

Appendix C

Mission Review II (2005-2010) Guidance Document (State-Operated/Funded) State University of New York

Please prepare a Mission Summary document in response to the questions raised below. All of the sub-appendices referred to in the questions can be found on the Mission Review II (2005-2010) Web site (<http://www.sysadm.suny.edu/provost/missionreview.htm>). We ask that you attach to your response all extant strategic plans, your facilities master plan, capital campaign plan, and the campus' most recent Middle States Self Study with the visiting team's final report and campus response, and any other documents that help describe campus direction. Please submit your Mission Summary to the Provost by June 30, 2004.

Campus Role/Distinctiveness

1. Based on the current MOU, in no more than a paragraph or two, update the central and distinctive elements of your campus mission and your institutional aspirations. Please be sure to highlight outstanding programs and/or initiatives/services that play an important role in defining the institution, and expand the description of your unique role within SUNY.

Stony Brook has a five-part mission:

- To provide comprehensive undergraduate, graduate, and professional education of the highest quality;
- To carry out research and intellectual endeavors of the highest international standards that advance theoretical knowledge and are of immediate and long range practical significance;
- To provide leadership for economic growth, technology, and culture for neighboring communities and the wider geographic region;
- To provide state-of-the-art innovative health care, while serving as a resource to a regional health care network and to the traditionally underserved;
- To fulfill these objectives while celebrating diversity and positioning the university in the global community.

Established in 1957, Stony Brook has grown rapidly in both size and reputation and is now recognized as one of the nation's finest public research universities. Physically and academically integral to Stony Brook is its academic health center, as well as the University Hospital and Long Island State Veterans Home. Stony Brook is also the home for SUNY's Marine Sciences Research Center, now expanding its activities to the Southampton College campus. A study published by John's Hopkins University Press (*The Rise of American Research Universities*, by Hugh Graham and Nancy Diamond, 1997) placed Stony Brook among the top three public research universities in the country in terms of per capita faculty research productivity. A study based on similar objective measures (*How Should We Rate Research Universities?* Published in *Change* magazine July/August 2000, by Nancy Diamond and Hugh Graham) placed Stony Brook 9th amongst publics. Most recently, the *Times Higher Education Supplement*, Stony Brook ranked in the top 50 North American Universities, and 136th in the world. In May 2001, the Association of American Universities recognized Stony Brook's achievements when it invited Stony Brook to join its ranks. Stony Brook is one of a handful of American universities entrusted with the management of a national laboratory. The U.S. Department of Energy continues to evaluate management of Brookhaven National Laboratory (BNL), in which Stony Brook is a partner, as excellent to outstanding, and awarded a non-competitive five-year renewal contract beginning in 2003. Opportunities for collaborative initiatives between Stony Brook and BNL that enhance both institutions continue to be pursued. Stony Brook was a pioneer in the development of inter-institutional doctoral programs beginning with the Ph.D. in Genetics offered in conjunction with BNL and Cold Spring Harbor Laboratory. There have been three significant structural changes over the last few years with the

launching of Stony Brook Manhattan, the College of Business, and the six thematic undergraduate colleges that offer great potential for Stony Brook to access a broader base of students, and to enhance educational offerings and student experiences. Details on these important developments will be given as part of responses to subsequent Mission Review questions. At present, Stony Brook is engaged in discussions to acquire portions of the Gyrodyne property (adjacent to the campus) and is in discussion with Long Island University concerning the future of its Southampton College students and campus. The outcome of both of these discussions have major import for the future of the University.

Stony Brook's aspirations for the next phase of its development are to solidify the position suggested by the studies cited above, and to be recognized as one of the top ten public research universities in the nation and the best public research university in the eastern United States. However, to achieve this Stony Brook must take greater advantage of its intellectual resources to deliver a high quality undergraduate education. To accomplish this objective the University must do two things. The first is to elevate both the reality and the recognition of its *undergraduate* programs to a level more comparable with those of public universities (that are its peers in terms of research and graduate education). The measure of success will be when Stony Brook becomes the public university of choice for undergraduate students in the northeast. The second challenge will be to maintain excellence in faculty scholarship (by most measures Stony Brook's faculty were already close to top 10 status by the mid 1990s) and rebuild in departments that had achieved nationally recognized excellence but which have since lost strength.

These goals will stretch the University but are eminently achievable. It is clear that the University lacks the resource base to compete successfully in this company both by virtue of the scale and the very high cost of competition at this level. Stony Brook has few endowed chairs with which to recruit and to retain the best faculty, and some of its strongest programs, particularly in the humanities and social sciences (e.g., English, Political Science and Psychology), have lost strength in the last ten years. As these areas are essential components of a great university and were significant elements in the high assessment by Graham and Diamond, these programs must be restored. Internal reallocation will not provide sufficient resources; instead the campus must increase its overall income, and do so faster than it grows associated costs, in order to regain its competitive edge. Some programs need to grow to be able to accommodate the increased level of student interest at the undergraduate level. Other programs must grow to be able to compete at the highest level for faculty and graduate students. In particular, SBU is challenged by the fact that it is located in a very high cost part of the state (126 percent of the median) and receives a COLA capped at 13 percent and applied to only a small portion of the state purpose revenue. Stony Brook wishes to work with SUNY to develop the case for State, and SUNY, investment to enable the University to fulfill its potential to become one of the nation's *great* public research universities. The principle routes available to the campus on its own to achieve its goals are by continuing efforts to grow sponsored research, by increasing tuition revenue and by increasing private support. That being said, the nation's great public universities enjoy a higher level of state investment than is the case within SUNY. SBU will need that investment to compete successfully within the elite group of public, research universities to which it now belongs.

2. What institutions, in terms of *overall* characteristics, do you regard as your current and aspirational peers (see Appendix C-1)? In updating/developing your list of peers, we ask that you emphasize extra-SUNY (i.e., national) peers and describe the methodology and criteria you used to identify your peers. For Community Colleges, what are your plans for participation in the *National Benchmarking Project*?

In Spring 2000, Stony Brook carried out an analysis of leading, public, research universities to identify a group of peer institutions. Because many of SBU's comparisons with other schools have financial components the University elected to examine only public universities. The goal was to identify a sufficiently large group of universities so that a statistically meaningful subset of the group could be found in studies on as many subjects as possible. Twenty-one universities were identified for Stony

Brook's peer group, and to date, all comparative studies in which the University has been interested have included at least 12 of these schools.

Eight of the group rank above Stony Brook in overall assessment (aspirational peers), 13 rank equal to or lower than Stony Brook. The tail of our peer list is longer than the head so as to include Virginia, Penn. State, Maryland and Iowa, which provide a useful increase in geographic coverage.

The entire peer group includes: University of Arizona, University of Colorado at Boulder, University of Illinois at Champaign-Urbana, Indiana University at Bloomington, University of Iowa, University of Maryland (College Park), University of Michigan at Ann Arbor, University of Minnesota at Twin Cities, University of North Carolina at Chapel Hill, Pennsylvania State University (Main), University of Pittsburgh, University of Texas at Austin, UC Berkeley, UC Davis, UC Irvine, UC San Diego, UC Santa Barbara, UCLA, University of Virginia, University of Washington, University of Wisconsin (Madison). Stony Brook and these 21 peers are the top comprehensive, public, research universities in the country.

The analysis approach was to close approximation with the criteria that AAU employs to evaluate research universities for membership and continuing eligibility. SBU discussed the fact that the criteria emphasize research and graduate education and feel that this is appropriate for Stony Brook given its aspiration to be one of the nation's leading, public, research universities. This peer group challenges the University in all areas, but particularly in terms of undergraduate selectivity and outcomes. This challenge is appropriate as SBU wants to raise all areas of activity to the high standards that it has already met for graduate education and research. The University examined data for all public Carnegie Research I and all public AAU universities and the CUNY Graduate Center. Specifically, it looked at programs ranked in the top quartile in the 1995 NRC study, an in house ranking of universities based on faculty scholarly productivity (using data from the 1995 NRC study), data from the Graham & Diamond (1997) study of per capita faculty scholarly productivity, data on federal funding for research, data on doctoral degree production and data on numbers of postdoctoral fellows.

Data supplied by the SUNY System for MR II suggest a peer list of up to 29 schools. 12 of these overlap with Stony Brook's own list: University of Arizona, University of Iowa, University of Maryland (College Park), University of Michigan at Ann Arbor, University of Minnesota at Twin Cities, University of North Carolina at Chapel Hill, University of Pittsburgh, UC Irvine, UC San Diego, University of Virginia, University of Washington, University of Wisconsin (Madison). SUNY's list omits as peers Colorado, Illinois at Champaign-Urbana, Indiana, Texas at Austin, Berkeley, Davis, Santa Barbara and UCLA. The University feels that, while these institutions undoubtedly differ from it in important ways, they are genuine competitors. Most importantly, removal of Berkeley, UCLA and Colorado would leave only five members of the peer group that are ranked ahead of Stony Brook. SUNY's list suggests other public universities all of which rank well below Stony Brook by any accepted measure for graduate education and research and their inclusion would serve to pull down the average for its peer group. The suggested inclusion of peer private universities (Boston University, Penn., Vanderbilt, Brown, George Washington, Washington University, Yale and Duke is interesting but SBU feels that too much of its comparative work relates to funding and workload issues that benefit little from comparison between private and public universities.

The University feels that the peer group that Stony Brook has used since 2000 is appropriate for the comparisons that it makes and challenges it to improve performance in all areas to standards found only in the nation's finest public research universities; accordingly it refers to this peer group in the remainder of this guidance document.

3. Describe the impact of your institution on the local, regional, and state economy. In addition to completing the Economic Impact Table (see Appendix C-2), please describe the campus' economic impact in a brief narrative.

Stony Brook provides a huge economic and public benefit to New York State. The most recent comprehensive report, *The Impact of Stony Brook University on the Long Island Economy*, prepared in Spring, 2003, by Dr. Lee Koppelman, Director of the Stony Brook's Center for Regional Policy Studies and Executive Director of the Long Island Regional Planning Board, indicates that for the 2002/2003 fiscal year, Stony Brook University's total impact on the Long Island economy amounts to \$2.5 billion in revenue and 47,438 jobs. Stony Brook University accounts for almost 5 percent of all economic activity in Suffolk County and roughly 6.7 percent of its labor force. The regional economy gets approximately \$2.5 billion from the state's investment of about \$159.4 million in direct tax dollars. This represents a gain of \$15 for every dollar the state invests.

Koppleman's report indicates that research discoveries at the University, together with R&D support and stimulus coming through partnerships and corporate development, added another \$272.5 million in economic revenue to the Long Island region. This intellectual enterprise makes Stony Brook a natural choice for management of BNL, which has an annual budget in excess of \$450 million and commensurate impact on the regional and state economy. Each year about 4,500 graduates receive bachelors, masters, doctorate and professional degrees. Using standard studies, the added earning power for all these degree recipients each year is more than \$100 million and, of course, this earning power lasts over the course of their working careers. (Koppelman's detailed publication "The Impact of Stony Brook University on the Long Island Economy" is appended).

Enrollment/Admissions

(Plans for strengthening the quality and diversity of students)

4. Assuming no new state funding, please describe your enrollment objectives through fall 2010. Where growth is anticipated in selected academic programs, indicate which programs will be expanded/added. Similarly, describe where academic program contraction/ elimination is anticipated. These plans should be consistent with your responses to questions 14 and 17. (See Appendix C-3 and *Mission Review II (2005-2010): Building an Expectation of Excellence* for context.)

Stony Brook does not accept the premise that future enrollment growth will not be accompanied by increased state funding. While the recent past certainly does not suggest that new state funding necessarily follows increased enrollments for SUNY institutions, the University believes that any or all of the following factors: new state funding, re-allocations within SUNY, and additional tuition revenues, can support Stony Brook enrollment growth.

Stony Brook currently enrolls about twenty-two thousand students, over fourteen thousand of them undergraduates. There are more than sixty undergraduate majors. Every freshman student is a member of a first-year college, and there are a variety of other innovative programs including the Honors College, several Learning Communities, Living Learning Centers, and Women in Science and Engineering (WISE). Undergraduate enrollments have increased by nearly two thousand over the last five years. At the same time, SAT scores of all regularly admitted students have risen over 100 points. For fall 2004, the SAT average of entering Honors College students was 1390; fifteen freshmen are either National Merit finalists/semifinalists or Intel Competition semifinalists, and more than twenty are high school valedictorians. Graduate and graduate-level professional study is offered in 45 different areas, including the health sciences. The doctoral degree is offered in 46 areas, the MA in 22 areas, and the MS in 28 areas, as well as two MFA's, the MM, MBA, and MSW. Since 1996, graduate enrollments have increased by approximately 1,800 students. GRE scores for doctoral students have risen 70 points in the past two years. Stony Brook's enrollment is still relatively small for a national

public research university with extensive facilities and a comprehensive set of programs. The plan over the next five years is to grow enrollments by about 3,300 students while continuing to increase selectivity and to improve student success. 500 of these students will be in existing doctoral programs, 1250 in master's degree programs, just over 300 in health science programs, and 1300 additional undergraduates.

SBU has new programs in place that are attractive for undergraduates including American Studies, Athletic Training, Bioengineering, Cinema and Cultural Studies, Computer Engineering, Environmental Studies, Health Sciences, and Women's Studies. The University has submitted to SUNY proposals for new majors in Asian Studies, Chemical and Molecular Engineering, Marine Sciences, and Technology and Society. It expects to develop a proposal for Civil Engineering. Stony Brook has a set of attractive MAT degrees in Biology, English, Foreign Languages, History, Mathematics, TESOL (MA), and one is proposed in Spanish. This year the University has begun to offer the MPH degree and expects enrollments in that program to grow to about 70 students. The School of Health, Technology and Management now has programs leading to a professional doctorate in Physical Therapy. With the appointment last year of a dean for a new College of Business, the MBA program is projected to grow by 2008 to about 500 students, at both the main campus and Manhattan sites. As it believes that the baccalaureate will be surpassed as the credential of choice for graduates entering a high tech workforce, SBU is also engaged in broad thinking about developing a set of combined degree programs whereby in five years students can obtain both bachelor's and master's degrees. Stony Brook is especially interested in developing curriculum paths for students to earn a bachelor's degree in Arts & Sciences coupled with an MBA or MAT, all in five years. As a consequence of rethinking offerings in Business, it is likely that the large undergraduate Business major will diminish in size, and that more students will couple studies in non-business areas with a graduate business degree.

The professional HSC programs continuously adapt and change in order to accommodate societal needs, medical technological advances, and the mandates of the relevant professional accrediting agencies. In order to respond to these needs, the Schools of Medicine and Dental Medicine propose to increase their student class by 20 and 50 percent respectively, and to add a two-year program for foreign trained dentists. The schools of Social Work and Nursing propose to increase their class size (entry level undergraduate and graduate programs) and the School of Nursing will launch a Nursing PhD program. The proposed growth requires the addition of instructional space, and laboratories and operatories as well as faculty lines.

Three of the programs in Health Technology and Management (PT; PA; OT) have recently been upgraded from BS to MS entry level, following mandates by accrediting agencies; this will result in a decreased number of undergraduate students in the School, and an increase in the number of graduate students. All six programs in the SHTM propose to increase their class sizes with appropriate addition of instructors and instructional space.

Stony Brook Manhattan continues to develop as an important addition to the life of the university through courses for credit, small conferences, special programs, and outreach activities. Approximately 100 courses have been offered each academic year, including the summer session, with enrollments averaging 1800 students. Courses with New York themes as a focus or that are otherwise relevant to the metropolitan area have been offered at the facility to enhance the educational experience of our students, including courses in the humanities, social sciences, the natural sciences, and from the School of Professional Development. The summer session has been particularly useful for students who reside in the metropolitan area to help them complete their course requirements in four years. Courses have also been offered that have served graduate students from other schools through the eight-institution Inter-University Doctoral Consortium that includes Columbia, CUNY Graduate Center, Fordham, New School, NYU, Princeton, Rutgers, Columbia (Teachers College) and Stony Brook. The two health programs that use the facility most extensively are the Master of Science in Social Work degree program (offered in the School of Social Welfare) and the transitional Doctor of Physical Therapy

program (offered in the School of Health Technology and Management), though of course neither program can be completed in its entirety at the Manhattan center. An exciting new initiative is the Center for Wine, Food, and Culture that will begin running programs in Spring 2005. We look forward to developing further courses at Stony Brook Manhattan in connection with the increasing enrollments of out-of-state students coming to Stony Brook for whom NYC will be of special interest, and through greater realization of the innovative pedagogical possibilities for courses at the Manhattan site. The State Education Department conducted a Site Visit on October 5, 2004 as part of the approval process as an Extension Center. Following upon the Site Visit report and the university's response submitted November 11, the canvas of area institutions will conclude December 10, 2004.

- Describe campus goals for the mix and diversity of the student body to 2010. In terms of mix, such plans should include, as applicable, undergraduate/graduate/ first professional, full-time/part-time, transfers/freshmen, and resident/commuter. In terms of diversity, such plans should include ethnic, geographic (in-state, out-of-state, international), economic, age, gender, and disability status. With respect to age, please extend campus plans to 2015, consistent with NYS's *Project 2015* (<http://www.sysadm.SUNY.edu/provost/Project2015.htm>). The Office of Enrollment Management can provide campuses with data and analytical support on the ethnic and geographic diversity of enrollment markets and opportunities for broadening the diversity of the applicant base (contact Director of Financial Aid and Enrollment Analysis Renee Overdyke at overdyre@sysadm.suny.edu or 518-443-5474). See also Appendix C-4 for data on diversity and mix of students.

Stony Brook's student body is highly diverse and the University maintains a commitment to diversity while growing enrollments and recruiting out of state students. Figure 1 shows the composition of the entire Fall 2003 undergraduate student body (based on the students' identification of their origins). Figures 2 and 3 show the ethnicity of the undergraduate and graduate classes that entered in September 2003. In addition to diversity of origin, Stony Brook has a great number of students who are the first in their families to attend college or who come from low-income homes. Eighty seven percent of first-time, full-time Stony Brook students are still enrolled after the first year. Approximately 56 percent of incoming freshmen graduate within six years.

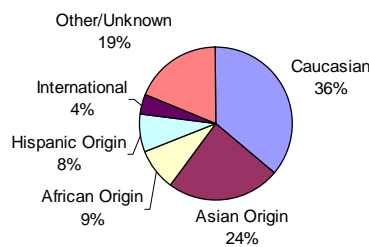


Figure 1: Undergraduate Student Ethnicity – Fall 2003

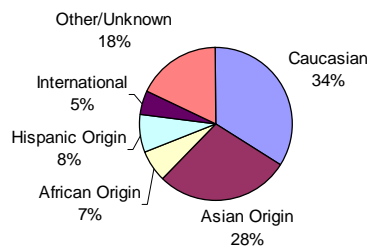


Figure 2: Freshman Student Ethnicity – Fall 2003

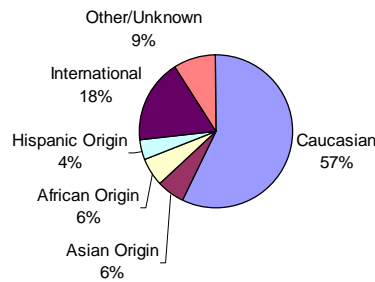


Figure 3: First-year Graduate Student Ethnicity–Fall 2003

Stony Brook plans to continue its current mix of students, with the exception of a strong effort toward increasing geographic diversity. Stony Brook primarily serves the New York metropolitan area. In Fall 2003, 87 percent of its undergraduate students came from Long Island or New York City. Students from elsewhere in New York State, other states, or other countries represent 6 percent, 3 percent, and 4 percent respectively. The advantages of increasing representation of students in the latter three categories would include greater cultural and experiential diversity, the enrollment of a larger number of high-achieving students, and additional income from higher, nonresident tuition. Just as importantly, the ability to draw students from a wider geographic area will serve to enhance SBU's academic reputation and place it more definitively among the ranks of highly regarded public research universities.

6. Please share undergraduate and graduate enrollment management plans, including recruitment strategies for 2005-2010. Describe investments planned to enhance the size and quality of the applicant pool, the yield on accepted students, and efforts to broaden the draw of students from outside the region and state. Against which institutions do you compete for undergraduate and graduate students? (See Appendix C-5.)

For undergraduates the Admissions Office will promote the University's unique opportunities for high achieving students which include the first-year Undergraduate Colleges, five-year bachelors/masters programs, the Honors College, Alpha Tau (the freshman honors society), Learning Communities, as well as the many research opportunities available throughout the University. New recruitment initiatives will involve alumni, particularly in out-of-state markets, and faculty who will play a special role in international recruitment as well.

In addition to a comprehensive recruitment effort targeting New Jersey, Connecticut, and Massachusetts, the Admissions Office is taking advantage of Stony Brook's reputation for excellence among academics by expanding recruitment in selected regions near national labs and in towns across the country with large public universities. The overall goal is to increase the proportion of out-of-state freshman enrollees, including new foreign students, to approximately 30 percent of the freshmen class (20 percent domestic; 10 percent international). Stony Brook believes this goal is realistic; many AAU public universities have at least this fraction of out-of-state students, and flagship, public universities in the northeastern region have, on average, even larger fractions. Increasing Stony Brook's enrollment from out-of-state will not only enhance the diversity of the freshman class and add revenue, but will also increase selectivity, enliven weekend activities, and broaden the scope of the student body commensurate with the University's national stature. Achieving geographic diversity will depend upon increasing public visibility outside of New York and recognition of Stony Brook as a first choice university for high achieving undergraduate students. This will involve educating the high school guidance community about program offerings, expanding programs for campus visits to include more classroom and lab tours, and connecting with alumni to meet with prospective students.

In order to increase the yield of Group 1 students, Stony Brook will continue investment in growing and supporting the Learning Communities and those academic programs that attract high achieving students. See appendix SBU-1 for a description of each of these programs.

There are HSC undergraduate programs in the Schools of Nursing, Social Work and Health Technology and Management. Some students in these programs transfer from other institutions, but the majority cross over from the College of Arts and Sciences, as juniors or seniors. The University proposes to increase the class sizes of the Registered Nursing, BS in Social Welfare, Clinical Lab Science, Respiratory Care, and BS in Health Sciences programs, but will need additional instructors and renovated instructional space to do so. Expansion will serve both the State and national need for entry level health professionals.

In 2003, the top ten universities with which Stony Brook competed for undergraduates (derived from the College Board's Enrollment Planning Service), from largest overlap to smallest in number of joint applications, were: SUNY Binghamton, SUNY Albany, New York University, SUNY Buffalo, St. John's University, Cornell University, Hofstra University, CUNY Hunter College, Boston University, and SUNY New Paltz.

Graduate School recruitment will continue to maintain highly successful recruitment at the program level. University wide recruitment is limited to efforts to increase the diversity of the applicant pool for all doctoral programs (e.g., NSF's Alliance for Inclusive Graduate Education and the Professoriate). Stony Brook will continue to interview applicants from PRC at five locations in China prior to making offers of admission. This strategy has improved its ability to recruit the best students and to identify students with excellent preparation in their discipline as well as a high level of ability to operate in English. The Graduate School agrees on recruitment goals with each program and constrains a large number of TA/GA lines for new students. The University operates a backstopping program to enable programs to make offers early without fear that unexpected increases in yield might leave them without resources to support their students. Further, Stony Brook will initiate a program to enable programs to increase the size of their entering doctoral class in situations where only one year of university support is required before the students move on to research funds.

