resident students who qualify for admission. To protect access for this cohort of

students, Stony Brook will fund an institutional needs-based scholarship program to supplement statutorily required tuition credit so that TAP-eligible students whose family income is \$75,000 or less will be held harmless from the \$300 annual tuition increase. In addition, Stony Brook will create a merit-based scholarship for students maintaining a 3.0 GPA and whose annual family income is between \$75,000 and \$100,000. These two programs will ensure that higher tuition does not put a Stony Brook education out of reach. Equally important, hiring 267 more faculty over the next five years will open Stony Brook’s doors to an additional 1,200 students.

VII. EVERY STUDENT BENEFITS

This plan is not just about creating jobs and enhancing Stony Brook’s research capabilities—although it will accomplish both of these goals. **The most important aspect of this plan is that every student at Stony Brook University benefits from NYSUNY 2020.** Every single school or college at the University will gain faculty. Students enrolled in every degree program will benefit from the increased number of

faculty and course sections. An additional 400 undergraduate research placements will be created. Additional faculty will improve the current four-year graduation rate by 8 percent and the six-year graduation rate by 10 percent. And the student-to-faculty ratio will improve from the current 28 to 1 to 22 to 1, which is the average for public AAU institutions.

VIII. THE ECONOMIC IMPACT OF STONY BROOK’S NYSUNY 2020 ACADEMIC VISION

Stony Brook University is a critical asset to the Long Island economy. As Long Island’s largest single-site employer, the University provides nearly 14,500 men and women with full- or part-time jobs, and generates more than twice that number of jobs in induced employment. As Long Island’s only public research university and academic medical center, Stony Brook generates the discoveries and inventions that become the

technologies of the future, provides the advanced technology support to help companies become and remain competitive, and produces the educated workforce that drives the area’s high-tech economy. These economic impacts flow from faculty and student talent and a regionally unique research infrastructure. This plan will expand and enhance all of these critical resources.

Conservative estimates of the impact of Stony Brook's NYSUNY 2020 vision include:

- The **267 new faculty, 400 new staff** (including graduate student hires), and **80 new clinical jobs** will bring more than 700 new jobs to Stony Brook University
- Induced employment due to research activity is conservatively estimated at more than **1,000 permanent new jobs**
- Nearly **1,000 additional jobs** will be created or saved by industry partners of the University's economic development programs, based on past performance
- **4,200 construction-related jobs**, of which nearly 1,900 are direct jobs and 2,300 are indirect jobs
- More than **\$50 million** in total new revenue from estimated research grant income of \$200,000 per new faculty member annually
- **\$11 million** in new revenue generated by clinical work of new medical pediatric, gynecological, and surgical oncology physicians and support staff
- **Enrollment of 1,200 additional** undergraduate and graduate students over the five-year plan
- **\$30 million** projected annually in private philanthropy

A Strong Track Record Is a Solid Investment

Stony Brook University's track record in commercializing technology is unmatched in the SUNY system:

- Average royalty income: **\$10 million to \$15 million per year**
- Gross royalty income for FY 09 was **\$17.2 million**

- In 2010 Stony Brook accounted for **98 percent of all SUNY royalties**
- Stony Brook researchers have filed approximately **1,400 invention disclosures**
- Stony Brook researchers have been awarded more than **800 patents**
- Stony Brook has produced **all four of the FDA-approved drugs** from the SUNY system

Strategic Partnerships With the Long Island Business Community

The demonstrated success with the Long Island business community in commercializing new ideas provides a strong foundation for increasing critical results in Stony Brook's NYSUNY 2020 targeted areas. Existing programs include:

- Strategic Partnership for Industrial Resurgence (SPIR)
- New York State Small Business Development Center (SBDC) and the University's four incubators
- Statewide-mandated New York State Centers for Advanced Technology (CATs), in medical biotechnology and in sensor systems
- New York State Center of Excellence in Wireless and Information Technology (CEWIT)
- Advanced Energy Research and Technology Center (AERTC)