Both within the State and nationally there is a demonstrable shortage of health professionals, and applications from well qualified individuals to the HSC graduate programs significantly exceed Stony Brook's admissions abilities. The University proposes to respond to these needs by increasing the class sizes of the programs in Medicine, Dental Medicine, Nursing and Social Welfare. Instructional space renovation, additional operatories and faculty lines, as well as the addition of one major clinical affiliation will be required to support the expansion. A new dean of Nursing is charged with the planning and launching of a Nursing Ph.D. program, and SBU has upgraded the Health Technology and Management programs in Physician Assistant, Physical Therapy and Occupational Therapy to an MS level to respond to the more sophisticated needs of these professions.

The HSC competes for graduate students with the main New York City universities – CUNY, Columbia, and NYU, as well as Long-Island based colleges - Hofstra, Adelphi, Touro, and Long Island University. The opening of an extension center at Stony Brook Manhattan will enhance the attractiveness of graduate programs in SSW and SHTM; SON has invested in Distance Learning and is offering its graduate programs nationally and internationally through advertisement on their web in professional journals.

7. Please update your five-year goals for undergraduate selectivity (see Appendix C-6) through fall 2010. Include specific goals for Special Admissions and the breakdown by each special-admit program (e.g., EOP, TRIO, etc.). Since SAT/ACT scores and high school records are typically required for undergraduate first-year admission at SUNY state-operated campuses, the anticipated proportion of first-year students without SAT/ACT scores and/or high school grade point averages should be very small. Students lacking one or both, admitted on the basis of other criteria, will be considered Special Admits and should be identified as such. Please describe the criteria used to guide your Special Admit program(s). What are your plans for the new SAT I and do you have any recommendations regarding its use to share with System at this time?

The University's goals for undergraduate selectivity are shown in the table. Stony Brook expects to continue to improve selectivity at approximately the same rate as in the past five years.

Percent First-Time Full-Time Regular Admits By Selectivity Group

	2003	2004	2005	2006	2007	2008	2009	2010
Group 1	50.3%	48.5%	50.0%	52.0%	55.0%	57.0%	59.0%	61.0%
Group 2	49.4%	51.4%	49.0%	48.0%	45.0%	43.0%	41.0%	39.0%
Group 3	0.2%	0.1%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Group 4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Group 5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Currently Stony Brook accepts 48 percent of its freshman applicants. It plans to increase applications both from NYS and, especially, from other states, so that it can maintain the trend of the past four years of increasing the number of freshman admits while increasing selectivity. At steady state, for each additional freshman admit each year, SBU can reduce the number of transfer admits by about two to maintain overall undergraduate student body enrollment. As it allows the freshman class to grow through an increasing applicant pool, Stony Brook expects to increase selectivity criteria for transfer admissions, thereby further improving the likelihood that transfer students will succeed.

As the only SUNY university center in the NYC region, Stony Brook is committed to providing access to first generation and immigrant students and students graduating from a growing number of community-based collaborative schools that utilize nontraditional evaluation and grading methods including portfolio review systems. EOP/Advancement on Individual Merit, the English Enhancement Program, and opportunities for consideration through special talent admission are critical to supporting access and diversity. The Admissions Office projects that the percentage of students enrolled in the Group 7 - Special Admit category will remain fairly constant. In particular, the University projects slight increases in the athlete student group in this category as it progresses in Division 1, and an increase in the English Enhancement Program, reflecting demographic trends in our primary downstate market. The University seeks to maintain EOP enrollments at about 6 percent of the entering class. (See appendix SBU-2 for detailed criteria for special admit programs).

Stony Brook will require the SAT 1 or ACT with the writing test for the students applying for admission in Fall 2006. Following SUNY System Administration's recommendations, SBU will not use the writing test to make admissions decisions for two to three years until its predictive value is clear. The University may use the test for writing course placement depending on its relationship to the current writing placement exam.

8. Please describe current expectations for Academic (Curricular) Preparedness in undergraduate admissions decisions. What high school courses are required and/or recommended for admission? Do you require the Advanced Regents diploma or any courses in addition to the general Regents diploma? How, if at all, will these requirements change over the next five years? In addition to the transcript, what characteristics and abilities are considered? What procedures are in place to gauge the appropriateness of the requirements/recommendations? Where there are program-specific requirements, please describe those as well. Please describe any collaborative efforts to help prepare K-12 students for success at the college level.

Stony Brook University is a selective institution, seeking to enroll those students who demonstrate intellectual curiosity and the academic ability to succeed. Successful applicants will typically have a high school diploma or equivalent (a Regents diploma is preferred for graduates of New York State public high schools); a strong high school academic program that includes three to four units of mathematics (four units required for engineering), four units of English, four units of social studies, three units of science (four units required for engineering), two to three units of a foreign language; in addition to standardized college exam scores that indicate the promise of success in a rigorous undergraduate course of study. Stony Brook will seek applicants with the Advanced Regents Diploma. The University currently requires at least three years of science and math (four of each for CEAS applicants), which is consistent with the Advanced Diploma and recommends that students provide SAT II scores in writing, mathematics, and a third area of their choice.

Due to the competitive applicant pool, Stony Brook's Admissions Committee strongly encourages all freshman applicants to submit the online Freshman Supplemental application in addition to the standard SUNY application. This supplemental application provides evidence of communication skills, special talents, interests in co-curricular activities, and motivation. Letters of recommendation provide information about students' academic and social growth and motivation to pursue the challenges of a selective research university.

Retention rates since Fall 1988 have been rising; the freshman-to-sophomore retention rate rose from 81.2 percent in 1998 to 87.1 percent in 2002. This trend is evidence of the fact that the freshmen class as a group is better prepared to complete the rigorous requirements for a four year undergraduate degree at Stony Brook, and also of the investments and emphasis SBU has made on improving student success support structures and function. The mean SAT score for entering freshmen has also increased and is now over 1200 for regularly enrolled freshmen. It is worth noting that Stony Brook serves a student population that includes a large proportion from homes whose first language is not English. National data show a 6-7 point gap between verbal and quantitative SAT scores; at Stony Brook the gap is about 35 points suggesting that average students who choose Stony Brook are better prepared in quantitative skills.

Stony Brook has program-specific admissions requirements for various academic areas. The College of Engineering and Applied Sciences and the pharmacology major require a minimum math SAT score of 600 and a minimum grade point average of 90. The College of Business requires a minimum math SAT score of 550. The upper division Health Sciences majors require specific undergraduate science courses in biology, chemistry and physics as well as various liberal arts pre-requisites.

Stony Brook participates in a variety of collaborative efforts to help prepare K-12 students for college. The Young Scholars Program provides academically talented high school students with an opportunity to enroll in selected entry-level undergraduate courses at the university. The Office of Admissions regularly hosts groups of junior high and high school students. These groups participate in lectures, workshops, and learn college survival strategies from current undergraduate students. In addition, members of the Admissions Staff regularly present workshops at area high schools on curriculum requirements for college, navigating through the college admissions process, and mastering the transition from high school to college. Now in its eighth year, the Pre-College and Community Music

Program provides over one hundred middle and high-school students with training in chamber music, composition, and music theory. Student groups work with graduate students and faculty in master classes. In Spring 2004, the chamber orchestra from Ward Melville High school performed in a workshop with Stony Brook's Emerson String Quartet. The program has recruited a number of talented undergraduates for Stony Brook; while others have gone on to further studies at conservatories and universities across the country.

The Stony Brook Science and Technology Early Entry Program (STEP) runs a number of enrichment and academic skill enhancing programs throughout the year. STEP is a New York State Education Department program, which began in 1986 to encourage and prepare more underrepresented minority and low-income secondary school students for entry into scientific, technical, health, and health-related professions, including many areas where licensure is required. Students in STEP must be residents of New York State. The program at Stony Brook offers enrichment activities and experiences through both a Saturday program and a summer program. The program's primary collaborators are the Health Science Center, the School of Medicine, the College of Engineering and Applied Sciences, the Department of Earth and Space Sciences, and the Department of Technology and Society. During the fall semester, it offers a research in health careers program. The program offers SAT prep courses in both the fall and spring. During the spring, it offers a mentor program for high school students and undergraduates, and a physician shadowing program. STEP's four-week summer residential program has three tracks: (1) a geosciences program that continues throughout the fall and spring semesters; (2) a problem solving track that offers a three-credit course (EST/AMS 194), an AP Physics prep course, and a technical based writing course and an Anatomy Lab; and (3) a computer literacy track that offers a three-credit course (EST 100), an introduction to Advanced Placement Calculus AB, and a research methodology course.

Special admit programs resulting from collaborative efforts are the Collegiate Science and Technology Entry Program (CSTEP), the Louis Stokes Alliance for Minority Participation (LSAMP) program, and Long Island-bio prep. Like STEP, CSTEP is a NYSED program. The CSTEP program at Stony Brook aims to promote academic excellence and to provide support services for its students. The mandate of CSTEP is to increase the numbers of underrepresented minority and low-income undergraduates pursuing degrees in scientific, technological, health, and health related fields of study, including many areas where licensure is required. Students in CSTEP must be residents of New York State. Each year the Stony Brook CSTEP program offers its students a summer bridge program for incoming first-year students, an academic success program, a research development course, and numerous seminars and workshops on graduate school admissions, career choices, career planning, and career building skills. The CSTEP program also offers collaborative learning workshops for mathematics, physics and chemistry. The LSAMP program at Stony Brook is a National Science Foundation sponsored program that is part of an alliance of sixteen SUNY colleges and universities with Stony Brook University as the lead institution. An LSAMP student must be from an underrepresented minority, majoring in science, technology, engineering, or mathematics and must also be either a citizen or a permanent resident of the United States. The LSAMP program offers a small stipend of \$250 per semester to students who maintain a cumulative GPA above 3.00. LSAMP students also participate in numerous activities that are co-sponsored with the CSTEP program.

Program admissions requirements for CSTEP and LSAMP are the same as for general admission to the University. Stony Brook does, however, look for a demonstrated ability in high school math and science coursework and also looks at a student's test results on the Regent's sequential math courses and grade 11 English Regent's exam.

Long Island Group Advancing Science Education at Stony Brook (LIGASE), in the department of biochemistry and cell biology, is another special program. Initiated in 1993, LIGASE develops educational partnerships between Stony Brook, colleges, and schools. It provides workshops, courses, and resources for pre-service and in-service K-12 science teachers and offers inquiry-based science

activities for students from elementary through graduate school. It is funded by the National Institutes of Health Minority Access to Research Careers (MARC) grant, matching Stony Brook scholarships, and National Science Foundation fellowships for student teachers in high-need schools. The main goal of the MARC program is to increase the numbers of underrepresented students pursuing research careers in bio-medicine. Additional funding allows recruitment of underrepresented students interested in research careers in all sciences. LIGASE builds solid relationships with middle and high schools through the Biotechnology Teaching Laboratory (BTL), summer science programs, and teacher workshops. Nearly 90 percent of Long Island school districts now participate in LIGASE activities. In 2003, more than 3,000 high school students and more than 300 middle school students visited the BTL and performed experiments. For the eighth year, LIGASE offered its four-week residential summer high school research program, enrolling 21 students in the Biotechnology Summer Camp and 19 students in the High School Scholars Program. Three hands-on LIGASE workshops in 2003 drew 42 elementary school teachers in 2003 to help prepare them to deliver scientific concepts to their students in dynamic, creative ways.

Faculty

(Plans for strengthening the quality, diversity, and reputation of faculty)

9. Please describe your faculty hiring priorities through 2010. What faculty profile do you aspire to in terms of tenure/non-tenure, rank, full-time/part-time, and diversity? Describe the impact this profile would have on your ability to enhance existing academic programs, add new ones, and/or strengthen your research mission (see questions 14 & 17). How would indicators such as faculty/student ratio, percentage of instruction delivered by full-time faculty (i.e., percent of full-time equivalent students taught by full-time faculty), class size distribution, and faculty workload likely change? How would these faculty changes be funded? (see Appendix C-7)

On Stony Brook's west campus, hiring priorities for the next years are driven by the goal of maintaining and strengthening graduate and research programs with national stature and/or programs critical to its goals as a public research university serving regional and state needs where it offers high quality education programs in many areas, e.g., engineering, health care, teacher education.

Priorities for hiring in specific areas include, but are not limited to: Asian and Asian American Studies, Business, Chemical and Molecular Engineering, Civil and Environmental Engineering, Computational Neurosciences, English (Creative Writing), Environmental Sciences, Mathematics, Nanosciences (especially joint appointments with BNL), and Political Science.

In the HSC, the SOM plans to enhance programs in Cancer and Cardiology by hiring new faculty in Medicine, Surgery, Pathology and in the Basic Sciences. The SON will improve research capability and develop a Ph.D program in Nursing by hiring several faculty. The SDM priority is to rebuild both research and clinical endeavors by hiring faculty in Oral Biology and in clinical departments. The SSW will hire to build the Ph.D program in Social Work. The SHTM goal is to hire additional faculty to enhance programs that have recently been transitioned to graduate level (PT, PA, OT), and enhance scholarly research especially in the DPT program.

Stony Brook's faculty totaled 1,846 in October 2003, including 1,330 full-time and 516 part-time. There are 927 tenured or tenure-track faculty, 657 off-track faculty (mostly clinicians) and 262 adjunct faculty (defined as part-time lecturers and instructors included in the instructional faculty). In addition to US born faculty, more than 300 scholars from 40 countries pursue research and teach at Stony Brook throughout the year. Nearly all of Stony Brook's full-time faculty members hold doctoral degrees or the highest degree in their field and more than 90 percent of the faculty are engaged in active research leading to publication and development of new knowledge. Stony Brook's distinguished faculty also includes seventeen members of the National Academy of Sciences, four members of the National Academy of Engineering and two members of the Institute of Medicine; a Nobel Laureate in Physics; fourteen members of the American Academy of Arts and Sciences; three MacArthur Fellows; four

fellows of the Royal Society; a Fields Medal winner; two winners of the United States Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, 5 Grammy award winners, two Pulitzer prize winners; and four recipients of the national Medals of Science and Technology and the Benjamin Franklin Medal. Stony Brook's faculty have also won 58 J. William Fulbright Fellowships or Awards and 74 John Simon Guggenheim Fellowships among numerous other fellowships. Stony Brook's faculty are dedicated teachers, and include 105 recipients of the Chancellor's Awards for Excellence in Teaching.

The number of tenured or tenure-track faculty in specific programs has typically decreased over the last few years because of tight budgets, the ancillary costs of startups, or the need to redirect monies to new or expanding programs. On the west campus, about 20 percent of FTE instruction is done by non-tenure track faculty and the percentage varies depending on program. For example in Writing and Rhetoric most instruction is done by full-time lecturers. In the MA in Public Policy, and in Business, more instruction is done by adjuncts because of their specific expertise.

The Office of the Provost regularly reviews student faculty ratios, class size distribution and faculty class workload in comparison with the University of Delaware database for our chosen peer institutions.

Faculty diversity does not mirror the diversity of SBU's students. Data for tenure-track faculty show that 82 percent are Caucasian, 11 percent are of Asian origin, 4 percent of African origin, and 3 percent of Hispanic origin. Four years ago the Provost commissioned a faculty task force to study issues related to women faculty success at Stony Brook. The task force report and Provost's response are available on the web (<http://ws.cc.stonybrook.edu/provost/Reports/Reports.htm>). Partly as a result of those deliberations, special salary equity reviews (based on the triad of faculty expectations: teaching, research/scholarship/creative activity, service) were done for women faculty, and later for all faculty, and salary adjustments were made where needed from campus discretionary monies. The deans on the west campus make a report annually to the Provost, describing efforts in improving faculty diversity.

Various budgetary pressures over years have meant that the University has not renewed itself with enough hires of new faculty. This makes diversity goals harder to achieve and also contributes to a "graying" faculty profile. A recent analysis shows about 15% of tenure-track faculty are less than 40 years old, 26% between 40 and 49, 33% between 50 and 59, and 26% are 60 or older. The fraction of faculty in this last age group is appreciably larger in some units including some of our best-known institutes and centers. Additionally, the skyrocketing costs of housing on Long Island and the very limited rental market in the area have become significant issues for recruiting new faculty. Low cost housing for beginning faculty would be an important investment in the future health of the institution.

10. What programs are in place on your campus to encourage faculty development, research/scholarship/creative activity, collaboration, and retention (e.g., financial support for attending professional conferences, grant writing, peer mentoring, faculty club, etc.), and how do you gauge the effectiveness and appropriateness of these programs? Describe how faculty achievements and accomplishments are recognized and rewarded.

As a research-intensive University Center, Stony Brook has at the core of its mission the creation of knowledge through research, scholarship, and creative activity. Therefore, research/scholarship/creative activity plays a central role in faculty life, balanced by contributions to the education and service components of our mission, and, in the schools of the Health Sciences Center, clinical practice. Information is collected each year for every faculty member concerning grants, conference papers, and publications, along with data on teaching and service. The self-study component of the regular review process for departments and centers similarly includes specific questions pertaining to faculty development.

There are a number of programs and procedures in place to help faculty develop their research/scholarship/creative activities consistent with the recommendations of Provost Salins' Task Force on Faculty Development (October 8, 2004). These include regular seminars organized by the Office of the Vice President for Research on topics related to extramural funding of research. That office also provides assistance in grant writing, in particular for new faculty and for faculty organizing large, collaborative projects. In addition, the NYS/UUP Professional Development Program is available to all faculty members. Funding for travel to conferences for the presentation of research is channeled to departments from the Deans. While some programs have been suspended for budgetary reasons, there have been many grant and awards programs to support faculty development, including The Academy of Teacher-Scholars and the Presidential Mini-Grants. The Undergraduate Research and Creative Activity Awards (URECA) provide funding for undergraduates to work with faculty on their research projects.

Most mentoring activities are carried out at the school and department levels. In the College of Arts and Sciences, for example, the Dean and Associate Dean for Faculty Affairs have yearly luncheons with each cohort of tenure-track assistant professors during which issues central to progress toward tenure are discussed. The Associate Dean and the Dean review in detail departments' recommendations for the final three-year probationary appointment, and the Dean's letter to the Provost supporting such an appointment is explicitly designed as advisory to the candidate and is copied to the candidate and the candidate's chair. The Associate Dean is available for one-on-one advising and oversees a College-wide mentoring program. The mentoring program is two-pronged: it pairs untenured faculty with tenured faculty in other departments who have similar concerns and interests, and it asks chairs to appoint a tenured faculty member to be a departmental mentor for each new hire. Chairs are key mentors to their junior faculty through the formal yearly conferences in which they assess progress and offer advice and support to each untenured faculty member. There is a generous policy for release time in the case of outside fellowships, and in the humanities, fine arts and lettered social sciences junior faculty are given a one-semester research assignment (and thus relieved of teaching) usually in their third or fourth year at Stony Brook. While details differ from school to school, the general pattern of mentoring services at both the school and department levels generally applies.

Stony Brook supports many venues for faculty collaboration, especially collaboration across traditional disciplines. Departments are encouraged to consider interdisciplinary opportunities when proposing new faculty positions, and search committees may include faculty from other departments. In particular, the various interdisciplinary Institutes and Centers at Stony Brook bring together faculty from various departments for colloquia, seminars, and collaborative research. Many of these result in center grants; others result in publications or conferences. Examples of institutes or centers include: Yang Institute for Theoretical Physics, the Center(s) for Advanced Technology, Center for Excellence in Learning and Teaching, Center for Global History, Center for India Studies, Center for Italian Studies, Centers for Molecular Medicine, Center for Regional Policy Studies, Humanities Institute, Institute for Cell and Developmental Biology, Institute for Long Island Archaeology, Institute for Mathematical Modeling, Institute for Mathematical Sciences, Institute for the Conservation of Tropical Environments, Latin American and Caribbean Studies Center, Mineral Physics Institute, the Center for Environmental Molecular Sciences, the Materials Research Science and Engineering centers in Polymers and in Thermal Spray, and New York Sea Grant Institute.

The Provost and President also run active lecture series that bring in prominent artists, scholars, diplomats, journalists, politicians, and others who are available to meet with faculty and students across the university. Beginning in 2004, the Graduate School has offered up to \$20,000 annually as matching funds for the organization of interdisciplinary seminar programs for graduate students.

The effectiveness of these efforts is measured by grants and other awards, publications in top journals, citations of Stony Brook publications, visibility of faculty in national organizations and meetings, national reputation and national ranking of each department in the usual reports and surveys, and our

ability to attract and keep excellent faculty at every rank. Stony Brook's strong record in promotions to the rank of Distinguished Professor is also evidence of a commitment to faculty development over the long term. As suggested by Provost Salins' task force, Distinguished Professors have been invited to give campus-wide lectures.

Faculty accomplishments are recognized and rewarded by discretionary salary increases, and by campus-wide and system-wide awards for research, teaching, and service, and by institutional nominations for national honors. Both the President's Office and the Provost's Office hold regular dinners and receptions to honor publicly faculty achievements, publications, and awards.

A review of Stony Brook faculty salaries in non-HSC areas shows that on average our salaries are slightly better than the average of public AAU universities but, when cost-of-living differences are taken into consideration, effectively Stony Brook salaries are too low. Many of our excellent faculty are targets for "raids" and we work hard to defend against outside offers from high quality institutions. This is a costly but unavoidable aspect of operating a nationally competitive university.

11. Please update your goals for research/sponsored activity to 2010. For doctoral campuses, please be sure to include goals for federal research dollars. Compare your expenditures with the peer institutions you identified above (question 2) and project three- and five-year benchmarks. Describe campus infrastructure (e.g., sponsored programs/grants office, equipment, start-up packages, etc.) that has been put in place to support and encourage research/scholarship and other sponsored activity, technology transfer/commercialization of new knowledge, and patenting/licensing of inventions/discoveries. (see Appendix C-8)

Stony Brook is a Carnegie Doctoral Research University—Extensive (in the 2000 classification) institution. This ranking places it among the most prestigious research universities in the country. Stony Brook has two National Science Foundation (NSF) Materials Research Science and Engineering Centers (the only university in the country with two). In addition, it is the host institution for an NSF-sponsored Center for Environmental Molecular Science, one of six in the nation. The University's successes in peer-reviewed research competitions come from the priority that SUNY has given to the research mission at Stony Brook and from the creativity of the highly talented and hard-working faculty supported by the Stony Brook administration. Research excellence continues to be a first priority mission of Stony Brook and provides an environment in which the research and scholarly activities of faculty and students flourish.

Stony Brook's externally-sponsored research funding accounts for more than 22 percent of the entire SUNY volume. The Stony Brook University Five-year Plan 2001-2005 sets a target of at least 5 percent per year growth in research expenditures. This has been exceeded—FY 04 saw growth of 13 percent! SBU's goal is to double research expenditures over the next ten years and to show at least a 40 percent increase in the first 5 years. The SUNY Graduate Research Initiative (GRI) was a critical component in building the University's success to date and failure to renew this resource will most likely result in declining success with grant proposals. SUNY is very strongly urged to continue this key program. Stony Brook's ambitious growth target will be greatly facilitated by the State-initiated STAR Center and Center of Excellence programs which have made commitments totaling over \$65 million to Stony Brook to provide the capital for facilities in which new programs will be housed.

Stony Brook continues to lead SUNY campuses in research expenditures that are derived from external sources and are managed by the Research Foundation (see appendix SBU-4). Moreover, Stony Brook shows the greatest federal funding administered through the Research Foundation of all the SUNY campuses. Stony Brook intends to grow its federal funding at 7 percent per year over the next ten years

The rankings that compare SBU to its aspirational peer group of 21 universities show that the University lags the group, ranking 20th and 12th in FY02 and FY97-99 expenditures, respectively. (In other words

we've been losing ground compared to our peers). However, many of our peer schools have many more faculty than Stony Brook. When the per capita expenditures are examined, Stony Brook faculty members are quite productive, ranking 17th among the peer group. The trend toward a smaller "market share" is of concern. Sustainable growth of research expenditures will require additional new faculty appointments targeted to specific areas designated for research growth.

University	FY97-99 Average Annual Expenditures (in Thousands of Dollars)	FY02 Expenditures 1000s of dollars	# of Full Time Faculty FY03	FY02 \$/FY03 FTE
University of California, San Diego	\$399,364	\$585,008	1265	\$462,457
University of California, Berkley	\$118,631	\$474,746	1566	\$303,158
University of California, Los Angeles	\$132,969	\$787,598	2824	\$278,894
University of California, Davis	\$112,260	\$456,653	1951	\$234,061
University of Wisconsin, Madison	\$151,067	\$662,101	3067	\$215,879
University of Washington	\$161,785	\$627,273	3003	\$208,882
University of Michigan, Ann Arbor	\$157,041	\$673,724	3319	\$202,990
University of Arizona	\$103,842	\$390,827	2024	\$193,096
University of North Carolina, Chapel Hill	\$117,574	\$370,806	1942	\$190,940
University of Minnesota, Twin Cities	\$116,680	\$494,265	2719	\$181,782
University of Illinois, Champlain-Urbana	\$79,371	\$427,174	2421	\$176,445
Pennsylvania State University, Main	\$118,751	\$492,739	2907	\$169,501
University of Indiana, Bloomington	\$75,014	\$299,080	1785	\$167,552
University of Colorado, Boulder	\$230,733	\$399,818	2416	\$165,488
University of California, Irvine	\$119,459	\$209,469	1285	\$163,011
University of California, Santa Barbara	\$98,746	\$131,795	894	\$147,422
Stony Brook University	\$116,067	\$184,045	1314	\$140,065
University of Iowa	\$97,627	\$288,808	2130	\$135,591
University of Texas, Austin	\$81,810	\$320,966	2636	\$121,763
University of Pittsburgh	\$112,039	\$400,200	3336	\$119,964
University of Maryland, College Park	\$84,560	\$324,980	2954	\$110,014
University of Virginia	\$72,585	\$182,340	2695	\$67,659

Table 1

FTE Relationships to our National Peer Group

Sources: Employees with faculty status. IPEDS Employees by Assigned Position Survey, Fall 2002
NSF data for FY97 and FY02 expenditures: <http://nsf.gov/sbe/srs/rdexp/start.htm>

SUNY should recognize selected campuses, including Stony Brook, as research intensive and requiring additional financial resources and faculty who will enhance SUNY's competitiveness for research growth.

To realize continuing growth objectives at the campus level SBU has established the following:

- Supportive administrative structures for sponsored programs administration
- Creative approaches for backing multi-disciplinary research initiatives
 - As a result of the last two years of effort, following the appointment of an Associate Vice President for Research charged with facilitating efforts to pursue multi-disciplinary opportunities (the wave of the Federal future as shown in both the NIH Roadmap and the NSF priorities announcements), Stony Brook now has 400+ grants with investigators in at least two departments and total multiyear budgets of \$116M. These include the Center for Environmental Molecular Science [\$5.6M], the USAID-funded Higher Education and Development for Archaeology and Environmental Health Research in Iraq program [\$10.9M], and an NIH Program Project Grant in infectious diseases [\$15M] totaling \$31.5M. The University would like to increase this figure by at least a third over the next five years.
- Ever closer relations with Brookhaven National Laboratory

- The President's seed grant program funds exploratory joint research projects. BNL's interest in joint projects funded by other-than-DOE sources is evidenced by the fact that they have added administrative staff for increasing "work for hire"—for the NIH, for example. Stony Brook is planning a joint session with BNL on the SBIR/STTR program to be offered in 2005 and wants to increase expenditures on joint BNL/SBU projects by at least 10 percent per year over the next five years.
- Provision of resources needed to attract and retain excellent faculty including a number of state-of-the-art facilities, equipment, and shops and service facilities
- A royalty system that encourages invention and an Office of Technology Licensing and Industry Relations that encourages investigators to bring their inventions to the marketplace

New research activities are being supported that have the potential to impact emerging fields, and to create leveraging opportunities both with Stony Brook's existing faculty and resources and with external partners such as Brookhaven National Laboratory, Cold Spring Harbor Laboratory, and industry. The Affiliated Centers of the new Centers for Molecular Medicine have attracted significant funding from the NIH. The Centers include the following: Center for Structural Biology; Center for Infectious Diseases; the Howard Hughes Medical Institute Professor and the associated Center for Brain and Spinal Cord Research, the Center for Molecular Cardiology and the Center for Cell and Developmental Biology (the new Centers for Molecular Medicine building also houses the Biology Learning Laboratories). Stony Brook is also home to two Centers for Advanced Technology, one in Medical Biotechnology and the other in Sensor Systems. Both are highly rated by NYSTAR.

The following internal programs and assistance mechanisms support research priorities at Stony Brook and assist faculty in securing external support:

Programs that support research initiatives include the following:

- Administrative commitment to building programs of research excellence;
- Return of 30.5 percent of F&A monies to generating units for research development: the VP for Research uses 5.5 percent of the value of the campus Indirect Costs to provide matching funds for grant applications and for facilities development;
- Appointment of an Associate Vice President for Research to coordinate and create interdisciplinary teams to respond to new funding opportunities;
- An Office of Research Resources to match funding opportunities with faculty interests;
- A comprehensive Research Informatics Web site;
- A full-service Office of Sponsored Programs to submit proposals to funding agencies and to negotiate contracts;
- An Office of Research Compliance to assure that the University meets federal requirements pertaining to use of human subjects, animal subjects and hazardous materials in research; (recent reviews by OHRP and FDA found our program in humans subjects research to be exemplary). This office also provides training for investigators planning to use human or animal subjects or radiation producing materials.
- A full-service Office of Grants Management that also responds to audits.
- An Office of Economic Development that pairs local industry sponsors with researchers at Stony Brook, an activity that benefits the regional economy as well as the research endeavor.

Programs that Support Technology Transfer: Patents, Copyrights, Licensing and Royalty Management—a Full-Service Office of Technology Licensing and Industry Relations:

- Identifies faculty and staff intellectual property through an aggressive program of visits to departments and laboratories to help inventors recognize the commercial potential of their inventions;
- Receives disclosures of intellectual properties;
- Pursues patents, if appropriate, using outside counsel;

- Markets intellectual properties;
- Licenses intellectual properties, a process that involves extensive negotiations to develop contracts that are advantageous to both Stony Brook and the commercial partner;
- Receives and manages royalty payments; Stony Brook has the most active and successful technology transfer office in the SUNY system generating more than 95 percent of the revenues that accounted for SUNY's 14th place ranking nationally in licensing income (2001).
- Encourages regional economic development by preferentially licensing intellectual properties to local industry.

Campus Vulnerabilities

- As mentioned above, Stony Brook is very concerned about the loss of GRI funds to meet research development needs. NYSTAR is not able to substitute for the GRI monies because their processes do not provide the agility required for research proposal development.
- The ability of the campus to seed a high tech economic development zone is hampered by the high cost of living in this area and the lack of housing and amenities for the young, frequently single, scientists and engineers who create the advances and excitement that go into a fast moving industry.

12. Have your faculty review, promotion, and tenure procedures (including the role of and/or weight given to teaching effectiveness, scholarly productivity/research, and service) changed since the first round of Mission Review? Please describe these and any anticipated (additional) changes over the next five years? Is external review incorporated into the tenure and promotion process? If not, please explain.

The Promotion and Tenure Committees for both the College of Arts and Sciences and the College of Engineering and Applied Sciences revised their guidelines in 1999, placing a greater emphasis on teaching effectiveness. The revised guidelines require a "teaching portfolio" to be included in tenure and promotion files. The newly required materials in the teaching portfolio are syllabi and other sample course materials, and at least two reports of peer observations of classroom teaching.

In the School of Medicine, the Educator/Clinical Scholar track was revised to include a tenure eligible Educator's position. Individuals in this position are appointed in the tenure track titles (Assistant, Associate or Full Professor) with a local title of Educator. Candidates within this local title "must participate in a research program or demonstrate a pattern of scholarship leading to publications in peer reviewed journals. The publications may involve scientific, clinical, and/or educational research or other forms of recognized scholarship." This new track is in line with trends in medical education reported nationwide.

External review is incorporated into the promotion and tenure process for all faculty. External review is required for all tenure files for librarians and for promotion to Associate or Full Librarian.

13. Please describe how faculty opinion and satisfaction are gauged (e.g., HERI survey, campus-based survey, or other) and incorporated into campus decision making (see Appendix C-9 for HERI faculty survey results). Please describe the role of faculty governance in campus planning.

Stony Brook gauges faculty opinion indirectly through issues raised in the development of each Five Year Plan and a periodic survey of faculty and staff conducted by the University Senate. Special survey projects which in the last few years have included the HERI Faculty Survey (spring 2001), a telephone survey of students and instructors conducted for the Middle States Self Study (spring 2003), and a Campus Climate Survey (spring 2004).

Progress toward, and achievement of, goals laid out in the Five Year Plan are documented in the President's annual reports to the campus community. The current plan (2000-2005) represents the work of more than 150 faculty, staff, students, alumni and friends of the university. Specific actions in the current plan include: improvement of the reward structure and working environment, support for a diverse faculty, effective support for research, enhancement of interdisciplinary activities, and development of the arts.

The faculty governance structure at Stony Brook is based on three major units: Arts and Sciences (A&S), Engineering and Applied Sciences (EAS) and Health Sciences (HS). Governance is conducted through the University Senate and the senates of two of the three units, the A&S Senate and the EAS Senate. The third unit, HS, does not operate a unit-wide senate but has smaller constituency senates; the largest are the Medical Faculty Senate and the Dental School Senate. The primary distinction between work of the University Senate, and the unit Senates, is the constitutional assignment of responsibility for personnel policy, curriculum, academic standing and appeals, and academic judiciary to the individual units. Professional employees on campus are represented by their own governance structure, the Professional Employees Governance Board (PEG Board); undergraduate students are represented by the Undergraduate Student Government (USG), and graduate students by the Graduate Student Organization (GSO). The elected membership of the University Senate consists of: faculty from the three major units; professional employees; and student members from USG and GSO.

The University Senate retains responsibility for governance issues that cross the boundaries of the major units. It acts in an advisory role to the President, the Provost and selected administrative units. The primary mechanism for formulating advice is through the standing committees of the University Senate. The committee list, including the charge and current composition of each, can be found at <http://naples.cc.sunysb.edu/Admin/usenate.nsf/pages/standing>. Faculty from each of the three units, professional employees, and student members from USG and GSO have elected representatives serving on these committees. Each committee has an *ex officio* representative consisting of a senior administrator whose office they advise. This is the primary mechanism for the input of faculty governance in any area of campus planning. Example committees are: Academic Planning and Resource Allocation, which reviews budgetary procedures and planning/resource allocation priorities and advises the Provost; the Undergraduate Council, which reviews the educational process and recommends undergraduate policy and advises the Deputy Provost, who has special responsibility for Undergraduate Studies; and the Graduate Council, which oversees all aspects of graduate education and advises the Dean of the Graduate School. The University Senate President meets individually with the President and Provost on an as-needed basis. The Senate President has a non-voting seat on the Stony Brook Council (<http://naples.cc.stonybrook.edu/Admin/fshotlinks.nsf/By+Section+Number/301.00>) and is a member of the Provost's Advisory Group which meets bi-weekly.

The University Senate has an Executive Committee to administer standing committee functions and bring policy resolutions from committee to the Senate floor for final Senate decision. The executive committee advises the University President and Provost directly and meets with each on a monthly basis during the academic year. This is the secondary mechanism for the input of faculty governance in any area of campus planning.

Academic Program Directions

(Plans for strengthening the quality and reputation of academic programs)

Undergraduate Programs

14. Describe your plans and priorities for undergraduate program development to 2010 (please be sure to reference the five-year enrollment plan).
 - a. How do these priorities relate to the mission of your campus? In light of your priorities, what specific programs will you likely add, remove, or change over the next five years (see Appendix C-10 for trends in enrollment and degrees across programs)?
 - b. Detail the implications for resources (including faculty) and facilities.
 - c. Is there a particular regional or local focus to the planned program development? If so, please explain, including whether the focus will likely change over the next five years.

Historically, undergraduate program development at Stony Brook usually begins at the individual department level and works its way up through both administrative and governance units. Since the last mission review, a number of undergraduate programs have been developed and approved in this fashion, including American Studies, Biomedical Engineering, Cinema and Cultural Studies, Environmental Studies, and Health Sciences. Departmentally-based initiatives in the last year alone include Asian and Asian-American Studies, Chemical and Molecular Engineering, European Studies, Marine Biology and Technological Systems Management.

Our new majors have received strong reviews. For example, an external examiner from a major research university in the mid-west singled out our major in Cinema and Cultural Studies as the new communications major. Because of their basis in student interest, these new majors have also been very well received by our undergraduates.

Other majors have been reconfigured since the last mission review to reflect both changes in the wider world and changes in student needs. For example, the Department of Sociology has focused all of its educational programs at both the graduate and undergraduate level on sociology that is informed by a global perspective. The Department of European Languages has similarly recognized changes in the political landscape with its new major in European Studies, which acknowledges the new unity of Europe as both a political and a cultural entity.

Another major achievement has been the accreditation of our teacher preparation programs by the National Council for the Accreditation of Teacher Education (NCATE). This accreditation constitutes formal recognition at the national level of Stony Brook's unique distributed disciplinary-based centrally coordinated model for teacher education.

In the last several years, two new initiatives have also been undertaken at a university-wide level that seek to reorganize undergraduate education at Stony Brook much more broadly. These initiatives, the multi-award programs (combined bachelors and masters degree) and the undergraduate colleges, will have major repercussions on the Stony Brook undergraduate experience for the foreseeable future. The University expects them to change entirely how it conducts undergraduate education. These programs and the resources devoted to them bespeak a new emphasis on undergraduate education at Stony Brook which, like its long-standing emphasis on undergraduate research, will take advantage of SBU's ever-growing strengths in research and graduate education.

Multi-award programs permit a student to earn both a bachelors and masters degree through a single five-year program of study. Stony Brook has set a course that will allow us to offer multi-award programs in all those areas where such programs will be beneficial to its students. These programs are primarily in professional areas where Masters degrees are important credentials, including business (MBA), teaching (MAT and MA) and certain health professions. In teaching, the combined degree will prepare candidates for permanent certification. Several of Stony Brook's engineering departments are planning to award a Master of Engineering degree in their fields that currently offer M.Sc degrees. In business, the overall plan combines an undergraduate liberal-arts degree with the MBA, thus providing students with both the intellectual breadth and skills that a liberal-arts degree provides and the technical

knowledge and skills acquired in a business program. For each masters degree, Stony Brook has adopted a templatic approach towards the approval process that links several undergraduate majors to the relevant masters. The University is working closely with cognizant officials at central administration to ensure that approval proceeds as smoothly as possible.

The undergraduate colleges touch on every aspect of Stony Brook's undergraduates' lives, beginning with the recruitment process. The six Stony Brook undergraduate colleges, now all fully operational, are academic and social communities, each the size of a liberal arts college. Every year, between 350 and 400 new first-year students join each college. The colleges are named for the distinct themes that drive their academic and social lives. These themes are not tied specifically to particular majors, but are very broad and designed to appeal to a wide range of student interests. The six colleges and their themes are as follows: Arts, Culture, and Humanities; Global Studies; Human Development; Information and Technology Studies; Leadership; and Science and Society. Each college is headed by a faculty director who is a respected full-time tenured member of the Stony Brook faculty with a strong research and teaching record. In order to get new students off on the right foot, a professional academic advisor is assigned to each college. The faculty director, college faculty, and academic advisors work closely with student affairs staff. Each college is linked to one of Stony Brook's six residential quads and the new first-year residential students in the college live together in the quad associated with the college. For first-year students, the primary academic component of the college is the academic seminar program which brings freshman together with faculty in courses covering a vast range of topics linked to the various college themes. College life extends beyond the first year. Upper-class students may act as mentors for first-year students in their college, primarily through the tutoring centers that can be found in every college. Upper-class students may also commit themselves to one of the Living Learning Centers that have been an important part of Stony Brook life for many years. These have been fully integrated into the colleges, so that each college has within it one or more Living Learning Centers thematically linked to it.

15. Identify undergraduate majors and programs on your campus that are nationally and/or regionally recognized.

The most recent Gourman Report (10th Edition, 1998) ranks 14 Stony Brook undergraduate programs in the top 100 for that discipline:

Engineering Science (11)	Physics (29)
Computer Science (15)	Mathematics (34)
Geology/Geosciences (19)	Biology (35)
Psychology (26)	Economics (39)
Biochemistry (27)	History (39)
English (28)	Mechanical Engineering (52)
Nursing (29)	Electrical Engineering (72)

The excellence of Stony Brook's undergraduate programs needs to be better publicized beyond the Long Island/Metropolitan area (US News generally ranks Geosciences, Political Science, Sociology in the top 20). While this catchment area includes a large population, the University is making a major effort to promote knowledge of excellence in undergraduate education throughout the northeast.

Stony Brook's growing national reputation for undergraduate research (US News, Boyer, RAIRE, AAC&U) combined with its new freshmen colleges is a first step. Undergraduates who major in Anthropology, Applied Mathematics, Astronomy, Atmospheric Sciences, Biochemistry, Biology, Biomedical Engineering, Chemistry, Comparative Literature, Computer Science, Electrical Engineering, Environmental Studies, Geosciences, Hispanic Languages, History, Linguistics, Mathematics, Mechanical Engineering, Music, Philosophy, Physics, Political Science, Psychology, and Sociology are taught and mentored by internationally renowned faculty. Stony Brook's theme is affordable excellence.

16. Describe the distinctive elements of your general education curriculum.

The most distinctive component of the Stony Brook general education curriculum, especially in contrast to the SUNY-wide curriculum, is its upper division component. Four of Stony Brook's general education requirements, those devoted to expanding perspectives and cultural awareness, may not be met by introductory-level courses. This is in marked contrast to the SUNY general education curriculum, which is a lower-division program. When the SUNY-wide curriculum was first put into place, this contrast in approaches made it difficult to reconcile the two, but the conflicts have now been resolved.

Stony Brook's current general education program was implemented in Fall 1991 and has been revised several times since. As currently configured, the general education program contains two parts, a set of four entry skills, at least some of which many students will have met upon entry to the university, and the Diversified Education Curriculum (DEC), which is designed to help students place the more specialized parts of their undergraduate study – their major and Pre-Professional training – in a cultural and historical context.

The four entry skills are basic mathematics competence; basic writing competence; elementary foreign language competence; and competence in American History. All of these fulfill SUNY GER requirements. Some of the DEC requirements map onto the remaining SUNY GER requirements, but in general, DEC exceeds GER in scope and depth:

- DEC requires three courses in the Humanities, two courses in American History, two courses in the Social and Behavioral Sciences, and two courses in the Natural Sciences, while SUNY GER requires only one course in each of these core areas.
- The DEC requirements in mathematics and English composition exceed the SUNY GER requirements in both these skill areas (being by and large equivalent to two courses in each of these areas).
- One DEC category, Implications of Science and Technology, is not included in GER.
- In terms of numbers of credit hours, DEC requires over 40 credits of almost all students.
- Three DEC categories (European Traditions, The World Beyond European Traditions, and The American Experience in Historical Perspective) may not be fulfilled by 100-level courses, while all SUNY GER requirements may be met by 100-level courses.

Stony Brook is pleased overall with the DEC, and does not have any plans for revising it in a major way. All individual general education courses are reviewed periodically by the Arts and Sciences Curriculum Committee, which has been charged with oversight of general education. Over the last five years, several hundred courses have either lost or gained DEC certification.

Graduate and Professional Programs

17. Describe your plans and priorities for graduate and professional program development to 2010 (please be sure to reference the five-year enrollment plan).

Stony Brook expects to increase graduate enrollment by about 1500 students by 2010. This expansion will come about by taking advantage of existing faculty resources in Ph.D. programs where capacity exists and external research support is available, expansion of master's education and the addition of selected, new programs. Priorities for new programs at the doctoral level are in Chemical Engineering, Civil and Environmental Engineering, Environmental Science and Nursing. Priorities for new programs at the master's level are the MBA and MPH degrees implemented in Fall 2004, MA and MS degrees in Environmental Sciences, MA in Africana Studies, MA in Asian and Asian American Studies, expansion of tracks in the MS in Nursing, and a graduate Physician Assistant program by June 2005. The University anticipates substantial expansion of its five year combined degree (BA/MA, BS/MS, BA/MBA) programs and concomitant growth in its master's offerings and enrollment. SBU will

continue to add to its offerings of MAT degrees. Depending on actions by the professional organizations, the University may consider the development of an advanced masters degree or OTD (Doctor of Occupational Therapy - terminal degree program) and/or a transitional masters degree for occupational therapists by 2010.

Considerable opportunities exist to expand doctoral education and research programs as the result of the steadily increasing collaborations between BNL and SBU scientists and the new \$85 million Nanoscience Center at BNL, and the NYS STAR Center for Excellence in Wireless Internet and Information Technology.

a. How do these priorities relate to the mission of your campus? In light of your priorities, what specific programs will you likely add, remove, or change over the next five years (see Appendix C-10 for trends in enrollment and degrees across programs)?

These priorities are components of the University's plan to become recognized internationally as one of the top ten public research universities in the United States. Stony Brook will add a campus-wide, interdepartmental graduate program in environmental science, consisting of M.A. (non-thesis), M.S. and PhD degrees as well as develop a range of five-year bachelors/masters degree programs in which students from various bachelor's programs can enter the masters' programs and begin taking graduate courses in their junior and senior years. SBU anticipates the development of additional graduate programs in the areas of Biotechnology, Wireless and Information Technologies, Bio-Informatics and Bio-Modeling, Civil and Environmental Engineering, Chemical Engineering and Nanotechnology and anticipates further consolidation among doctoral programs in the biomedical sciences in terms of recruitment and first year curriculum.

Stony Brook eliminated one of its biomedical science Ph.D. programs a few years ago and has suspended admissions to the Doctor of Arts in Foreign Languages program. The University does not expect to eliminate others at this time; however, it expects to eliminate the MS in Management and Policy once the MBA program is fully implemented.

b. Detail the implications for faculty, resources, and fund raising (be sure responses are consistent with your responses in each of the respective sections).

The new environmental sciences consortium will draw faculty from across the campus and position SBU to compete more effectively for especially interdisciplinary grants, as well as seeking support from industry and the private sector. The University's initiatives will drive faculty hiring priorities for departments that are partners in these broad, interdisciplinary initiatives. Expansion of faculty in the Health Science Center will result from increased tuition and clinical revenues. Additional faculty on west campus will be recruited as funding becomes available through increased tuition revenues and improved state support for competitiveness in doctoral education and research. Faculty hiring will be driven by these priorities in relevant discipline areas. Stony Brook will continue to seek external funding aggressively and will increase its attention to philanthropic support for all areas in conjunction with the capital campaign.

c. Is there a particular regional or local focus to planned program development efforts? If so, please explain, including whether the focus will likely change over the next five years.