These programs' most recent three-year performance, together with their partner companies, helped create or retain a total of 3,535 jobs. **It is projected that the additional resources provided under this plan will facilitate the creation or retention of more than 11,500 jobs over the next decade.**

IX. COMMUNITY INVOLVEMENT AND SUPPORT

The University enjoys widespread support for the NYSUNY 2020 initiative from the Long Island business community, the Long Island delegation of elected officials, and other key stakeholders. Working closely with the Long Island Association, the region's largest business organization, which has pledged full support for NYSUNY 2020, the University is garnering support from the business, labor, and civic communities, including:

Business Groups

- Association for a Better Long Island
- Bayport-Blue Point Chamber of Commerce
- Brookhaven Coalition of Chambers of Commerce
- Cold Spring Harbor Laboratory
- Greater Middle Country Chamber of Commerce
- Greater Port Jefferson Chamber of Commerce
- HIA (Hauppauge Industrial Association)
- JVC Broadcasting Company
- Kings Park Chamber of Commerce
- LIA (Long Island Association)
- LIBOR (Long Island Board of Realtors)
- LIFT (Long Island Forum for Technology)
- LISTnet (Long Island Software & Technology Network)
- LIMBA (Long Island Metro Business Action)
- Long Island Builders Institute
- Long Island Contractors' Association Inc.
- Long Island Hispanic Chamber of Commerce
- Melville Chamber of Commerce
- Nassau Council of Chambers of Commerce
- Northrop Grumman
- Rauch Foundation
- Small Business Development Center

- Smithtown Chamber of Commerce
- St. James Chamber of Commerce
- Three Village Chamber of Commerce
- Vision Long Island
- Ward Melville Heritage Organization

Local Governments and Elected Officials

- Nassau County Executive
Edward P. Mangano
- Suffolk County Legislature
- Suffolk County Legislator Edward Romaine
- Suffolk County Legislator Sarah Anker
- Town of Brookhaven
- Town of Hempstead
- Town of Smithtown

Labor Organizations

- Architectural and Ornamental Ironworkers Local 580
- Boilermakers Local Lodge No. 5
- Building and Construction Trades Council of Nassau and Suffolk Counties
- Building Material Teamsters Local 282
- International Association of Heat and Frost Insulators and Allied Workers
- International Union of Painters and Allied Trades District Council 9
- Ironworkers Union Local 361
- Millwright & Machinery Erectors Local 740
- National Electrical Contractors Association, Long Island Chapter
- Northeast Regional Council of Carpenters Local 290
- New York State Iron Workers District Council
- Retail Wholesale and Department Store Union
- Sheet Metal Workers' International Association Local Union No. 28
- Tile, Marble & Terrazzo BAC Local Union No. 7



CONCLUSION

Stony Brook University stands on the threshold of the next wave of economic development activity through innovation to expand the Long Island economy and promote excellence as an academic and research institution. Stony Brook's plan to grow research and clinical activity over the next five years will result in the University's attracting and retaining world-class research and teaching faculty. Annual tuition and fee increases will fuel the growth of Stony Brook's student body and the construction of new facilities, and will generate at least \$180 million annually in new economic activity, while increasing the amount of merit-based financial aid available for students.

NYSUNY 2020 will help accelerate Long Island's fragile economy. It will bring well-paying jobs and provide opportunity for young people who want to live and raise families on Long Island. It also will support jobs throughout the region via the economic activity generated on the Stony Brook campus.

Stony Brook University has a proven track record in technology commercialization and the creation of well-paying jobs on Long Island. NYSUNY 2020 will help Stony Brook be a catalyst for further economic growth in the region, both now and in the years to come. ■

FOR MORE INFORMATION

For more information about the Stony Brook University NYSUNY 2020 Challenge Grant Application, contact the Stony Brook University Office of External Relations, (631) 632-6302.