Most of the University's graduate programs are geared to the national and international environment. Investments in Biotechnology, Wireless and Information Technology, and Nanotechnology build on existing strengths, connections to strengths at BNL and CSHL, and to corporate support in these areas. The environmental sciences program will have a strong emphasis on highly urbanized coastal environments like those of the New York City and Long Island regions. SBU's master's programs in all areas of the campus tend to serve regional needs to a much greater degree than is the case for doctoral

programs.

d. As a part of the graduate program benchmarking initiative now underway, doctoral campuses in particular will be identifying a set of data elements that relate to program quality, a component of which will be related to admissions. How have your admission criteria/standards for each graduate and professional program changed since the System Administration survey in 2002 (conducted as part of the Enrollment Planning process)? For your first-professional programs, what are your five-year goals for mean scores on qualifying standardized tests (e.g., LSAT, MCAT, and GMAT) for applicants, and admitted and enrolled students. Similarly, for your Ph.D. programs, what are your five-year goals for GRE scores?

Stony Brook's admissions criteria have not changed substantially since 2002. Stony Brook's graduate programs always seek the best applicants and to enroll the best from among those applicants. The University seeks better students but does not feel that this will necessarily be achieved by setting goals for standardized test scores for entering students. Better may mean students from an increasingly diverse cross section of society, students with improved preparation for research etc. SBU looks forward to working with System Administration to develop simple indicators of student quality but does not intend or expect to measure the quality of our programs or students using standardized test scores for admitted students.

At Stony Brook the emphasis is on output measures of program quality and particularly on the interest in those for faculty as they describe the intellectual environment in which doctoral education takes place. The University uses as indicators a summary measure of faculty scholarly productivity that includes publications, citations of publications, and externally funded support for research and scholarship in addition to externally funded research dollars per faculty member adjusted by discipline.

18. Appreciating doctoral campus commitment to work with System Administration on the benchmarking initiative for doctoral and first-professional programs, please identify the graduate and professional academic programs on your campus that are nationally recognized for excellence. Please specify which programs are ranked, the current/most recent ranking for each applicable program, and the source of the ranking. Describe plans to enhance this profile.

Stony Brook defines nationally recognized for excellence as having been ranked in the top 25 programs nationally or the top quartile nationally in the 1995 NRC study, or at the same level by Diamond and Graham (2000), or at the same level using faculty scholarly productivity data from the 1995 NRC study (Stony Brook FSP index), or at the same level in US News & World Report.

Nationally recognized for excellence:

Anthropology	Linguistics
Applied Mathematics and Statistics	Marine and Atmospheric Sciences
Astronomy	Mathematics
Biochemistry and Structural Biology	Mechanical Engineering
Chemistry	Molecular and Cellular Biology
Comparative Literature	Molecular Genetics and Microbiology
Computer Science	Music
Ecology and Evolution	Pharmacology
Genetics	Physics
Geosciences	Political Science
Hispanic Languages	Psychology
History	Sociology

Stony Brook has carried out external reviews of its doctoral programs for at least twenty years and invariably asks its reviewers where they believe that the University's programs rank in terms of quality.

In addition, several of the relatively small number of programs that are not nationally ranked for excellence based on the stringent criteria used above can be shown to have other indicators of excellence that will likely translate into national rankings for excellence in the future.

For those not nationally ranked as excellent the University has the following comments:

- Anatomical Sciences has a separately registered Ph.D. program that was not included in the 1995 NRC study. All of the faculty in that program were listed under Stony Brook's Anthropological Sciences program that was ranked #1 in the nation by Diamond and Graham (2000) and by Stony Brook's FSP analysis. It seems safe to conclude that Anatomical Sciences would be nationally recognized for excellence if such a ranking were carried out.
- Art History and Criticism was started in 1994 and was not included in the 1995 NRC ranking. Stony Brook's distinguished faculty in Art Criticism and Modern American Art win numerous prestigious awards and it seems probably that this program will be well reviewed in the future.
- Biomedical Engineering began after the 1995 NRC study but has won a series of peer reviewed, national competitions for support from the Whitaker Foundation and it seems likely that it will rank highly. In the most recent US News ranking it appears at #33.
- Economics ranked 24th on grants per faculty using data from the 1995 NRC study and is a program that we need to improve.
- Electrical Engineering has been substantially rebuilt since the 1995 NRC study and has grown its volume of externally sponsored research dramatically. The University believes that this is a very strong program and that its ranking will reflect its improvement in the next national study.
- Stony Brook's English program once ranked in the top 10 nationally and counted giants in the field among its faculty. It ranked 29th on FSP and 11th on publications per faculty, both of which scores, together with an excellent external review last year lead us to think that it will fare well in the next national ranking.
- Hispanic Languages and Literatures did not quite make our criteria for national excellence but ranks 29th on FSP, 22nd on publications/faculty and 16th on awards/faculty. This program is close to achieving national recognition for excellence.
- The Materials Science program is not nationally ranked by the criteria outlined above but it is the one of only two departments in the country (Stanford was the second) that was been awarded two National Science Foundation Material Research Science and Engineering Centers (MRSEC) and is the only one that was successful in renewing support for both centers. SBU believes that this success in the highest level of competition for peer reviewed funding augers well for the future ranking of this program.
- Music Performance is not ranked nationally by the NRC and there is no existing ranking of the DMA performance programs. The University achieves national recognition by the professional success and visibility of our graduates as performing artists. Currently, Stony Brook has graduates performing with: Metropolitan Opera, Lincoln Center Chamber Music Society, National Symphony (Washington, D.C.), Bang-on-a-Can All Stars, Ethel String Quartet, Orpheus Chamber Orchestra, Montreal Symphony. Stony Brook's faculty have won so many prestigious awards and includes such renowned figures as Gilbert Kalish, Ani Kavafian, Pamela Frank and the Emerson String Quartet that it seems clear that it functions at a level equivalent to what is described as national excellence.
- Neurobiology rankings in the 1995 NRC study were seriously compromised as the result of a campaign by chairs of Neuroscience departments to boycott the study. Stony Brook's program did not rank in the top group but a recent external review was strongly positive and the record of the faculty in winning external support for their research shows that the program functions at a level equivalent to national excellence.
- Stony Brook's Oral Biology and Pathology Ph.D. was not included in the 1995 NRC study. This program's faculty wins numerous awards and is tremendously successful in obtaining externally funded research and in translational research as measured by patents granted and licenses producing revenue. The University believes that this is a small, specialized but excellent program.

- The Philosophy program did not fare well in the NRC study or in terms of FSP using data derived from that study. Stony Brook's program has a focus in Continental Philosophy, which puts it in the company of a relatively small number of programs in the USA. Many of the awards and funding received by SBU faculty were not captured in the NRC. Three years ago an external review team led by a distinguished faculty member for Pittsburgh (which has one of the top ranked Philosophy programs in the US) concluded that our Continental Philosophers amounted to one of the top five such groups in the US and functioned at a level comparable with top ten analytic philosophy programs.
- The Physiology and Biophysics program was ranked just below the cut off for national excellence in the last NRC study. This program has an emphasis in Biophysics (which was not ranked in the 1995 NRC) and has been successful in winning an NIH Training Grant and renewals for many years. The University considers that this program functions at a level equivalent to excellence on a national scale.
- The new Ph.D. in Social Welfare was not included in the 1995 NRC study but attracts strong students and is on a trajectory that is considered to be very positive.

Rankings of master's programs (other than professional areas) are uncommon and Stony Brook's MFA in Studio Art does not appear in any of these. However, the yield of students who enroll following an offer of admission has been close to 100 percent for several years, which indicates a high quality program. Concerning the MFA in Dramaturgy; the January, 2001 issue of *American Theatre* (Vol. 18, No. 1), focused on major dramaturgy programs in America, the top ten programs in the country were profiled (pp. 22-29) alphabetically: Brooklyn College, Catholic University, Columbia, Harvard, Stanford, Stony Brook University, UC-San Diego, U Mass-Amherst, Yale, Villanova.

19. Describe the institutional support for graduate education, including but not limited to the provision of competitive stipends.

Graduate, and especially doctoral, education is at the center of the mission of a research university. As such, Stony Brook supports graduate education in numerous ways, with most of these activities being orchestrated by the Graduate School. The Graduate School is headed by the Dean and includes two (half time) Associate Deans (for Diversity and Recruitment and for Academic Affairs). The three major functional areas (Admissions and Records, Budget and Finance, International Student and Scholar Services) are each headed by an Assistant Dean. The Graduate School works closely with, and enjoys strong support from, the Office of the Vice President for Research. College and school deans also view graduate education and research as integral components of their areas of responsibility and devote considerable attention to this activity. The College of Engineering and the School of Medicine have an Associate Dean and Vice Dean respectively charged with responsibility for graduate education and research. A standing committee of the University Senate, the Graduate Council, provides oversight and advice on all matters concerning graduate education at the University. The Graduate Student Organization (GSO) is the Governance body for all post-baccalaureate students at the University.

The Graduate School allocates and manages resources for recruitment and retention of graduate students. Stony Brook funds 684 TA/GA lines with a minimum stipend of \$11,655. In many programs this funding is supplemented with summer research support so that recruitment stipends range from a low of \$11,655 to a high of \$23,000. To support recruitment of the best students in applicant pools, the campus has deployed \$900,000 annually to fund stipend supplements for recruitment. The campus also funds 50 Graduate Council Fellowships, which support ten entering students each year, and about 90 Turner Fellowships (Underrepresented Graduate Fellowship program), which support about 20 entering students each year. Stony Brook funds Dorothy L. Pieper Awards for one year to about five entering graduate students who were nominated for GCF's. For the past five years, Stony Brook's Turner program has augmented the allocation of Underrepresented Graduate Fellowship program fund with campus funds as the program has outgrown its allocation. Stony Brook's share of UGF funding is just over 12 percent of the total, which is a much smaller percentage than would be expected based on the

number of students enrolled or the number of degrees awarded. The University hopes that historical patterns of allocation will be reviewed and revised to reflect the goals of the program and the success of campuses in accomplishing these goals. Approximately 850 students are supported as RA's via research grants and about 120 as fellows with competitively awarded external funds.

The campus has increased its funding for tuition scholarships for each of the last two years. This has been done because SUNY did not increase funds for tuition scholarships when graduate tuition was increased. It is important that SUNY recognizes that doctoral students at the country's leading universities do not pay their own tuition so that the failure to fund the increased cost of tuition scholarships **had to be funded** by the campus from operational funds. For Stony Brook, the cost to honor tuition scholarship commitments in 03-04 increased by \$2.4M, and by a further \$0.35M in 04-05. Thus, the campus has been forced to reallocate \$2.75M from other areas to support doctoral education to maintain its competitive position with leading research universities.

The Graduate School produces recruitment brochures for each program every four years and covers design and set up costs and 50 percent of the printing costs. The Graduate School attends many recruitment events each year (augmented with NSF funding for our SUNY Alliance for Inclusive Graduate Education and the Professoriate) to enrich the applicant pool to our programs. AGEP runs an annual event (A Gathering of Science Scholars) for tri-state students involved in research as undergraduates or at the master's level to encourage their application to doctoral programs. The Graduate School funds recruitment visits to campus for outstanding students. The Graduate School supports an interview trip to China each February during which four faculty interview about 200 applicants who are being considered for admission to Stony Brook programs. Interviews take place at five sites around China and the reports on the applicants scientific abilities, prior research experience and facility in English inform the programs' ultimate decisions concerning offers of admission with funding.

The campus and the Graduate School make annual awards to recognize faculty, staff and student accomplishments:

- President's Award for Excellence in Teaching by a Graduate Student (five annually)
- President's Distinguished Doctoral Student Award (five annually)
- Dean's Award for Excellence in Graduate Teaching by a Faculty member (one annually)
- Dean's Award for Excellence in Graduate Mentoring (one annually)
- Dean's Award for Excellence in Service as a Graduate Program Coordinator (one annually).
- Dorothy L. Pieper Memorial Purchase Prize for Studio Art (one annually)

The Campus provides over \$50,000 each year as matching funds for GSO student activity fee funding to support graduate student participation at conferences where they are giving a paper via the RAP program run by the GSO. In 2003 the University undertook a renovation of space to create the University Café, which is operated by the GSO as a Coffee shop during the day and for Stony Brook's over 21 community in the evenings.

The Graduate School is leading the campus effort to connect more systematically to our graduate alumni with a quarterly electronic alumni newsletter the first issue of which will appear in Fall 2004. It also produces an annual publication of Graduate Student Achievements. The Graduate School coordinates with other units on campus to run Graduate School orientation programs, TA training programs, and International Student Orientation programs.

20. In your leading doctoral and professional programs, what institutions do you compete with for faculty, students, and sponsored research funds? If appropriate (i.e., the program serves a regionally diverse audience), please indicate the same for your master's programs.

Stony Brook competes primarily with the 21 institutions in its peer group in terms of faculty, students and sponsored research. In terms of sponsored research, the University competes with the top 100 research universities in the nation for competitive awards as all of these universities obtain substantial federal funding. Our main, direct competition comes from the top 40 or so AAU universities. For particular programs Stony Brook would add to its list of competitors: Arizona State University, Boston University, Dartmouth College, Eastman School of Music, Georgetown University, Juilliard, Manhattan School of Music, Mannes, New England Conservatory, New York Medical College, RPI, Scripps Institute, SUNY Downstate, Temple University, Tufts University, University of Connecticut, University of Delaware, University of Massachusetts at Amherst, University of Miami, University of Toronto, VPI, and Woods Hole. SBU's MFA in Studio Art, MFA in Dramaturgy, and MM in Music are nationally competitive programs. Most of the other master's programs serve a regional constituency and compete with other similar programs in New York City and on Long Island.

21. For campuses with Health Science Centers/Clinical Facilities, describe how the clinical enterprise enhances academic quality at your campus. Please provide a brief update on current/planned affiliation agreements. What support is in place to facilitate scholarship in basic science and clinical research areas?

The HSC clinical and academic enterprises are seamlessly integrated. This arrangement allows for multiple, mutually beneficial, interactions and outcomes. One fundamental benefit to the educational programs that the Hospital and the faculty clinical practices provide is that of both a site and facility to enable the educational process. Students in the five HSC schools train at University Hospital and affiliated institutions. University Hospital staff frequently serve as clinical instructors to these students. A good example of the mutual benefit to the Hospital and students can be found in the undergraduate program leading to the BS Degree in Nursing. Until recently the Hospital recruited only a handful of graduating nurses from each class to serve on its staff. However, the program was recently revamped, and current, clinically active Hospital nurses serve as clinical instructors to the SON students. The establishment of a mentor / role model relationship has proven to be very beneficial to the education of the students, and in addition introduces the students positively to University Hospital as a prospective employment site. Currently, the Hospital recruits about fifty students per year from the graduating Nursing Class, additionally a large number of graduates from the clinical laboratory sciences program make up the staff in the HSC's clinical laboratories.

It is important to highlight the enormous contribution to the educational enterprise of the five HSC schools that is derived from the practice of medicine by its clinical faculty. Although some clinical faculty, primarily the senior ones, earn a sufficient state salary to compensate for the time they spend on educational activities, the majority of clinical faculty receive little state support (averaging \$8,500 annually). Despite this, they make major contributions, in terms of time and skills, to the education of students as well as the operating of the Medical School through service on academic committees and other activities. Since they generate virtually all of their income through their own practice of medicine, they are in a very real sense supporting the University's educational mission by their patient care efforts.

The University Hospital plays an important role in facilitating our clinical research mission. The University Hospital is the site for many HSC-wide clinical research protocols, and it houses our federally funded General Clinical Research Center [GCRC]. These facilities and resources are critical to the conduct of Stony Brook's rapidly increasing clinical research programs. The programs benefit the Hospital since clinical research elevates the visibility, and promotes the prestige, of the Institution, thereby helping to ensure the success of its healthcare mission. Perhaps the best example of close interaction between the academic and clinical enterprises can be found in the Long Island Cancer Center

at Stony Brook. The Cancer Center was conceived as a true comprehensive cancer center with active missions in outstanding patient care, clinical and basic research, and public outreach. Academic leaders of the HSC clinical and service departments serve dual roles as both investigators and directors of patient care programs.

The five schools of the HSC have approximately 1,200 active affiliation agreements with sites that provide students with required clinical training and experience. Students continue to enhance their clinical experience and fulfill their academic requirements by spending time both at national and international affiliation sites. The affiliation sites are selected by the students, in consultation with their respective school. All affiliation agreements are reviewed and signed by the Office of the V.P. of the HSC. One of the essential purposes of these agreements is to ensure the acquisition of adequate general liability coverage for students in the event they cause injuries during the rendering of services while under the direction of these affiliated sites. SUNY Administration will not procure such insurance without the execution of a signed agreement. The affiliation agreements also provide course descriptions and objectives required for clinical training. Other issues generally addressed in these agreements include, but are not limited to, HIPAA and other regulatory requirements, selection and supervision of students, termination of agreements, discrimination issues, and adherence to policies and procedures of individual sites. The guidelines governing the affiliation agreements have been in place for several years and no significant changes are anticipated in the future.

The HSC has numerous services and programs in place to encourage and facilitate scholarship in the basic sciences and the clinical research areas. Many of these programs are created to serve the entire HSC faculty and student community, cutting across schools and departments. There are two major HSC-wide services, one is the HSC Library, which serves the educational, clinical and research information needs of the entire HSC and Hospital community, and functions as a resource to the surrounding community of health care providers on Long-Island. The second major is Media Services which provides equipment and staff support for teaching; research and publication support; and audio-visual resources for conferences and scientific presentations.

Through the establishment of various centers and service units, the HSC provides mentoring and training for its faculty to assist in their research enterprises. Examples include the Clinical Trial Service, to introduce HSC faculty to the world of Clinical research; a sophisticated Center-wide Bio-informatics Service, assisting graduate students and faculty in high-end computational needs; a Medical Informatics Instructional Center to introduce faculty and students to the art of literature search of medical electronic journals and databases; a Bio-Statistical Consultation Core, offering its expertise to HSC faculty and graduate students in support of their research projects; the offering of periodic mini-courses in Bio-Ethics, across the broad range of HSC disciplines, taught by experts in all phases relevant to bio-medicine.

Stony Brook created expanded opportunities for faculty development in joint research efforts with BNL and CSHL; and supports the development of new training program opportunities for faculty (\$12K/\$30K) and fellows, as well as graduate and undergraduate students.

The HSC established programs to encourage scholarly activities in primarily clinical programs such as the MD with Distinction and the Physician Scientist within the MD curriculum. It offers a Medical Scientist training Program to train the medical students in research and medicine; travel grants to HSC faculty attending and presenting scientific papers; and it provides matching funds for acquisition of sophisticated instrumentation needed for small, focused users groups.

Teacher Education Programs

22. Where appropriate, describe your campus' implementation status vis-à-vis (SUNY's) *A New Vision in Teacher Education*, including your participation in and implementation of the Teacher Education Transfer Template initiative. Please comment on the campus' performance on New York State Teacher Certification Exams relative to other NYS institutions (see Appendix C-11). Describe efforts underway or planned to enhance measurement of student success and use of resulting data to inform program improvement. What curricular changes and/or innovations have you implemented since the first round of Mission Review, especially to enhance clinical preparation and collaboration with K-12 schools?

Stony Brook University and the Professional Education Program (PEP) - Stony Brook's unit for teacher education and educational leadership programs are committed to excellence in teacher education. PEP has integrated the SUNY New Vision in Teacher Education into its programs and has implemented the document's primary driving objectives: ensuring excellent preparation of teachers; addressing the State's need for excellent teachers; and ensuring continuous assessment and improvement of the University's teacher education programs.

Stony Brook has articulated with both Nassau and Suffolk Community Colleges in areas of admissions and transferability of courses and programs as well as advisement for admission to teacher education programs. In addition, the University has vetted community college courses in the area of educational foundations and has accepted them as meeting Stony Brook equivalents of Educational Theory and Practice as well as Human Growth and Development for purposes of meeting our teacher preparation requirements for certification and resulting license. The Stony Brook transfer guide aligns all two-year college courses with their SBU equivalents.

As is evident from Title II data, Stony Brook's performance on state licensing exams is excellent and consistently surpasses NYS pass rates. For the most recent cohort of program completers (2002-2003), Stony Brook's pass rate on the LAST and the ATS/W that measure general knowledge in the arts and sciences and knowledge of teaching skills was 98 percent. (For additional test score information for earlier cohorts see <http://www.pep.sunysb.edu/scores.php>). Effective February 2004, Stony Brook teacher candidates will also be required to pass the Content Specialty Test (CST) to qualify for professional certification. Stony Brook's distributed model for teacher education provides strong preparation in the content areas and it is expected that candidates will excel in this area too.

The Professional Education program has developed a comprehensive Unit Assessment System to monitor candidate progress and provide information for continuous program improvement. The education programs and the Unit assessment system were developed in alignment with state, national, and professional standards. The assessment system includes procedures for regular and systematic collection, aggregation, and analysis of data, as well as a timely review of information gleaned from the data to improve candidate performance, program quality and unit operations. For additional information on PEP Assessment instruments see: <http://www.pep.sunysb.edu/assessment.php>.

Stony Brook University's PEP unit is one of fifteen units at SUNY campuses that jointly received a grant for a SUNY Teacher Education Program Assessment (TEPA) project from the US Department of Education Fund for the Improvement of Post-Secondary Education (FIPSE). This project creates a sustainable assessment system to document beginning teacher competency and performance and provides feedback for program improvement for each of fifteen teacher education institutions collaborating within the State University of New York system. Ideas advanced at the regular meetings of this SUNY group are being incorporated into the design and operation of Stony Brook's assessment system. As part of this project, the Division of Information Technology and the Office of Institutional Research are working with PEP to further enhance the assessment information system and to develop it into a model for other SUNY schools. The University expects that all of these developments will

substantially enhance the quality of the PEP assessment system and thus contribute to the overall quality of teacher education and educational leadership programs.

Stony Brook education programs have evolved in recent years as part of the NYSED and NCATE accreditation processes and SUNY New Vision for Teacher Education. An extensive fieldwork component of 100 hours has been added prior to student teaching and the clinical practice segment has been extended to 75 days. A substantial component of the fieldwork and clinical practice includes placement in high-needs schools and focuses on students with special needs and those from linguistically and culturally diverse backgrounds. All clinical faculty at Stony Brook hold appropriate terminal degrees and have acquired substantial experience as teachers or administrators. Clinical faculty and K-12 cooperating teachers have been involved in the formulation and implementation of Stony Brook's Conceptual Framework, curriculum design, and assessment activities for program improvement and excellence. Stony Brook has also been working closely with the SUNY Urban Teacher Education Center (SUTEC) to increase candidate participation in student teaching in New York City and in efforts to establish the Mathematics Science and Technology (MST) School. Through service on SUTEC Advisory Board, PEP assists SUTEC to realize its mission and vision to promote excellence in teacher education in an urban setting and to increase placements for students and new teachers in New York City.

In May 2004, the NCATE Board of Examiners, in partnership with the team from NYSED, conducted a highly successful site visit at Stony Brook to review the Professional Education Unit and education programs. After a review by the NCATE Unit Accreditation Board in October 2004, Stony Brook joined the fully accredited NCATE institutions.

International Programs

23. Describe the current and planned scope of international activities on your campus and abroad. Identify the number of courses/programs (including joint-degree programs), number of U.S. students enrolled in overseas academic programs, faculty involved, etc. (see Appendix C-12, and also question 5). What is being done to encourage greater participation? Describe the infrastructure (including facilities, staff) in place for ensuring that international activities appropriately support your academic mission and direction, and successful student outcomes. What changes/investments will be needed to support enhanced internationalization and what are the financial implications of these plans? How are you currently working with other campuses and what opportunities do you envision for expanded collaborative efforts within the system? What role do you see for online learning in expanding or facilitating your international programs, studies, and curricula?

In recognition of the increased importance of an international experience as a component of a contemporary undergraduate education, a dean of International Academic Programs was appointed in 2003. This office was also provided with an increased support staff, including two counselors and a senior staff assistant. In addition to now overseeing the Intensive English Center and Fulbright activities on campus, this office continues to have responsibility for Study Abroad programs directed by SBU faculty. These activities include previously existing programs in France, Italy, Madagascar, Russia, Spain, and Tanzania. An additional program in India was initiated in the summer of 2004, and other study abroad experiences are anticipated for the Caribbean and Ghana for 2005/2006. This office also continues to monitor active International Exchanges with approximately fifty overseas institutions of higher learning on every continent and directs students to other SUNY campus programs whenever possible. In 2203-2204 these opportunities provided close to 300 SBU students with an international experience. This figure was a significant increase over previous years and indicates an existing potential for future growth as this office activities are integrated with and co-sponsored by other administrative units on campus. Most relevant here is the plan to provide all undergraduate Business Administration and MBA students with an international experience as an integral feature of their training, particularly in

the Middle East and developing world areas. Currently, the College of Business offers a joint Masters program in Korea and the Department of Technology and Society a similar program in Taiwan.

With regard to internationalizing the campus, IAP recently negotiated a Dual Degree Program with Ajou University, Korea which was successfully inaugurated in January 2005. IAP is exploring further similar possibilities with universities in Israel, Japan, and Turkey. The latter program is undertaken in cooperation with System Administration's Office of International Programs and in conjunction with other SUNY units. Negotiations are also underway with Waseda University, Tokyo to provide up to thirty places annually for their students to complete their junior year at SBU.

New international initiatives by SBU are constrained, to some extent at least, by already existing exchange agreements initiated by other SUNY units with numerous overseas partners. In some instances, these relationships were put into effect before the creation of SBU. International Academic Programs is considering ways to expand upon international opportunities for SBU's students at this time without infringing upon the existing agreements of other SUNY campuses, although SBU encourages review of such agreements. As such, SBU's emphasis will be on establishing new unilateral collaborations with research universities abroad which better fit our academic strengths and concerns. An advisory board will be established to facilitate in these decisions.

Facilities and staff for existing Study Abroad and Student Exchanges are adequate but continued expansion of these and incoming programs may call for further support in the future.

Collaborative Academic Programming

24. Identify current and planned collaborative academic programming, including within-sector and cross-sector cooperative arrangements such as joint programs and articulation agreements, and other cooperative academic arrangements. What additional programs and/or disciplines would benefit from collaboration with other campuses?

Stony Brook University has Joint Admissions Agreements with Suffolk County Community College and Nassau County Community College. The Joint Admissions Program stipulates that upon admission into specific listed programs at either Suffolk or Nassau, students are guaranteed admission into the College of Arts and Sciences at Stony Brook provided they have completed their Associate in Arts or Associate in Science degree. There are similar guarantees for engineering majors, computer science majors, and business majors all with specific GPA qualifications. This collaborative academic programming has been further expanded to include two specific Unified Programs in Business Management and Psychology. These curriculum paths appear in the Suffolk County Community College Bulletin. In addition, Long Island students who are denied enrollment when they apply as seniors in high school are sent the brochure entitled, "An Alternative Path to Enrolling." This brochure provides information about the Joint Admissions Programs. Students who sign up for the program receive early advising by the Undergraduate Transfer Office each semester. As selectivity continues to grow, the admissions mix of freshman compare to transfers will change (see response to question #7). This may make necessary modifications in the present admission agreements with two-year colleges.

The College of Engineering and Applied Sciences is currently meeting with Yeshiva University over the details of a 3+2 program in engineering for high achieving students. The students would receive two degrees, one from Yeshiva and one from Stony Brook.

Undergraduate Biology works closely with a number of other programs on campus. There is a double major of biology and clinical laboratory sciences. Students complete most of the biology major on the west campus and then spend 2 years in the School of Health, Technology and Management completing the CLS program. Most students take 5 years to complete the BIO/CLS double major and many complete more than 147 credits, earning a double degree. In addition, two of the advanced tracks in the

biology major, marine biology and biomedical engineering, are based on collaborative arrangements with other programs. The Biology Learning Laboratories houses all of the undergraduate instructional labs including the biomedical engineering and pharmacology labs. The core introductory biology courses (BIO 150, 201, 202 and 203) are service courses for many programs on campus including the biochemistry, psychology and BSHS majors, the professional programs in the School of Health Technology and Management, the School of Nursing, the Learning Communities Program, and the pre-professional (pre-health) program.

A new Dean of International Academic Programs, William Arens, was appointed last year to develop exchange relationships, 2+2 programs, and study abroad opportunities with universities around the world. Stony Brook students' participation in study abroad doubled during the dean's first year. Many other programs are now under development and will greatly expand during the next five years. For example, the College of Engineering and Applied Sciences is also in the process of establishing joint degree programs with SUNY Maritime and with a consortium of universities in Turkey led by Middle East Technical University.

At the graduate level, Stony Brook was one of the first universities to develop an inter-institutional doctoral program (in Genetics, with BNL and CSHL) which continues to prosper after 20 years. Stony Brook usually has about 55 Ph.D. students working at CSHL and about 45 at BNL. Opportunities for BNL scientists to join our doctoral faculty and for students to work with them continue to grow steadily. Stony Brook offers a joint program (MSW/JD) with Touro Law School. Stony Brook was the first university in the United States to create a transatlantic inter-institutional doctoral program. The Collegium Transatlanticum Philosophiae linked selected faculty in Philosophy from Emory University, Stony Brook, Marburg and Wuppertal so that students from any school could draw on the combined intellectual resources of three of the schools in formulating their dissertation committee. This program was funded by the DFG and the Max Kade Foundation and has been presented at national meetings as a model for collaboration for doctoral education. The collegium is currently being restructured at the German side following retirements of key individuals at Marburg.

Stony Brook is a member of the eight institution Inter-University Doctoral Consortium that includes Columbia, CUNY Graduate Center, Fordham, New School, NYU, Princeton, Rutgers, Columbia (Teachers College) and Stony Brook. This is an important membership in that graduate students from any one of the institutions may enroll for advanced and specialized courses in any of the others for the home campus tuition. This enhances the educational experience by giving students access to special topics that may not be available in their home institution.

Technology-Enhanced Learning Environments/Online Learning

25. Describe plans to use technology-enhanced learning environments to bring courses and programs to a broader range of students, including opportunities in both degree and non-degree/continuing-education programs. What are your plans to prepare and encourage faculty to deploy electronic media, especially the Web, in their disciplines and classrooms to enhance academic quality, including teaching, research and scholarship, publishing, and collaboration (see question 35)? Describe current and planned online activity in terms of numbers of students, courses and programs offered, and faculty participation.

SBU is developing Blackboard as its primary technological foundation for learning. All students receive Blackboard accounts, and over 15,000 students, faculty, and staff make use of it for learning and instruction. All Engineering departments and most science departments list their courses on departmental web pages with links to course pages. The Harriman School for Management and Policy and the Women's Studies program require all their classes to have Blackboard accounts. In the next year, SBU plans to develop a direct link between the PeopleSoft Student Administration system and Blackboard. This will enable automatic creation of courses and assignment of students to these courses

during the registration process. This link will also facilitate the passing of grades and other information between the two systems. In addition, SBU is currently developing a pilot program to utilize Blackboard as a centralized electronic reserves file for class assignments. This will make it easy for faculty to place materials on electronic reserve because the library will do the scanning, and these files will be available 24/7 to any student with access to the Internet. Enhancements to Blackboard are also in the planning stages to include online portfolios, collaborative team projects, and quizzes.

During the spring 2004 semester, a total of 779 courses used Blackboard in courses that were completely online, hybrid, or supplemental. Of these, 71 were purely online. Most of the purely online courses were graduate classes managed by the School of Professional Development (SPD). SPD has offered online courses for ten years. In a typical semester, 1,200 graduate students take at least one course electronically. Approximately 10% of the students take all of their classes online. The school anticipates continued growth in this sector. Future plans include expanding e-learning courses and programs. SPD's leadership recognizes the need to keep pace with emerging technology and is continually examining how the distance learning field evolves. A strategic partnership exists between SPD and the University Library concerning the need to strengthen campus e-learning resources.

Instructional Computing (IC) provides on-going training for faculty and TAs who use Blackboard, and it will offer sessions on new features. IC will also sponsor faculty show-and-tell sessions on their use of Blackboard and other technologies.

The Department of Technology & Society in the College of Engineering and Applied Sciences (CEAS) has been involved overseas distance learning in Taiwan since 2002. For the first year the learning platform was a hybrid format in which the professor was in Taiwan for the first weekend of each class with the remainder of the class conducted via asynchronous teaching with Blackboard. Beginning in 2003, the format changed and we began using HorizonLive to broadcast our weekly lecture live to our Taiwan students from Stony Brook in the real-time mode eliminating the beginning weekend class sessions.

CEAS is in active discussions with Tsinghua University Research center in Shenzhen about a Master of Science in Technology Systems with a concentration in Global Industrial Management (GIM). There are some logistical issues that are in the process of being resolved, and we hope to begin the program beginning June 2005. The program will be offered using the HorizonLive format mentioned above.

We are also in discussions with Ajou University in Korea about offering our Educational Computing program using our distance learning capabilities.

Locally, Brookhaven National Lab would like us to offer our Environmental Waste Management program at their location. Current thinking is that the teaching platform would be the hybrid mode in which half of the schedule will be face to face and other half will be via broadcast from Stony Brook using HorizonLive.

The projection for entire distance learning in DTS is listed as follows:

Location	Concentration	Starting date	# of Students	Graduation date
Taiwan	GIM	June 2004	20	2006
Taiwan	GIM	June 2005	25	2007
China	GIM	June 2005	35	2007
Korea	EC	Sept 2004	25	2007

In the Health Science Center, the Schools of Nursing and Dental Medicine make extensive use of Internet technology. Nursing's distance education program for advanced practice nursing uses a custom written Lotus Notes application to deliver the curriculum. Four hundred students, 56 percent of the total

student population, participate in the distance education program. Since 1993 the School's distance education program has expanded from the initial Midwifery Post Masters program to include six additional areas: Family Nurse Practitioner, Neonatal Nurse Practitioner, Mental Health Nurse Practitioner, Pediatric Nurse Practitioner, Adult Health Nurse Practitioner, and RN to baccalaureate.

Nursing is working with members of the University of Asmara in Eritrea to set up a remote distance education computer lab. This lab will be able to communicate with servers in Nursing via the Lotus Notes client. Three Eritrean students are enrolled. The School has participated in discussions with members of an Iraqi delegation on how this model could also be used to train nurses in that country.

The School of Dental Medicine utilizes an internationally groundbreaking paperless patient record. This paperless record serves both as a bookkeeping role for patient care and provides extensive resources for the students' education. Desktop computers afford access to external online resources and to a suite of internal case reports, course syllabi and treatment guidelines. The clinical information system, Axiom, allows real time monitoring of student performance as well. Dental Medicine plans to make all daily course work, syllabi and PowerPoint lectures available on Blackboard or C-Base. This will give students 24/7 access to lectures, most which are in PowerPoint format. The department provides instruction on C-Base and refers its faculty to the Center for Excellence in Learning and Teaching for instruction on Blackboard.

Library Services/Support

26. With full implementation of the common library management component of *SUNYConnect* planned for 2005, how will you take advantage of University-wide access to maximize resources for students and faculty? What are your plans to ensure the library is able to fully support the mission of the institution (including the research agenda, where appropriate)? Describe how library resources, including faculty, are integrated into academic programming on your campus.

With the implementation of a common library system, SUNY is creating a union catalog of all library holdings. This catalog will be much larger and richer than SBU's local catalog, and it will make it easy for SBU's students and faculty to find and order print materials from anywhere in the system. The goal is to give everyone an easy look at holdings in all libraries and quick delivery of materials from campus to campus. This will take advantage of the existing diverse, non-duplicated book collections and it will take advantage of duplicate materials that are not in circulation. This single catalog will enhance teaching and learning as long as SBU and other SUNY libraries have healthy collections budgets.

The emergence of a union catalog raises the possibility of increased coordination of future acquisitions of print monographs and journals. The SUNY centers have created a committee to look at increased coordination of acquisitions. However, it must be kept in mind that coordinating the acquisition of print materials across a large system is very labor-intensive and, historically, has produced only marginal savings. This committee is exploring book vendor online services that facilitate coordination of acquisitions among campuses.

At SBU, for the first time, west campus and Health Science libraries share a common library system. This makes it possible to simplify searching the records of the two libraries by creating a single search against both catalogs. The common system also makes it possible to create single interfaces with student information systems to collect fines and apply blocks.

The universe of electronic, networked resources is growing rapidly. One study indicates that over 90 percent of all new information is born electronically with no print version. Bringing order to this expanding universe is a high priority for SBU's libraries. The SUNY Office of Library and Information Services (OLIS) has licensed software that links records in external bibliographic databases to full-text

holdings on each campus. This makes movement from records of articles to the articles themselves easy. The next step is for SBU to install software that enables users to search across databases and that displays search results in a comprehensible manner. This federated searching will enable users to view and compare resources available, for example, on the library's online catalog, selected licensed, external databases, and the public Web. Federated searching will help users by breaking down barriers that separate different silos of information.

Access to scholarly information is critical to SBU's research mission. Since this information is increasingly electronic and networked, the libraries plan to invest heavily in licensed electronic resources available over the Internet. These resources will be both locally-licensed and licensed by the system. It is very advantageous for SBU to have SUNY negotiate system-wide licenses on the model of Elsevier's ScienceDirect. In these large package deals, whether licensed for all campuses or a subset of campuses, the increase in access to full-text information markedly outweighs the loss of flexibility. These package deals do assume a long-term commitment by SBU to provide high quality library resources that support first-rate teaching and research.

In the next five years, much teaching and research in the humanities and social sciences will continue to rely on print resources. SBU's ability to acquire monographs and audio-visual materials needed by faculty for their research and teaching has eroded significantly in the last five years. Working with the other SUNY Center libraries, SBU's libraries plan to insure ownership or access to a first-rate comprehensive collection of research and specialized monographs, audio-visual and other print-like materials in all humanities and social science disciplines. As stated above, creating a SUNY-wide catalog and inter-campus circulation of print materials will reap the most benefit if individual libraries build strong and diverse collections.

The libraries plan to publish and preserve faculty research on a university-controlled Web site. With the assistance of OLIS, which has mounted MIT's DSpace on a SUNY server, SBU's libraries will begin with unpublished research such as dissertations, data sets, and PowerPoint presentations. In the next five years, this effort could include published articles that are increasingly available for open access. The creation of an institutional repository of SBU research will significantly increase awareness of and access to this collection of material and will brand it as Stony Brook's.

Library staff work closely with academic departments to select journals and books appropriate to faculty teaching and research. This is especially true of serials subscriptions but also includes profiles for books and selection of individual titles.

The west campus libraries work with Instructional Computing to integrate electronic resources into individual faculty Blackboard sites. In the next year, the libraries plan to create a central repository of electronic reserves managed by the libraries rather than by individual faculty. The University anticipates that all reserves except entire books and videos will be available to students in a digital format over the Internet. This will take the burden off individual faculty, and it should greatly increase use of electronic resources in teaching.

The west campus libraries have an active program of instruction that provides basic training to undergraduates through the Writing Program and specialized, discipline-specific training to graduate students and faculty. In our information age, it is critical that students become savvy in the use of web-based resources. The library plans to increase its instructional staff in order to provide comprehensive and in-depth training.

The Center for Healthcare Informatics Education (CHIE) provides program-integrated instruction for the five schools of HSC in a wide range of computer applications such as Windows, Lotus Notes, Microsoft products and web page design and in databases such as PubMed and ScienceDirect. CHIE also teaches three for-credit courses on computer applications in laboratory sciences, computer literacy,

and evidence-based practice. The HSC Library hosts a popular Lunch Bytes program, and it offers a Mini-Medical School course to the community.

Assessment of Academic Programs

27. Describe how assessment results from your General Education Assessment Plan and Assessment of the Major Plan have been used to enhance program quality and student learning. What specific changes have been made in your programs as a result of recent assessments? In addition, for programs externally accredited (e.g., through a national/international association), please describe how that process has been incorporated into program review.

The Provost established a faculty committee on the Assessment of General Education in spring 2003 to inculcate a culture of assessment on campus, support faculty and departments in the development of methods to assess general education learning outcomes, and meet the campus's obligation to SUNY to report learning outcomes in at least four areas of general education per year. The Committee has the responsibility for facilitating and coordinating the assessment of general education on the campus and submitting reports to the Provost for transmission to System Administration in Albany. In the spring of 2003 the Committee developed the campus plan and conducted a pilot assessment. During 2003-2004, the Committee continued this course-by course approach to assess learning in the natural sciences (BIO 150), written communications (WRT 101-102), math (MAP 103 and MAT 123), and information management (EST 110). Faculty members have used these assessment results to make improvements in the curriculum. For instance, in BIO150, the results suggested the need to clarify expectations and provide models of laboratory reports as well as to increase support for conducting literature reviews and data analyses. As part of this assessment process, the Provost's formal guidelines for external reviews that are issued to all departments and programs undergoing review on the west campus have been rewritten to include questions specifically addressing assessments of the major. For example, "What policy and procedures does the department have for the assessment of its majors? How does the department monitor and assess outcomes for its majors such as graduation rates, job placement, performance in admission and licensing tests, placement in graduate school programs?"

Following upon recommendations from its last review, the Department of Music, for example instituted in 2001 a new freshman seminar entitled "Sound Structure" that gives beginning music majors a cross-cultural introduction to music analysis and writing about music. In 2002 the Chemistry Department implemented a series of improvements to freshman chemistry in terms of advising, tutoring, course design, and new learning technologies. Following their spring 2004 review, the Department of English has followed the recommendations to increase the emphasis on creative writing, including the establishment of a yearly essay prize. They are also considering developing a combined BA/MA program, particularly in teacher preparation.

With regard to graduate education, in accordance with the practice at the nation's better research universities, Stony Brook has always conducted external reviews of its doctoral programs on a regular basis, at present they are done on a seven year cycle. Most doctoral programs are clearly linked to an academic department and are reviewed in the context of the overall review of that unit. Interdisciplinary doctoral programs are reviewed as stand alone entities. Doctoral programs associated with academic departments in Health Sciences are reviewed in conjunction with the reviews of those units, with the Vice President for Health Sciences serving as co-chair (with the Provost) of the Academic Review Committee in such cases. Stony Brook places particular weight on the periodic assessment of research-doctorate programs by the National Research Council to inform our own sense of our programs' standings.

Stony Brook education programs have evolved in recent years as part of the NYSED and NCATE accreditation processes and SUNY New Vision for Teacher Education. An extensive fieldwork component of 100 hours has been added prior to student teaching and the clinical practice segment has

been extended to 75 days. The Professional Education program has developed a comprehensive Unit Assessment System to monitor candidate progress and provide information for continuous program improvement. The assessment system includes procedures for regular and systematic collection, aggregation, and analysis of data, as well as a timely review of information gleaned from the data to improve candidate performance, program quality and unit operations. Along with other SUNY units, the Professional Education Program (PEP) received a FIPSE grant from the US Department of Education (Fund for Improvement of Post Secondary Education) for a SUNY Teacher Education Program Assessment project to document beginning teacher competency and performance and to provide feedback for program improvement.

The College of Engineering and Applied Sciences (CEAS) undergoes rigorous assessment of engineering undergraduate programs every six years. Programs in Engineering Science, Mechanical Engineering, Electrical Engineering and Computer Engineering hold ABET (Accreditation Board for Engineering and Technology) accreditation. In 2005 the college will undergo another review of the above programs and seek additional accreditation for Biomedical Engineering and Computer Science. The process is ongoing such that we have continuous quality improvement via an outcomes-based analysis that is determined by the various constituencies who are involved in the program. There are many instruments used to assess (i) the academic core of each program, (ii) the professional development of the students, (iii) the pedagogical approach of the instructors, (iv) the appropriateness of the resources, and (v) the ability of the students to write and communicate in an effective manner. These instruments include student mid-term and end of term evaluations of the course and instructors; focus groups with alumni; faculty meetings to discuss course and laboratory content; external consultants who provide input; attendance of CEAS faculty at external workshops and meetings; and meetings with external Industrial Advisory Boards.

The Health Sciences' professional programs have developed well-defined goals for training future practitioners and the professional schools undergo specialized accreditation reviews organized by their professional accrediting agencies that are charged with assessment of their programs to determine whether they meet or exceed national professional standards. To a great extent, the definition of professional training differentiates it from typical graduate training in Arts and Sciences programs because the mission, goals and objectives are dictated by outside agencies. Consequently, resource allocation and curriculum development are implemented to achieve predefined outcomes. The most notable recent changes resulting from the Health Science Center accreditation site visits are: streamlining the curricula of the School of Medicine (SOM) and School of Social Welfare (SSW) degree programs; appointing an academic advisor and confidential counseling for SOM students; offering programs of the SSW and School of Health Technology and Management (SHTM) in the Stony Brook Manhattan campus; upgrading the Physician Assistant and Occupational Therapy programs in SHTM to Master of Science entry level degree programs; upgrading the Physical Therapy program, first to a Master of Science entry level degree, and, subsequently, to that of a Doctor of Physical Therapy degree; adding Program Centers to the SSW (Infant Death; Aging Policy; Social Justice; Child Welfare); and developing plans to expand the SOM graduate program to incorporate a Ph.D program in Nursing within the next five years.

Responsiveness to local/regional/state needs

28. Highlight the ways in which your campus' current and planned academic program offerings respond to local/regional/state needs, including the relationships you have with business and industry, K-12 schools, health care institutions, and involvement with workforce development (see Appendix C-13). Describe the scope of educational offerings outside those that are credit-bearing and/or state funded (including continuing education). Include types of courses/programs and numbers of students enrolled, currently and projected to 2010. Be sure to also describe academic program planning that will help to address the State's changing population demographics, including the aging workforce (see New York State's *Project 2015* at <http://www.sysadm.SUNY.edu/provost/Project2015.htm>).

Stony Brook University is extraordinarily responsive to local, state and regional needs. The degree of activity in this area is quite extensive (see appendix SBU-4 for summaries from the School of Professional Development (SPD), the College of Engineering and Applied Sciences (CEAS), the Office of the Vice President for Economic Development, the Professional Education Program (PEP) and its components, the College of Business, the schools and divisions of the Health Sciences Center (HSC), and the Marine Sciences Research Center (MSRC)).

There are several additional items that set Stony Brook apart from most other institutions of its size in either the public or private sectors, and which provide an indirect economic stimulus to the regional economy far beyond that which appears in the University's direct expenditures. These include the following: 1) Stony Brook's leading role in state-of-the-art economic development programs; 2) the economic impact of students and their families from outside of the region; 3) non-operating revenues paid by the state, which would be an expense for any other employer on Long Island; 4) spending on construction; 5) the income of Stony Brook retirees; and 6) the multiplier effect associated with research institutions, which roughly doubles Stony Brook's economic impact in terms of jobs and income.

Stony Brook University is truly unique in resources it possesses and provides to local businesses in terms of both support and partnerships. Through a number of business development programs (including the Centers for Advanced Technologies, or "CATs," which include the Center for Biotechnology and the Center for Sensor Systems); the Long Island High Tech Incubator (LIHTI); the Strategic Partnership for Industrial Resurgence (SPIR); and the Small Business Development Center (SBDC), Stony Brook provides technical, financial, strategic, and marketing expertise to new and growing businesses.

In the 2000/2001 development cycle alone, these programs added 1,484 new jobs, 1,424 new companies and/or clients, \$8.5 million in new investments, attracted \$18.1million in federal and other external funds, and resulted in more than \$245.9 million in additional corporate revenue. In fact, Stony Brook University's Long Island High Technology Incubator was ranked in 2002 as a top-performing technology incubator in a report produced by the National Business Incubation Association (NBIA) following a 12-month analysis of U.S. technology business incubation programs.

Most recently, the Center for Excellence in Wireless and Information Technology will help put Stony Brook at the forefront of the wireless revolution and positions New York State as a global leader in this technology. Partnerships formed include those with Computer Associates, IBM, Symbol, CosmoCom, LIPA, Sotheon, EDO Corporation, Invision, and Anorad among others. Brookhaven National Lab as well as Nassau and Suffolk Community Colleges are also partners in this center.

Student Outcomes

(Plans for enhancing student outcomes/success)

Retention/graduation rate goals and efforts

29. Please update your three- and five-year goals for retention and graduation to 2008 and 2010 respectively (see Appendix C-14). At the undergraduate level, describe current and/or planned efforts to enhance retention rates and encourage timely graduation. At the graduate level, describe the time-to-degree for full-time students in doctoral programs at your campus, by broad discipline, compared to national norms¹. What changes if any do you anticipate in your time-to-degree data over the next five-years? Please explain.

Graduation Rates: Public, Highly Selective Institutions

	Within 4 years		Within 5 Years		Within 6 years	
	CSRDE Norm	Stony Brook	CSRDE Norm	Stony Brook	CSRDE Norm	Stony Brook
Overall	39.5	34.2	62.8	51.2	67.5	53.7

Stony Brook Data from Attrition and Retention Survey, Fall 2002.

National benchmark data taken from CSRDE National Norms published in 2002.

Comparing Stony Brook's Graduation rates (Attrition and Retention Survey, Fall 2002) with national norms published by the University of Oklahoma Consortium for Student Retention Data Exchange (CSRDE) shows that the University lags significantly behind norms for the public, highly selective universities that it consider its peers. Stony Brook also lags behind its sister SUNY research universities (6-year graduation rate from initial college: Albany, 62.1; Binghamton, 79.3; Buffalo Ctr., 56.1, Stony Brook 53.8. Data from Appendix C-14). The reason for the lower graduation rate at Stony Brook may be partly regional and related to the socio-economic status of many undergraduates. The CUNY schools and large community colleges on Long Island make transfer easy; indeed, Stony Brook's largest feeder school is Suffolk Community College, and their largest feeder school is Stony Brook University.

The University's goals are to bring Stony Brook in line with the CSRDE National Norms for highly selective public universities (defined above) by 2010. In order to meet this goal, Stony Brook's goal for 2008 is to reach a 4-year graduation rate of 37 percent, a 5-year graduation rate of 57 percent and an 6-year graduation rate of 61 percent.

Stony Brook has begun efforts to meet these goals, through the following measures:

- Getting students started on the right foot. Orientation for new Freshmen has been streamlined. Students are given a list of appropriate courses for beginning students (rather than having to negotiate the entire Bulletin). Beginning in Summer 2004, an ad-hoc committee meets weekly to monitor enrollment in these courses and to ensure availability (especially in the Writing Program, which had developed a serious backlog).
- Placing students in a smaller, more nurturing academic environment. Beginning in Fall 2004, each entering student will be assigned to one of six residential colleges, organized by general areas of interest (Science and Society; Arts, Culture and Humanities; Information Technology; Leadership and Service; Global Studies; Human Development). Each college has its own academic and residential advisors; each college runs a series of 1-credit themed seminars to give students immediate access to small-class instruction. Commuter students are also assigned

¹ Median registered time: Education (8.1 years); Engineering (6.8 years); Humanities (8.8 years); Life Sciences (7.0 years); Physical Sciences (6.8 years); Business and Management (7.6 years); Social Sciences and Psychology (7.5 years); and Other Fields (8.5 years). Source: National Science Foundation, National Institutes of Health, U.S. Department of Education, National Endowment for the Humanities, U.S. Department of Agriculture, and the National Aeronautics and Space Administration, *Doctorate Recipients from United States Universities*, 2000.

to these colleges, where they participate in all academic and social activities. The advisors placed in the colleges reduce the number of students per advisor from approximately 1,000 to approximately 350, which should increase the effectiveness of advising and increase retention.

- Facilitating a timely enrollment in a major. An internal study identified choice of major as a crucial ingredient in progress to graduation; many students avoid the choice or do not realize its importance and find themselves unable to graduate on time or at all. Within the past year, Academic Advising has reduced the number of upper-division students without a declared major from more than 1400 (Summer 2003) to fewer than 400 (end of Fall 2003). Academic Advising is now following students more closely to insure timely declaration of majors, which should increase retention and graduation rates.
- Many Stony Brook students come from economically disadvantaged families and find themselves unable to continue to meet their college expenses. The University is actively soliciting discipline-based scholarships which will be available for upper-division students of high academic standing. This measure should increase retention and graduation rates. More generally, through vigorous fund raising efforts the university has tripled the amount of money available for scholarships in the last five years. This is clearly an important factor in attracting highly qualified students, and in helping them succeed once they are here.

Beginning in 1993, Stony Brook set in place actions to monitor compliance with time limits for graduate programs. This included development of a contract to complete the doctorate with any student needing an extension. The contract set out a timetable, a maximum of two years, with milestones each six months that would lead to the completion of the dissertation. The contract has to be signed by the student, advisor, committee members and the graduate program director. Initially, this increased average time to degree as SBU graduated a number of doctoral students who were ending their second decade of registration. However, by 1997 time to degree had been reduced by an average of one year in each major discipline area compared to 1993. Times to completion are currently well below national averages: Engineering 5.2 (cf. 6.8), Humanities 8.5 (8.8), Life Sciences 6.2 (7.0), Physical Sciences 6.2 (6.8), Social Sciences 7.4 (7.5). We are satisfied with our progress on time to degree and don't anticipate any further reduction.

Transfer Success (sending and receiving)

30. Please describe your efforts to ensure successful transfer and provide a status report on your campus' implementation of the Teacher Education Transfer Template project and other recommendations found in the SUNY Transfer Action Plan. Which institutions represent your campus' most active transfer partners? With which institutions do you seek to strengthen communication and articulation to enhance transfer success? (see reference files in Appendix C-15)

All seminal course work taken at the community colleges that Stony Brook directly articulates with fulfills the SUNY System and NYSED General Education Core requirements for degree and certification. The General Education Core consists of study in the liberal arts and sciences in each of the following and forms the bases for our DEC and Core requirements at Stony Brook University:

- Artistic Expression: coursework in such areas as art, dance, music, or theater
- Humanities: coursework in such areas as literature, religion, philosophy, or cultural anthropology
- Communication: coursework in such areas as communication, English, written or literary analysis, or composition
- Written Expression: coursework in English, or composition
- Information Retrieval: coursework in such areas as library studies, research, computer literacy, or educational technology
- Historical & Social Science Concepts: coursework in such areas as history, anthropology, economics, psychology, sociology, or political science

- Language other than English (including American Sign Language)
- Scientific Processes: coursework in such areas as biology, chemistry, earth science, or physics
- Mathematical Processes: coursework in such areas as algebra, geometry, calculus, number theory, statistics, or probability

In addition, there is articulation between academic departments in meeting the introductory and survey level course requirements within each of the major department and cognitive areas relevant to teacher preparation programs at Stony Brook. These areas include: English, Foreign Languages, Mathematics, Sciences, Social Studies, and TESOL.

Stony Brook has articulation agreements with both Nassau and Suffolk Community Colleges in areas of admissions and transferability of courses and programs as well as advisement for admission to teacher education programs. In addition, the University has vetted community college courses in the area of educational foundations and has accepted them as meeting Stony Brook equivalents of *Educational Theory & Practice* as well as *Human Growth & Development* for purposes of meeting teacher preparation requirements for certification and resulting license. The Stony Brook transfer guide aligns all two year college courses with their SBU equivalents.

Monitoring the performance of transfer students and identifying opportunities to increase their success at Stony Brook is an ongoing effort conducted by the Office of Institutional Research. In fall 2002, 1,310 full-time, degree-seeking, new transfer students enrolled on the west campus. By July 2003, 96 percent had transfer credits on record at Stony Brook. These 1,258 are the focus of this analysis. New transfers previously attended over 400 different institutions of higher education. 72.3 percent transferred credits from only one school, 21 percent from two schools, and 6.7 percent from three or more. Suffolk and Nassau CCCs are the primary feeder schools (248 and 129 students in fall 2002 respectively). Overall, SBU's transfers are fairly evenly split between four-year and two-year schools, with 49.3 percent of the transfers from U.S. four-year schools, and 47.3 from U.S. two-year schools. By area, 40.6 percent of the transfers are from schools located in Suffolk or Nassau counties, 19.7 percent from schools in the New York City five borough area, and 39.7 percent from schools located elsewhere. Based on the number of credits accepted by Stony Brook, 10.6 percent of the new transfers entered as freshmen, 43.6 percent as sophomores, 37.8 percent as juniors, and 7.9 percent as seniors. Regarding performance, transfers from foreign schools earned the highest mean GPA (2.93). Transfers from state schools beyond New York have the highest percentage of GPAs in the range of 3.0 and higher, and the second highest mean GPA. The GPA of Suffolk County Community College places it in the middle of the range, yet 43 percent of its students earned a 3.0 or better. Approximately 40 percent of the transfers from Long Island private schools had GPAs of 1.99 or less at the end of their first term. 12.5 percent of the transfers did not enroll for classes in spring 2003. The schools with the highest percentage of students not returning were: Suffolk County Community College (17.3 percent), the "other" category of two-year schools (17.0 percent), and the Long Island privates (14.8 percent). Suffolk Community College may have the high proportion of non-returning students because of proximity (6 miles from Stony Brook) and the ease of moving between the two schools.

Regarding the SUNY Teacher Education Transfer Template project, all of the courses have been evaluated for Suffolk and Nassau Community Colleges. The University has very early intervention advising for students at these community colleges, beginning with their first semester. In terms of articulation with other community colleges, SBU plans to participate in the next interaction with the SUNY Teacher Education Transfer Template project. In the past, the University has not had enough lead time to get all the courses out to its departments early enough to have them evaluated. With regard to these other community colleges, SBU will inform its departments about what SUNY is doing and request that they evaluate the community college courses as equivalent to their own.

Student Support/Student Life

31. Briefly describe the student support services and student life programming in place or planned to achieve your mission, including serving an increasingly diverse student body. Please be sure to address the following areas: advisement; health & safety; living/learning environments (including residence life) and co-curricular programming (including arts and athletics); and student governance. How do you measure the effectiveness of student support/student life programming, particularly the impact on academic outcomes? How effective are you relative to your peer institutions? Please describe how results have been used to improve services and programs.

Serving both a large population of undergraduates and graduate students, Stony Brook University provides a full range of student services typically found on major university campuses. The recent focus of utilizing computing and digital technologies in Admissions, Records, and Financial Aid areas has maximized service accessibility to both resident and commuter students. Students can access their record and financial aid information, as well as campus job opportunities, from on or off campus through the SOLAR (Student On Line Access to Records) System. Student support services also include the themes of counseling, advising, health and wellness, spirituality, activities and recreation, computing and other auxiliary services. Additionally, Stony Brook offers a complement of special services in the areas of gender support (Wo/Men's Center), Commuter Student Services, Disability Support Services, International Student Services and Career Center.

As one of the nation's most culturally diverse campuses, one of Stony Brook's primary goals and challenges is to structure services, in terms of accessibility, service modality and content, to be able to meet the broad range of needs represented by its pluralistic student community. This includes measures taken to diversify staffing and to expand and enhance the training of both staff and students regarding knowledge about various cultures. Of particular note in fostering greater inter-cultural awareness is the Diversity Fellows program, Diversity Calendars, and Community Development and Diversity Challenge Grant Programs. The goals of these programs are to increase understanding and appreciation of the rich diversity represented in the Stony Brook community. Additionally, several new cultural, ethnic and religious student clubs have formed over recent years on campus that continue to plan educational and social programs promoting awareness of the diverse needs and interests of their organizations.

Dating back to the Federated Learning Communities that featured a "master-learner," Stony Brook has had a long-standing reputation as being a leader in Living/Learning Center models. Indicative of this reputation and of the peer status of the learning communities on the campus, Stony Brook University has been invited on several occasions to make presentations about its learning community programs to other campuses and at professional conferences in the US and in Europe, most notable is the University's participation in the Oxford University Roundtable. The learning community models featured at Stony Brook include the Undergraduate Colleges and the Living/Learning Centers. Both serve as a model for collaboration between Student Affairs and Academic Affairs. In terms of student life, the Undergraduate College model creates a sense of inclusion and belonging on a large campus and encourages students to develop relationships and a sense of class identity, and enhances interaction between resident and commuter students. The Living/Learning Centers (LLC) offer upper-class students an opportunity to live with others who have a similar academic interest as well as engage in programs and activities designed to enhance their campus experience. Like the Undergraduate Colleges, the LLC's are also accessible to commuter students.

It is important to note that approximately half of Stony Brook's student body is commuter. Stony Brook's Commuter Student Services and Career Center have been repeatedly cited by other institutions and professional organizations as exemplary benchmark examples of services. Colleges such as University of Maryland at College Park have cited SBU's Commuter Student Services' recently developed "virtual community" as a benchmark for communication to commuters. This virtual

community includes an extensive commuter listserv and the usage of BlackBoard technology that supplements the traditional mailings and one-on-one service the office provides, enhancing student knowledge about student life and services on campus and includes off-campus accessibility to a range of services.

Similar to Commuter Student Services, Stony Brook's Career Center has used cutting edge web-based technology to offer service to students and alumni to connect with career information, job and volunteer opportunities and services. A member of the University's recent Middle States Accreditation Evaluation Team returned to campus with his staff to study its Career Center as a model benchmark.

Over the past two years, an intense concentration has been made on improving and upgrading academic advising provided to students. Among the most notable improvements, the Academic and Pre-Professional Advising Center has revamped its follow-up with students in academic jeopardy and instituted new methods of communication with undergraduates. These, along with other improvement initiatives, have evidenced positive results. Over the past two years, the percentage of students on early levels of academic action (warning level two and probation) has dropped by more than 15 percent. For freshman students, the creation of the Undergraduate College program now puts Stony Brook's advising ratio on par with other institutions (one advisor for every 350 freshmen).

Utilizing data gathered in the Student Opinion Survey (SOS), Stony Brook has been making a concerted effort to enhance the student's social experience through the expansion of campus programming, particularly on weekends. This has yielded excellent results. During the past two academic years, weekend program offerings increased approximately 20 percent. Significant reform of Stony Brook's student government over the same period has enhanced collaboration of Student Affairs staff and student leaders in advancing programming to offer a more exciting continuum of activities, including concerts, comedy shows, hypnotists and fashion shows. Recent data assessment has also suggested improvement be made in the graduate student social experience. Collaboration between Student Affairs and the Graduate Student Organization (GSO) resulted in a new café offering a venue for graduate students to socialize on campus.

With the undergraduate student government reform, a record number of students ran for elected office and more students participated in the [on-line] voting process last spring than ever before. The most diverse group of students ever selected to serve as student government leaders will represent the Undergraduate Student Government in 2004-2005. A priority related to the restructuring of the Undergraduate Student Government is the focus on and accessibility to Leadership Development. In the context of leadership development and student governance, an academic internship for members of the Executive Council and Student Senate is being designed. Additionally, one of the new Undergraduate Colleges is themed as Leadership and Service, an existing academic course, The Sociology of Leadership, has been refined and is offered to students who hold leadership positions on the campus and a number of workshops and seminars on a wide range of leadership topics are continually offered.

As a result of a student referendum, plans for the construction of a Campus Recreation Center at Stony Brook University are in process. Based on comparisons with other institutions, the University believes such a facility will have a profound impact on improving the social experience of Stony Brook students. Another priority area for SBU is student wellness and we have begun to see positive results on campus. Stony Brook has opened a small new Wellness Center in the Student Activities Center that provides limited recreational outlets, including classes and workshops as well as some state-of-the-art fitness equipment. A programming highlight was the first annual Wellness Expo, attended by thousands of students, faculty, and staff.

Like most campuses across the nation, one of Stony Brook's most significant challenges is meeting increased student mental health service needs. The University Counseling Center is meeting this challenge with decentralized service and creative collaborations that maximize staff resources

economically. In addition to full-time clinicians, psychology interns, psychiatric residents, graduate students in psychiatric nursing and social work; per-diem clinicians from the local off-campus community now provide services to the student population. A new satellite counseling center located in the Health Sciences Center provides on-site access for student in medicine, nursing and other health professions. A Wo/Men's Center located in the Student Union specializes in gender issues for men and women. Liaison counselors working in Stony Brook's new Undergraduate Colleges provide direct services and consultations to parents of new students. Increase referral to off-campus mental health practitioners will become possible when mandatory student health insurance goes into effecting August 2005.

An ever existing concern for any university is that of campus safety. Stony Brook University offers a number of outreach and educational programs through Student Affairs departments and University Police to address issues of sexual assault and harassment, alcohol and substance abuse, personal safety and awareness, and community responsibility. Additionally, University Police has the following special programs in place: CrimeStoppers, Neighborhood Watch, and Operation I.D. Program.

The campus just completed the Middle States Commission on Higher Education (MSCHE) Accreditation Evaluation process, conducting an extensive self-study on the student experience at Stony Brook University. The University's self-study employed a number of independent assessment reports, formal surveys, and a range of informal data gathering approaches. In addition to the SUNY-wide Student Opinion Survey (SOS), Stony Brook University participates in a number of national benchmark peer surveys including College Student Survey (CSS) and CIRP conducted by the Higher Education Research Institute (HERI), and the National Survey of Student Engagement (NSSE) conducted by George Kuh. SBU also conducts periodic telephone surveys and freshman focus groups. Student Affairs and Institutional Research are currently in the process of designing a systematic approach to assess the First Year experience, including all aspects student and academic life, as well as other assessment efforts.

Post-graduate Success

32. Please describe the post-graduate success of your students and data collection efforts planned or in place to measure this outcome.
 - a. For undergraduate students: pass rates on certification and licensure examinations; employment patterns, starting salaries, and employer feedback; performance on graduate admissions tests; placement into graduate schools; geographic location; etc.
 - b. For graduate and first-professional students: pass rates on certification, board, and licensure examinations; post-graduate placements (e.g., post-docs, residencies); faculty appointments; employment patterns, starting salaries, and employer feedback; honors and awards; publications and inventions; geographic location; etc.

Stony Brook conducts a survey of all recent alumni every fall to document their activities in the year after graduation and perception of the preparation their Stony Brook education provided. The Career Center and professional schools also survey specific student populations.

Having collected university-wide alumni data for several years, the University now has a large enough database to support departmental analyses, which will be prepared and shared with department chairs in the coming year. As a further guide to improved outcomes, Stony Brook will also use the data to characterize the students who were not satisfied with the preparation Stony Brook gave them for graduate school or the work place. The planned SUNY survey will provide data on the outcomes and perceptions of undergraduate alumni several years after graduation. The University also intends to participate in Science PhDs - Five Years Out, a Ford Foundation-funded national study of social science PhD paths being conducted by the Center for Innovation and Research in Graduate Education (CIRGE) at the University of Washington.

Stony Brook does not have a general mechanism for assembling employer feedback, but several professional programs gather this input. For example, as part of the NCATE accreditation process, PEP conducted surveys of both recent program graduates (undergraduate and graduate initial teacher certification as well as advanced certificate programs in educational leadership) and the school districts that employ SBU graduates. All of these surveys showed a very high rate of satisfaction with the overall quality and the specific components of Stony Brook's programs. Alumni rated the University's teacher education graduates highly in the areas of content knowledge, lesson planning, the ability to adapt instruction to meet the needs of individual students, and knowledge of relevant education regulations. These ratings were echoed by the majority of area employers, who rated the overall strength of Stony Brook graduates—in comparison to the graduates of other area teacher education programs—as excellent. Educational leadership alumni responded in addition that the program was especially strong in preparing them to act in an ethical manner, develop both staff capability and a supportive learning environment, and implement school policies as required by law. Survey results are reviewed by PEP Assessment Committee and faculty on an on-going basis and appropriate changes are implemented, as necessary, for program improvement. For additional information on PEP Assessment instruments see: <http://www.pep.sunysb.edu/assessment.php>.

The fall 2003 Alumni Survey shows that about 40 percent of Stony Brook's undergraduate alumni are employed in a career position immediately after graduation (of these 12 percent are also pursuing further studies); an additional 40 percent are in school (a figure which includes the 12 percent in a career position). Another 13 percent are employed in a job they believe might lead to a career; 11 percent hold non-career jobs and 8 percent are doing other things.

Most employed undergraduate alumni work in Suffolk County (about 35 percent) or New York City (30 percent), with an additional 20 percent in Nassau County, 5 percent elsewhere in New York State, and 10 percent out of state. Almost 40 percent of the alumni who continue in school attend Stony Brook, 14 percent attend other research universities, 30 percent other colleges and universities on Long Island or in New York City, and 16 percent other institutions. Most (about 60 percent) are seeking masters degrees; 20 percent are in doctoral degree programs, and 20 percent are enrolled for a graduate certificate, second baccalaureate degree, or other educational offering.

About 43 percent of SBU's undergraduate applicants were admitted to a US medical school for fall 2003. Including other options such as foreign and osteopathic medical schools the number rises to about 50 percent. The University believes this is a strong showing, given that many of SBU's applicants are of immigrant, economically disadvantaged or underrepresented minority backgrounds. For students whose GPA and MCAT scores are at the national means the acceptance rate is between 90 and 100 percent every year.

Stony Brook's success in placing students was documented in a 2003 *Wall Street Journal* article ("Want to go to Harvard law?" 9/26/03) which reported results of an independent study of the undergraduate colleges of students admitted to top graduate schools in medicine, law and business. Stony Brook ranked 8th nationally among public colleges and universities, and 86th among 3,000 public and private institutions.

Maintaining that strength is an ongoing effort. In 2003 pre-professional advising services were reorganized into the Academic and Preprofessional Advising Center within Academic Advising to further strengthen these services and increase their visibility to students. More than 700 students now receive weekly email updates, and the prehealth advising website is consistently among the top Google search results for "prehealth advising" and "premedical." The number of application letters written by the Committee on the Health Professions has increased 57 percent in the last five years.

Stony Brook students perform very well on licensing and certification examinations. In teacher education, for example, they consistently surpass New York State average pass rates on state licensing

examinations. For the most recent cohort of program completers (2002-2003), Stony Brook's pass rate on the LAST and the ATS/W that measure general knowledge in the arts and sciences and knowledge of teaching skills was 98 percent. (Additional test score information for earlier cohorts is available at <http://www.pep.sunysb.edu/scores.php>). Effective February 2004, Stony Brook teacher candidates will also be required to pass the Content Specialty Test (CST) to qualify for professional certification. Stony Brook's distributed model for teacher education provides strong preparation in the content areas and it is expected that candidates will excel in this area too.

Results in the health professions are equally strong. In 2003 nursing students achieved a 94 percent pass rate on the National Council Licensure Examination (NCLEX). The mean pass rate for physician assistant students over the last seven years was 96 percent, compared to a national average of 92 percent. Respiratory therapy graduates consistently exceed national pass rates; for example on the entry level examination the program pass rate was 81 percent over the last four years, compared to an average of 66 percent. Cytotechnology has a 100 percent pass rate, with 94 percent of students passing on the first attempt. In the last two periods for which a sizable number of clinical laboratory science graduates took the certification examination they achieved pass rates of 84 percent and 91 percent. Occupational therapy averaged a 93 percent pass rate for 2001 and 2002. Based on interviews with graduates and employers, reviewers from the Accreditation Council for Occupational Therapy wrote that "Graduates of the occupational therapy program are a reflection of a dynamic curriculum that has enabled them to practice effectively in a variety of environments. Their professional competence, enthusiasm for their practice, and their commitment to professional development are evidenced by the positive appraisals of employers and fieldwork educators."

To comply with ABET requirements, the College of Engineering and Applied Sciences (CEAS) has developed an extensive and robust process to receive feedback concerning academic programs. The evidence from alumni, CEAS Industrial Advisory Boards, and from the employers themselves has indicated that SBU students are exceptionally well prepared for careers within their chosen profession. The most significant professional licensure activity for Bachelor of Engineering students is the Fundamentals of Engineering Exam ("FE exam") which leads onto the qualification of PE, Professional Engineer. The FE exam need not be taken during the period when the student is enrolled at Stony Brook and it is, in fact, administered by an outside body. However, all students are advised and encouraged to take the FE exam in the last semester of their senior year and, historically, up to 10 students may take this exam during this period. The statistics concerning the pass rate is highly variable with pass rates of from 25 to 85 percent for any group who takes this test. Over the past two years CEAS has taken steps to better prepare students for the FE exam by holding preparation courses and mock exams throughout the fall semester.

Medical students pass three examinations administered by National Boards of Medical Examiners (USMLE). The SOM receives the results of Step 1 and Step 2. The actual Step 3 licensing exam result may be withheld by the student, who is a resident at the time of its taking, but most residents will report it. The USMLE reports list the number of SOM students taking the exam compared to the total number taken in U.S. and Canadian medical schools; the number of students who passed the exam compared to the number of students who passed from all US and Canadian schools; and the percentage of students who passed the exam compared to the percentage passed in all other US and Canadian schools. It also lists the performance of the first-time examinees who failed their first attempt at step 1, and who repeated the exam later in the same year.

In 2003, the pass rate of the exam for Step 1 was 91 percent out of 102 students taking the test for the first time. The passing rate for Step 2 in 2002-03 was 99 percent out of 107 first-timers. The most recent reporting for Step 3 was for the period between May 2001 and December 2003: during that period 67 of Stony Brook's students scores were reported as first-timers, and 99 percent passed.

A second important measure of medical education outcomes is the “match,” or placement success, between medical students seeking residency placement and academic programs seeking residents. Stony Brook students are extremely successful by this measure. For example, 99 students entered the match in 2004; 94 matched immediately and 5 were placed shortly thereafter; 72 percent matched in NY State for their first post-graduate year, 44.4 percent matched in the NY Metropolitan area; 27.6 percent matched on Long Island, and 28 percent matched out of state.

The School of Medicine conducts an annual survey of the first postgraduate year sites in which medical students are placed. The residency coordinators are asked to rate the graduates on a five-point scale. The criteria rated are: overall clinical performance; patho-physiology; performance of medical history; performance of physical exam; evaluation of interpersonal skills; evaluation of communication skills with patients; performance on in-service exams; evaluation of initiatives and self improvements; and evaluation of the application of evidence-based learning. In addition, the survey assesses the overall degree of preparedness of the students, and the degree of accuracy of the SOM’s recommendations of the students.

Dental School graduates are engaged in their profession across the nation, as practicing dentists, academicians and researchers. All graduates pass their licensing and national board examinations, and they are sought after for residency training programs and positions in private practice. All graduates who wished to pursue advanced education have been accepted to a post-doctoral training program, and surveys of residency training programs show that Stony Brook graduates consistently outperform the average. Many have gone on to significant academic careers and have distinguished themselves as deans, directors of residency training programs, department chairs and as holders of endowed professorships. A recent survey of graduates revealed that 30 percent held leadership positions in dental organizations and 35 percent held academic appointments. They reported active involvement in continuing dental education and 23 percent reported holding fellowships in honorary societies. They each contributed an average of 1.95 articles and abstracts per year to the professional literature.

Nursing students also demonstrate strong preparation. Pass rates on nursing certification examinations range from 92 percent for neonatal nurse practitioners to 70 percent for midwifery. These pass rates exceed the national average on all examinations for which comparative data is available.

Student/Alumni satisfaction

33. Describe how the results of student and alumni surveys are used to inform institutional planning and enhance the quality of academic programs and services. Please describe instruments that are currently in use and/or planned for the future.

Stony Brook conducts the Residence Hall Quality of Life Survey every semester, the CIRP New Student Survey (every year since 1966), an annual survey of recent alumni, the SUNY Student Opinion Survey every three years, the National Survey of Student Engagement on a periodic basis, and other surveys as needs arise. Recent examples include surveys to collect information on the student experience—conducted to support the Middle States Self Study, graduate student housing, the bookstore, academic integrity issues, and campus climate. Teaching evaluation data are collected every semester. The analysis of results from the 2000 Student Opinion Survey were published as a journal article. (EH Thomas and N Galambos. What Satisfies Students? Mining Student-Opinion Data with Regression and Decision Tree Analysis, *Research in Higher Education* 45:3, May 2004, 251-269)

Survey results are used in program planning. For example, student opinion surveys generally indicate that Stony Brook undergraduates are well-satisfied with their academic experience but less satisfied with their social experience and sense of belonging on the campus. Academic initiatives such as the Undergraduate College program and the Student Mentor Program, campus life enhancements such as the development of Division I athletics, and training programs to increase staff responsiveness to

student needs all respond to those concerns. The University is also planning a complete redesign of new student orientation, which was rated low in the 2003 Student Opinion Survey.

The results of the Quality of Life Survey are used each year in developing annual goals and shaping long range planning for the Division of Campus Residences. Results of other surveys and focus groups have provided direction for renovations, policy development and adjustments in procedures. Results from the Campus Climate Survey will be used to develop enhanced diversity-training programs. In addition to university-wide opinion assessments, several professional programs conduct separate surveys of their students and alumni. For example, at the end of each semester the Professional Education Program (PEP) surveys program completers and their cooperating teachers about the effectiveness of the program in preparing candidates to meet program standards, including their content knowledge. Results of surveys of program completers, cooperating teachers, alumni, and employers provide evidence that these stakeholders all agree that Stony Brook education programs prepare well-qualified teachers who have a solid grounding in the subject area and pedagogy of their disciplines.

The School of Nursing conducts a Six-Month to One Year Outcome Survey of its alumni as well as the AACN/EBI Nursing Alumni Survey. These surveys collect information on alumni job placement and/or continuing education, satisfaction with Stony Brook nursing education, and learning outcomes.

Technology

(Plans for ensuring technology infrastructure supports academic quality)

34. Describe your planning process for ensuring that technology appropriately supports your mission, including relevant assessment processes. In addition,
- a. What is being done to ensure faculty and students have access to sufficient technology and training? Describe your plans for increased integration of technology in the classroom, including the proportion of instructional space that provides an instructor with network connectivity and projection capability, and the proportion of instructional space that provides network connectivity for each student seated in the classroom.

Stony Brook has a planning process in-place to support the IT infrastructure for the instructional area. A comprehensive replacement plan is in place to ensure that there are sufficient public computer sites and machines to support the student population. The plan includes a 3-4 year replacement cycle for client and server hardware, as well as an annual budget for the software licenses needed for the machines. Machines that are rotated out of service are assigned to graduate students for their offices.

Plans for improving classroom technology are in place but implementation has been limited due to the lack of sufficient resources. All of the large lecture halls have network connectivity and computer/projection equipment. Smaller classrooms still use portable equipment for their computer/projector needs

In addition to the Registrar-assigned classroom space, many departments have discipline-specific computer classrooms that are designed to integrate technology into the instructional process. These facilities have individual workstations for each student in the classroom. Such facilities exist in: Psychology (UG computer labs), Social Sciences (DataLab), Health Sciences Library, Earth and Space Science, Anthropology (GIS lab), Writing, and Engineering. In addition, there are specialized instructional labs for Foreign Languages, Theater Arts, Music, and Fine Arts. In the School of Dentistry, a new computerized patient record and treatment system has been implemented to provide support for dental students and graduate trainees. In addition, the Dean of the SHTM headed Stony Brook's effort to design and build the Medical Informatics Learning Center with donated funds from Bayer, software from Triple G and hardware from Data General.

There is wide-spread use of the web and Blackboard to enhance the instructional environment. The response to #25 has additional information about these resources and how they are being used for instruction.

Training in the general use of computers, Blackboard, and other applications is provided by Instructional Computing and is offered to both faculty and students. Training for PeopleSoft, Lotus Notes, and Microsoft Office applications is available from Client Support and is available to all campus users. Discipline specific training is available for students, faculty, and staff that use these specialized facilities. In addition, the campus is using computer based training materials from Skillsoft to provide both IT and business courses. These courses are available to all campus users. The Center for Excellence in Learning and Teaching provides training and support to faculty in developing multimedia materials for their courses.

The Professional Education Program (PEP) has integrated knowledge, skills, and dispositions related to educational and information technology throughout its education courses, experiences, and assessments. The university devotes substantial resources to support the use of technology to enhance student learning. As a research university, Stony Brook has an impressive infrastructure for supporting technology and promoting its application in coursework. PEP's commitment to technology is explicitly stated in the Conceptual Framework, and the candidate proficiencies. PEP (proficiency no. 6) requires candidates of all programs to be able to use and integrate technology effectively to enhance their own learning and to design learning experiences to support student learning. To prepare candidates to achieve proficiency in the use of technology, instruction in this area is incorporated into curriculum and assessment, and PEP is supported in this area by several university units.

Technology is integrated across the teacher education curriculum, instruction, field experiences, clinical practices, and the PEP assessment system. Blackboard is used extensively as a platform in teacher education. Through Blackboard and the PEP website, the unit has developed its own online community. Blackboard sites are available for each teacher education program to establish an online community.

Stony Brook University's PEP unit is one of fifteen units at SUNY campuses that jointly received a grant for a [SUNY Teacher Education Program Assessment \(TEPA\)](#) project from the US Department of Education Fund for the Improvement of Post-Secondary Education (FIPSE). This project creates a sustainable assessment system to document beginning teacher competency and performance and provides feedback for program improvement for each of fifteen teacher education institutions collaborating within the State University of New York system. Ideas advanced at the regular meetings of this SUNY group are being incorporated into the design and operation of Stony Brook's assessment system. As part of this project, the Division of Information Technology and the Office of Institutional Research are working with PEP to further enhance our assessment information system and to develop it into a model for other SUNY schools. We expect that all of these developments will substantially enhance the quality of the PEP assessment system and thus contribute to the overall quality of our teacher education and educational leadership programs.

In the School of Nursing, the planning and assessment process is guided by The Academic Technology Committee with input from faculty, staff and students. This input is presented as agenda items to the Committee. Depending on the subject area, the assessment may consist of data collection, research, pilot testing of new technologies and methods, as well as interviews with pertinent individuals to provide input. The planning process is based on the result of such assessments and may include the recommendation and implementation of new policies, procedures, methods, systems, programs, and/or technologies. Recommendations may also include the request for the allocation of resources, such as staffing, equipment and/or space.

- b. What changes or investments in technology will be needed on campus by 2010 to support academic program directions, research, libraries, student support services, administrative initiatives, federal or state requirements, etc.? Describe the financial impact of these changes and how the initiatives will be funded.

The fiscal environment is an important boundary condition for future investments. Clearly, Stony Brook must continue to find ways to provide additional academic and administrative services for its students, faculty, and staff while keeping costs as low as possible. Stony Brook has made a significant investment in technologies to support its academic and administrative environments and must continue this commitment into the future.

The use of PeopleSoft, as the campus ERP solution, provides a powerful platform that has transformed many disparate processes into an integrated process that better serves the campus users. Self-service applications have transformed employee and student services areas to better serve them. Students have 24 X 7 access to their records and can conduct virtually all of their business using self-service. A “closed-loop” communication mechanism has been built into the self-service application to communicate with individual students about advising, records, accounts, and other functions. Other examples include the automation of employee recruitment, appointments, tracking of health information, tracking of training and certifications, vacation accruals, Form I budgeting, Student payroll time reporting, management of personal information, and other enhancements too numerous to mention. As we move forward, further work is needed to continue this effort. We plan to further develop the data warehouse infrastructure and reporting solutions required to support operational reporting, interactive web-based management reporting, decision support systems, and ad hoc analysis.

The use of Lotus Notes has transformed a number of paper based processes into electronic applications that facilitated the collection of data and authorizations needed for Human Resources, The Research Foundation, and other areas. The use of Notes has spawned hundreds of applications that have targeted areas where electronic routing and approvals assist in reducing the time necessary to deliver services to our students, faculty, and staff. Plans are in place to expand and extend this technology to other areas of the campus.

In the academic area, significant investments are needed to further inject technology into the instructional environment. All classrooms requiring network connectivity, computer, and projection equipment must be equipped, staffed, and secured to facilitate the use of technology. Continued investment in course management systems will be necessary to keep pace with the growing demand for this technology. The use of mobile devices to enhance teaching must be further developed and deployed. This will require additional network infrastructure, including a wider deployment of controlled wireless communications.

Discipline specific facilities must continue to be developed and supported. Examples include: the School of Dentistry’s patient treatment simulator, a technology which offers the student a “near” real-world experience in all phases of patient treatment; similar technologies exist for Medicine and Nursing, as well as the Sciences, Arts, and Humanities. All of these initiatives require equipment and staffing to support them.

The Library must further develop the acquisition and deployment of on-line materials. Access to on-line databases and other resources will need to increase in response to demand for these services. The underlying infrastructure supporting the Library systems must continue to expand and be maintained. This requires base funding to ensure that the services and facilities are available for use and meet the needs of its users. The SUNY Connect program has facilitated the adoption of a common hardware and software platform for campus libraries. Unfortunately, no provision was made in this program to provide replacement hardware. As a result, additional resources will have to come from the campus operating budgets to fund the necessary periodic replacement of hardware.

The IT infrastructure must continue to evolve both in capacity and expansion of services. Bandwidth requirements will continue to grow. Additionally, increased emphasis on security requires both staffing and equipment to ensure that the campus is appropriately protected from cyber attacks. While investment in security provides no visible benefits to users, ignoring this growing responsibility can potentially result in degradation of services as well as possible exposure of protected data.

Funding for these initiatives must come from a combination of State allocation and fees. In all cases, replacement and maintenance costs, as well as staff support, must be considered in developing new initiatives. Without continued support, facilities rapidly become inoperative and obsolete.

- c. What new roles, responsibilities, and organizational changes have been implemented or are being considered to ensure that technology is adequately supported and integrated across the institution?

No major organizational changes are planned.

- d. How are you currently working with other campuses or organizations within SUNY to share technology resources and what opportunities do you envision for more collaborative efforts within the University?

Stony Brook and Albany continue to collaborate in their respective PeopleSoft implementations. Both campuses are working closely together to maximize the use of the PeopleSoft system to provide better services to students, faculty, and staff.

Membership in the SUNY Training Center provides courses offered on Stony Brook's campus for the benefit of its faculty/staff and those of nearby SUNY schools. Participation and sponsorship of CIT is an important collaboration for Stony Brook.

Centers for Learning and Teaching in the University Centers sponsored video conferencing programs featuring outstanding presentations from each campus on aspects of improving teaching and learning.

A plan is in place to participate in shared development of best practices and learning objects for dissemination among SUNY schools.

SUNY Connect, the SUNY-wide Library initiative is an important collaboration among SUNY campuses. This project will continue to evolve and as a result provide better services to all participants.

Facilities

(Plans for ensuring facilities support academic quality)

Overall Design Concept, Campus Facilities Plan and Facilities Management

35. Does the campus have a long-range Campus Facilities Plan in effect that guides campus development and integrates academic goals and priorities? Does the Plan incorporate an overall design concept for the campus? Describe the campus' ongoing facilities evaluation and project prioritization process, including the process used to review and update the Campus Facilities Plan and capital project priorities. Please provide a brief update on the status of the facility goals outlined in the current Memorandum of Understanding.

Funding for major campus development is provided through the State University Construction Fund and the Dormitory Authority. A Campus condition study (building by building) and a Framework Study have been completed by Beyer, Blinder and Belle, which identifies needed repairs, renovations and lays out guidelines for future land use. Beyer, Blinder and Belle have also developed campus guidelines, which dictate building style to unify the campus appearance. Capital priorities are established by the President based on input from the Provost and Vice Presidents. With the current capital plan, Stony

Brook has added a wing to the Heavy Engineering building and renovated and expanded the Humanities building. In addition, the University has constructed an outdoor stadium which accommodates 8500. Other major projects that have been completed are DLAR, Brain Lab and Yeast lab.

While the next capital plan is primarily designed to remediate infrastructure needs, programmatic improvements in classrooms and labs must also be addressed. Major renovations to the Graduate Chemistry building and Computer Science building are planned as are improvements to the HSC and Life Science Building. Stony Brook has also received special funding through NYSTAR for a Biomedical Engineering wing and from the Center of Excellence Grant Program, which will allow us to build the Center for Wireless and Information Technology.

Additionally, the state awarded the University, a grant of \$750K to initiate the program for the rehab of the Heavy Engineering building which began its construction contract on February 1, 2000. The time-line for the completion of Heavy Engineering was originally June 30, 2003 then revised to August 6, 2003. To date, construction has not been completed and the SUNY construction fund has informed SBU that it is not sure of a completion date at this time. The University holds its ABET accreditation visit in the fall of 2005 and hopes very much for completion in time.

A facilities condition study conducted by the State University Construction Fund in 2002 (using Beyer Blinder Belle), determined that Stony Brook University would need to spend about \$300 million dollars to address all of its critical maintenance and plant adaptation needs. This study, which covered each building in the campus, was conducted to help establish priorities for the new (2004 – 2009) Capital Plan. Stony Brook has received \$173 million in new Capital Plan funds to address these needs. Clearly, choices will have to be made.

The President will determine the specific priorities, but they will include the following items:

Major building renovations and or repairs

- Graduate Chemistry
- Basic Sciences (Health Sciences Center)
- Clinical Sciences (Health Sciences Center)
- Old Chemistry
- Computer Science Building
- Life Sciences Building
- Physics
- Harriman Hall
- Dining Halls
- Flax Pond Marine Science Lab

Campus Infrastructure

- Utility systems repairs
 - Electrical
 - High temperature hot water systems
 - Roadways
 - Plaza deck repairs

Building Systems (Various Buildings)

- Roofs
- HVAC
- Elevators

Appearance Improvements

The previous Capital Plan (approximately \$115 million dollars) is nearly complete. The projects still to be finished include:

- Stadium (final closeout)
- Heavy Engineering (phase 2 construction)
- Humanities (under construction)

- Staller Center improvements (under construction)
- Other projects of note include:
- Two student apartment complexes the rest of which will be completed fall 2004
 - Sunwood, President's house and conference center (Stony Brook Foundation funds) - completed
 - Charles B. Wang Center (private gift) - completed
 - Biomedical Engineering (NYSTAR Grant) in design
 - Center for Excellence in Wireless Information Technology (Empire State Development Corporation project) in design
 - Calverton Incubator (State Grant) - completed
 - New York City office and classroom space (lease) – in operation

Stony Brook University Hospital is undertaking \$123 – 150 million dollar Capital Plan to renovate and expand its facilities. The projects include:

- Expansion of the Emergency Room
- New Cardiac Center
- Ambulatory Care Pavilion for imaging and outpatient cancer care
- Expansion of Women's and Children's Services
- Upgrading and renewal of hospital systems and equipment

Stony Brook University is pursuing the acquisition of 246 acres adjacent to the campus. Using both campus funds and a Genysis Grant, the property is to be acquired by purchase or eminent domain. The site will be used to develop our Research and Economic Development Campus.

Lastly, Stony Brook University in conjunction with Stony Brook Foundation Realty, which holds a 60-year ground lease on a 12-acre parcel, is negotiating with a developer to build a hotel/conference center. This hotel in conjunction with the Charles B. Wang Center and other campus conferencing facilities will enable the University to host significant regional, national, and international conferences. The campus has been working for 15 years to build such a facility that would attract research, academic, and health care meetings to Stony Brook.

36. What is the condition of existing facilities, including site improvements and infrastructure? How well do existing facilities meet current and projected needs? Can facilities support planned academic and enrollment growth? Please identify any known constraints or anticipated shortfalls. Describe space utilization strategies. Describe the manner in which operating resources (staff and funding) are allocated for your campus' preventive maintenance program. Does your program have defined goals and objectives? How do you gauge its effectiveness?

The aging campus infrastructure has proven to be a challenge for SBU's campus. With a limited state budget, remediation has been limited to critical repairs and has not allowed the University to provide ongoing maintenance. Infrastructure funds that are provided in the new capital plan will be used for the replacement of roofs, elevator upgrades, removal of underground tanks, replacement of utility feeder lines and other selected projects. In conjunction with the Construction Fund, Beyer, Blinder and Belle was hired to prepare a campus master plan study. This study provided a building by building assessment of the infrastructure deficiencies and prioritized critical needs. The study has identified over \$300M of critical maintenance projects. Pending legislative approval, the next capital plan is estimated to be \$173M of which 80 percent has been earmarked to address such critical maintenance projects as utilities upgrades, building system repairs and roadway improvements.

In addition to the enormous cost of rehabilitating, repairing, and maintaining campus buildings and infrastructure, SBU has been hard pressed to provide for the operating costs of new buildings, which have been put on line. For the last six years no funding has been provided by the State to cover

operating costs of new buildings. Operating costs for buildings include custodial, maintenance of HVAC and other building equipment, and utility costs.

A related problem is the high cost of these and other services on Long Island. Typically, SBU pays 25 percent more for these services than upstate SUNY campuses. The most expensive costs are for utilities. SBU and other LI campuses have the highest utility costs in the SUNY system. There is little financial recognition by SUNY of this growing problem. The campus utilities costs of state-purpose activities are approaching 14%, even though Stony Brook is reducing its growth in utility costs through efficiencies and controls being placed on the campus and which are financed by energy bonds. These bonds will have paid for themselves in utilization savings within eight years. However, the cost of fuel continues to drive up costs well beyond the economies we are achieving. Because of recent fuel increases, in FY 03-04, SBU was \$4 million dollars over its utility budget, in FY 02-03, the University was \$5 million dollars over its budget.

Educational Facilities (including Research)

37. Please describe planned capital projects and priorities vis-à-vis the academic direction and outstanding critical maintenance needs of the campus for building and renovation of educational facilities (including research facilities and research equipment; and site infrastructure such as underground utilities, roads, and parking) through 2010. Indicate which specific projects are scheduled for the current proposed multi-year capital plan (through 2008-09) and which projects will be deferred until the following capital plan. Describe the process by which you integrate campus mission requirements, outstanding critical maintenance needs, and your overall capital plan resources. In addition, how do you address unanticipated needs such as regulatory issues (e.g., those generated by environmental audits) and emergencies?

The priorities of the next capital plan are established by the President recognizing the academic, research, and operational needs of the campus. The campus is proactive in addressing regulatory changes and those identified in environmental audits. Funding for these items is provided through campus and capital funding. Appendix SBU-5 is the proposed capital plan, which is pending legislative approval.

Residence Hall Facilities

38. As appropriate, please describe plans and priorities vis-à-vis the academic direction of the campus, student enrollment patterns, and changing demographics, (e.g., resident vs. commuter mix) for building and/or renovation of residence hall facilities through 2010. Please indicate whether specific plans are scheduled for the current multi-year residence hall capital plan (through 2007-08) or the next one. Describe the formal process by which you assess the physical condition of your residence halls and establish priorities for rehabilitation and repair. Do you require your residence hall program to maintain a minimum level of reserves to address emergency situations? If so, what is the level?

The addition of 679 apartments during the 2004-05 academic year, intended for use by upper division undergraduates and graduate students, will enhance somewhat the ability of the campus to accommodate a larger proportion of incoming freshmen and transfers. It should be noted, however, that the completion of the first phase of these apartments, in 2001, resulted in an increase in juniors and seniors wishing to live on campus in excess of the capacity of the apartments.

While there are no plans, at present, to construct new residence halls, projected increases in our latest enrollment plan, does suggest future new construction for both graduate and undergraduate needs.

The second phase of renovation of the 26 residence halls is continuing. This follows the major renovation that invested in excess of \$80 million (more than \$10,000 per bed) in updating all residence halls. The current phase of renovations, which will include work in each year and extend through 2011, will expend an additional \$20 million.

The third phase of renovations of the Chapin Apartments, the first group of apartments built on the campus is nearing completion. Additional work planned includes the construction of a Community Center, the expansion of parking and renovation of the heating system. The Schomburg Apartments, opened 1990-91, are scheduled for their first major renovation in the 2005-06 academic year. This project will extend over two academic years.

The schedule for the current phase of renovations of the residence halls is based on the schedule of the original phase; new work follows the same sequence as the earlier project, cycling through all six quads. Apartments renovations have been planned in collaboration with the Rate Review committees comprised of apartments residents, with the input of staff in the Division of Campus Residences. Additional expertise has been sought from architects and engineers as needed. Priority for repairs is determined by staff in Residential Operations, based on consideration of life/safety issues, structural integrity, best practices and the comfort and convenience of residents. Quality Assurance Tours are conducted monthly by teams of staff and students in each residential area, in order to assess conditions.

Combined reserves in each fiscal year are set at approximately \$1.5 million.

Hospital and Clinical Facilities

39. Please describe plans and priorities vis-à-vis the academic direction of the campus for building and renovation of hospital, clinical, and clinical research facilities through 2010. Describe how these building and renovation priorities fit into the hospital/campus strategic plan? How will these projects be financed and how will the ongoing maintenance and operational requirements of new or expanded facilities be supported? Describe the overall cost-sharing arrangements between the hospital and campus with regard to operational costs and financing capital projects in support of academic priorities and strategic business plans.

The Facility Master Plan was initiated to address a number of immediate needs and to establish a facility and strategic direction for the Hospital for the next ten years. The plan is aimed at the Hospital's focus on building subspecialty care including Cardiac, Surgical, Vascular, Neonatal and Oncological services; the key programs that support the University's clinical and academic mission. The overall planning directions of the Master Plan include both renovations of 300,000 square feet of existing space for new uses, and new construction to create additional space.

The key to meeting these objectives was to identify the best use for the existing facilities, and to develop a strategy to phase the implementation, so as revenues increase following the early initiatives and capital investments, these revenues would help finance the later elements of the Master Plan.

The State University of New York and the State Legislature allocates bonds to the three SUNY hospitals. While the capital projects at Stony Brook University Hospital are supported by New York State bonds, the expectation is that all bonds will be repaid from Hospital operating revenues. There will be some overlap in capital investment with the University for shared infrastructure improvements, parking and site development expenses.

Energy Planning and Management

40. What steps are you currently taking to reduce the campus' level of energy usage and/or per unit cost? If you are in the Niagara Mohawk or NYSEG service areas, does your campus currently participate in the SUNY Electricity Buying Group? If not, why not?

Long Island and the New York City region have the highest energy costs in New York State. Stony Brook's utility cost for 2003-2004 was \$42.3M, with the bulk of the dollars being spent on electricity and steam. The University has taken steps to meter all buildings on the campus in an effort to identify heavy consumption. The campus has taken out energy bonds to fund improvements that will reduce utility costs. The savings in utility costs will offset the cost of the bonds. Included in this project is the replacement of variable frequency drivers, installation of state of the art utility controls, water conservation systems and monitoring equipment. This \$25M bonded project is guaranteed to save the campus approximately \$3M per year. In 03-04 new gas supply lines were installed. This initiative reduced our campus' natural gas consumption by five percent. Stony Brook will be hiring an energy manager to identify further potential reductions and savings in utility expenditures.

The campus is exploring the possible use of NYPA low cost power. It is not clear whether or not this is feasible due to the fact that we have a cogeneration facility on campus with a contract that may preclude us from contracting with another energy source. In the meantime, the staggering cost of utilities is hampering the University's ability to fulfill its mission.

Administrative Structure and Resource Management

(Plans for administrative and resource support to ensure academic quality)

Administrative Structure and Effectiveness

41. *Rethinking SUNY* called for maximizing efficiency across the System. Please describe your current administrative structure. Do you anticipate any changes over the next five years? Please explain. How are institutional plans developed, communicated, and evaluated? Be sure to describe the role of faculty, students, and the local governing body. How do you gauge the effectiveness and efficiency of your administrative structure, especially relative to peer institutions? For campuses with hospitals/clinics/other patient-care services, please describe current and planned affiliation agreements and cooperative programs (see question 21) that exist between the hospital/clinical facilities, school of medicine and practice plans, and how these arrangements ensure institutional efficiency and effectiveness.

Since rethinking SUNY was initiated, Stony Brook University has made a number of changes consistent with streamlining campus questions. These include:

- A single VP for Administration replaced two vice presidents (finance and facilities)
- A single Dean of Arts and Sciences replaced four individual Deans
- The Dean of Medicine and Vice President for Health Sciences positions were merged.
- A Vice President for Economic Development position was created. It was filled by the Dean of Engineering who serves in both roles.
- A new College of Business was formed from the Harriman School and the new MBA program – the school is headed up by a newly hired interim Dean.
- A task force is studying how to improve the integration and operation of the 18 Clinical Practice Corporations in the School of Medicine. A non-profit federated plan is being considered, which could strengthen the Clinical Practices as well as the School of Medicine.
- The new Biomedical Engineering Program was developed as an integrated department drawing on engineering and life sciences faculty. The program has grown rapidly and

has received recognition and financial support from external sources. A new and/or renovated building is being planned for the program.

- President's Five-Year Plan. When Shirley Strum Kenny came to Stony Brook, she polled the campus community on what improvements they would like to see on the campus. The President translated these ideas into projects to be undertaken by specific administrators with completion and progress reports made each year. Nearly all the tasks listed in the first two Five-Year Plans were completed. Stony Brook University is now in the planning stage of its third Five-Year Plan.
- When Stony Brook became a partner in managing Brookhaven National Laboratory for the United States Department of Energy in 1998, the position of Vice President for Brookhaven Affairs was created to emphasize the important new responsibility of the university and also because the special administrative activities associated with BNL management. At present one person has the duties of Provost and Executive Vice President for Academic Affairs as well as of Vice President for Brookhaven Affairs.

42. Please describe current and planned institutional research capability. What investments are being made to ensure timely and accurate institutional data to support decision making at both the campus and System level?

Stony Brook's Office of Institutional Research is staffed by five professionals with strong data management and analysis skills. Three hold research (doctoral) degrees. The office is responsible for reporting to SUNY and other external agencies, and for the on-campus reporting and analysis of student, personnel and space data. The staff participates actively in SUNY AIRPO—the director is vice president/president elect, and in national institutional research activities through conference presentations, publications, the director's membership on the PeopleSoft Higher Education User Group's Product Advisory Group on Reporting, and Stony Brook's membership in the AAU Data Exchange.

Stony Brook has a long tradition of supplying timely and accurate data to the SUNY Central Administration. An automated process for assembling CASA data was created as part of the PeopleSoft implementation, from which the University submits clean, complete data in the spring semester as well as the fall. President Kenny expanded the institutional research function from its historical focus on reporting to a broad responsibility for the analysis of resource utilization, student behavior, and program effectiveness that is continually improving Stony Brook's understanding and management of academic and administrative operations.

There is no plan for additional investment in institutional research, but SBU will continue to develop a decision-support information system leveraging PeopleSoft data. This is a collaborative effort between institutional research and information technology to build a data infrastructure to support interactive web based management reporting and facilitate analysis. The University also plans to hire an assessment coordinator who will work closely with institutional research but be located elsewhere.

Alignment of Resource Planning and Academic Plans

43. Describe your campus' budget process, including all funds, from initial determination of need to final allocations by department and program. How do you ensure that this process is aligned with academic priorities and plans for enhancing quality? Describe how the enrollment planning process fits into your budget process? How are decisions made regarding allocation changes among accounts/programs and major objects after the campus budget is submitted to System Administration? What criteria do you use to establish IFR programs, and how do you determine whether these programs align with campus mission?

The campus budget cycle begins with a memo to the Provost and Vice Presidents to initiate planning for the next fiscal year's budget presentations. A series of cabinet meetings running from early February through March are designated for this purpose. The first meeting is devoted to capital construction plans and how they may affect operating budgets. A tentative schedule of presentations is established.

A series of planning assumptions are provided along with guidelines and questions that must be answered as part of each area's budget submission. This is an All-Funds process. Vice Presidents are encouraged to use the presentation as the opportunity to request state funds and other centrally managed resources such as Research Indirect Cost Return, Dormitory Income Fund Reimbursable, General IFR allocation and any other resources. Requests for Hospital Income Fund and Dormitory Income Fund allocation must also be submitted directly to either University Hospital Finance or Residence Life for inclusion in their internal budget processes. A brief written description of each request item is required. The Budget Office staff is made available to assist in the development of presentations as needed.

A list of Five-Year-Plan objectives to be accomplished in the upcoming year is usually included in the material distributed to launch the budget process. Any objectives that cannot be accomplished must be thoroughly discussed as part of the Cabinet presentation. The Provost and Vice Presidents assure, in the development of their requests, that all issues related to academic priorities and plans for enhancing quality are addressed.

As much insight as possible is given regarding the status of SUNY and state-wide issues that could impact Stony Brook's budget including what SUNY Trustees have requested and the campus's interpretation of economic and political factors that could affect the budget. The latest enrollment projections are discussed as well as their potential affect on the Performance Based Budget Allocation Process (BAP).

Planning includes:

- Stony Brook's best expectations regarding the likelihood that all contractual salary increases for employees paid (on PSR lines) from state purpose accounts will be funded in an amount equal to cost.
- Best estimates of projected changes to Stony Brook's budget for the next fiscal year.
- Projected status of campus utility expenditure compared to budget.
- Projections of enrollment and tuition revenue.

It is often SBU's practice to include specific questions that must be answered as part of the presentations (a narrative is optional.) Examples follow:

- What new initiatives would be your highest priority for investing additional resources next year? How much would be required in the first year and annually thereafter?
- Describe in detail any Five-Year Plan objectives that will not be accomplished with explanation as to why you were unable to achieve the goal.

- What Capital Budget initiatives will impact your operating budget in the next year? Please quantify impact to the degree possible.
- How have your operating units been impacted by recent enrollment trends and what actions of a budgetary nature will be required in the next fiscal year to manage projected enrollment levels?
- Describe your top priorities and greatest challenges for the upcoming year if not described above.

In addition to the full cabinet, members of CAPRA (Senate Committee on Academic Planning and Resource Allocation) are invited to attend cabinet budget presentations.

Following the cabinet presentations, the Budget Office prepares a summary of all request items. That summary is discussed at a subsequent cabinet meeting providing an opportunity for members to support their and other's proposals. All input is directed to helping the President establish priorities for resource allocation.

The Budget Office updates schedules of projected available resources differentiating among one-time and base or ongoing resources. This data, combined with the summary schedules of requests noted above, are used by the President in consultation with the Provost, the Vice President for Administration, Associate Vice President for Strategy, Planning and Analysis and the Budget Director to make allocation decisions.

The Budget Office officially communicates all budget distribution decisions to the Provost and Vice Presidents. Managers in those areas break down total allocations by account and object of expense for entry into the Campus Budget Module. The CBM is used to generate files for input to System Administration's Form 1 file.

After initial allocations are established, the Provost and Vice Presidents have full authority to reallocate funds among accounts and or expense categories within their divisions. The Budget Office processes all budget transactions crossing major divisions or modifies the total allocation on a Financial Plan Adjustment form requiring the President's signature.

Income Fund Reimbursable accounts must be self-supporting with a clear and defined income/expenditure relationship. They should have basically one purpose and one kind of revenue source. They must be managed to a positive cash position by generating revenue sufficient to cover incurred costs.

There is a screening process for all new IFR account requests. When revenue derives entirely from gifts or contributions, applications are channeled to the Stony Brook Foundation. When the activity is one hundred percent research related, a Research Foundation Services and Facilities account is requested instead.

Stony Brook policy maintains that financial stability of IFR accounts is ultimately the responsibility of the President, Provost or Vice President within whose organization the account resides.

In the spring, before the end of each fiscal year, the director of each IFR account prepares, subject to departmental and decanal review, a request for allocation for the coming year. This is submitted through the relevant Vice Presidential area to the Budget Office. Review and approval of accounts at the departmental, dean and vice presidential level assures relevance to the campus mission.

44. Describe mechanisms in place for monitoring actual budget performance versus your original budget (for both expenditures and revenue generation). Describe the procedures used to ensure accounts/programs stay within budget and steps taken when budgets are overspent or expected revenues are not collected. How do you gauge the effectiveness and efficiency of your resource planning, especially relative to intra- and extra-SUNY peers? (see Appendix C-16)

The campus Budget Office performs a comprehensive quarterly review (beginning at mid-year) of the campus' fiscal condition on an all-funds basis. This review includes; state expenditures compared to budget for the campus and by vice president, utility projections, tuition and fee revenue, actual to projected, Research Indirect Cost Return, Royalty Income, and Brookhaven Science Associates fees, actual to projected, as well as reviews of reserves and contingency accounts. The process for developing the data is a consultative one involving VP operating area participation to review and refine Budget Office projections. The results are presented to the President.

The following policy statement is distributed annually and is on the Budget Office website:

Managing Surpluses - A lapsing funds calendar, revised each year, specifies the last dates for the submission of expenditure transactions against vice presidential accounts. Uncommitted balances (all object codes) following the recording of all transactions received prior to those specified dates will be considered surplus allocation.

Vice presidents have the option of identifying planned surpluses for a fiscal year by the date specified on the campus' Lapsing Funds Calendar. A notification of planned surpluses must be given to the Budget Office by this date. Approved planned surplus allocation will be removed from the vice presidents' accounts (which should be identified when the Budget Office is notified) and transferred to university central funds in the current fiscal year. The following year each VP area will receive the same amount of resources in "new year" state or other appropriate funding. Following the identification and removal of planned surplus allocation, the remaining financial plan funds must be managed as if the revised allocation was the original allocation with surpluses and deficits subject to procedures described in this section.

Positive financial plan balances remaining at the end of the lapsing period not identified in advance will accrue to each vice presidential area the following year within the limits specified below:

- 1) Each area will receive 100 percent of the greater of: a) ½ percent of an area's state allocation at June 30th, or b) \$100,000.
 - 2) The area will receive 50 percent of any remaining surplus allocation over the amount calculated in 1). The other 50 percent of unplanned surplus allocation will accrue to the campus' central funds.
- Unusual circumstances, such as special appropriations received late in the fiscal year, may warrant an exception to these limits and will be reviewed on a case by case basis.

A deficit is defined as being the amount by which an area's state purpose allocation (all object codes) is over expended at the end of a fiscal year (measured at the end of the completed lapsing funds period). Deficit balances will accrue to university central funds in the current fiscal year, but will require a dollar for dollar restoration to central funds from the vice president's new fiscal year resources. This restoration may be in the form of state allocation or other resources subject to the approval of the campus Budget Office. All deficit balances requiring adjustments in the new fiscal year must be settled within one month of receiving a deficit notification letter from the campus Budget Office.

The University is protected against the consequences of negative fluctuation in campus tuition and fee collections through the maintenance of a reserve account for enrollment/revenue shortfalls.

Stony Brook gauges the effectiveness and efficiency of resource planning by the results. Stony Brook has not lapsed any state allocation in seven years. Internal deficits are effectively managed within the

above policy. Campus reserves have been sufficient to protect against revenue shortfalls and unexpected expenditures.

Institutional Development/Fundraising

45. What plans are in place for meeting goals described in the SUNY-wide capital campaign (*The State University of New York \$3 Billion Challenge*)? Please include changes to your campus and foundation infrastructure (e.g., staffing, technology, training, and facilities) and efforts to encourage student, alumni (through the alumni associations/groups and at the individual level), faculty, and staff support and participation. Describe how institutional development dollars will be used to enhance academic quality (i.e., students, faculty, programs). Are there particular academic programs or initiatives that will be featured in your campus' campaign? What role will the local governing body (Board/Council) play in helping to reach institutional development goals?

Changes in staff and infrastructure include:

- An increase Stony Brook's Advancement Staff with hires in fund raising staff and has plans to increase Foundation's Business Office staff;
- The purchase and implementation of a new donor database system (Raiser's Edge);
- Outsourcing of its prospect research;
- A change in its Annual Fund solicitation schedule;
- Hiring of a consultant to advise on the University's Alumni operation.

Efforts to influence Stony Brook fund raising culture and climate include:

- Organized regular meetings of Deans and Vice Presidents to discuss fund raising strategies;
- Offered to match (up to \$1,000) departments if they organize alumni fund raising events at Stony Brook Manhattan;
- Organized meetings with top alumni in various cities with President Kenny (and will do the same for all top administration);
- In addition, top Administrators have met with leading faculty members concerning fund raising efforts.

President Kenny regularly consults with the Stony Brook Foundation's Chair and Executive Committee, and the larger Foundation Board will be consulted on a regular basis about the campaign as well. The level of Board annual giving has been raised to \$10,000 per member per year. We expect that the campaign will help us to make some board changes in relation to membership.

Stony Brook's campaign will primarily be dedicated to raising its endowments, most particularly in relation to student scholarship funds, graduate fellowships, and the establishment of faculty chairs in all of our major academic units.

Collaborative administrative/financial arrangements

46. Describe any current and planned collaborative administrative/financial arrangements (e.g., joint purchasing of supplies and services) that your campus has with other SUNY institutions, New York State, and/or private entities. Under what organizational/governance conditions would you participate in University-wide collaborative purchasing arrangements, recognizing the possible tradeoffs between savings and flexibility?

The University continues to seek joint agreements with other SUNY campuses, NY State agencies and other consortiums. Stony Brook currently participates in SUNY wide contracts for commodities and

services and has joint purchase authorizations with other university hospitals to purchase consumable supplies and commodities at reduced costs. The University also avails itself of OGS purchasing contracts.

Community Relations and Service

(Contributions to community ensuring a vibrant environment to support academic quality)

Curricular contributions

See "Responsiveness to local/regional/state needs" (question 28)

Co-curricular/Cultural contributions

47. Please describe campus extra-curricular/cultural contributions to the community (e.g., in the arts, concerts, museum exhibitions, etc.; and for athletics, schedules of events, etc.). Where appropriate, include estimates of level of participation at events and/or use of facilities, numbers of visitors, etc. What are your plans to increase community participation in these kinds of activities? How do you gauge the effectiveness of your efforts?

Stony Brook University provides the greater community with a plethora of academic, cultural and athletic programs as far-reaching and as diverse as the students, faculty and staff of Stony Brook. From Community-wide support events, to Presidential and Provostial lectures to concerts, plays and films presented by Staller Center and The Charles B. Wang Center, to the University's Division 1 Athletics Events and professional and regional sports programs, Stony Brook literally has, and provides, it all. Each year, over one million visitors are involved in, or attend, these programs and the numbers continue to grow as the programming increases.

Many community-wide events involve different groups on campus. From programs such as the ongoing "Year of Community", now in its fifth year, to programs such as Habitat for Humanity, the annual SEFA campaign, Tis the Season (student run toys for tots program), Stony Brook continues to be a supportive neighbor to its community through giving of time and money by students, faculty and staff. Stony Brook also provides other community-wide support through its use of the facilities, and houses an office of Community Affairs that keeps the community apprised of Stony Brook events and often provides programs for local higher education professionals and community business leaders. The Roundtable (a group comprised primarily of retirees from the surrounding community) is often on campus and has access to the Melville Library and other campus resources. Local dance schools, Theatreworks (a not-for-profit children's theatre workshop that provides school day programs for resident public schools), The Long Island Philharmonic and dozens of other community organizations use Staller Center theatres each year for cultural offerings for the community. The Section 11 Athletic Association (representing public and private high schools in Suffolk County) hosts football, basketball and lacrosse championships at Stony Brook's Kenneth P. Lavallo Stadium, while The Three Village Soccer Club uses fields on the campus' South-P lot for match play. Many other community organizations are involved with the campus through arts, athletics and academic connections to the various departments and programs provided through and at Stony Brook.

Academic programs for the community are frequent and varied. Presidential and Provostial Lectures take place each month at various venues on campus, and dozens of individual academic departments host lectures, workshops, and special programs where the community is invited to participate and/ or come as spectators. Many of these programs are organized by the University's Office of Conferences and Special Events, whose mission includes education, research and community service by providing the resources and services necessary to create and schedule celebratory/ recognition programs as well as academic and non-academic learning experiences. On the average, this office sponsors over three-dozen annual programs with the community as the prime user, with over 25,000 yearly community attendees at these programs. Most of these programs and events are free and open to the public.

Cultural programs at Staller Center for the Arts, The Charles B. Wang Center, The Student Activities Center and various other libraries, museums, art galleries and meeting spaces on campus are activities for the campus and the community. Staller Center for the Arts presents over 300 concerts, plays, dance programs, popular events, children's and family shows, art exhibits and films each year that are available to the public in the center's five theatres and 5,000 square foot art gallery. These events are often preceded by pre-concert or theatre talks and often followed by discussion sessions where audiences can ask questions and interact with the performers, filmmakers, etc. Over 200,000 community visitors attend these diverse and varied programs throughout the year at Staller. The newly opened Charles B. Wang Center hosted over 410 events in its first year of operation of which 90 were Asian/Asian American themed programs. Put together, attended by, and enjoyed by students, faculty and community organizations; these Asian/Asian American themed programs are a hefty contribution to the diversity mandate of this University via Asian cultural education. In general, the Wang Center events attracted members of the Stony Brook University community as well as those from New York City, Connecticut and neighboring counties. This newest cultural facility with its 230 seat theatre, large and small technology-equipped break-out rooms, chapel and expansive meeting and gathering spaces will continue to grow with a full schedule of events and programs planned for the upcoming year. The recently opened restaurant, *Jasmine*, has proven to be a very successful draw for students, faculty, staff and members of the greater community.

The Office of Student Affairs, the Undergraduate Student Government and the Graduate Student Organization are also very involved in programming of events for the students and the community at large. From planning concerts and other cultural events in the Student Activities Center and Athletic Facilities, to hosting major community-wide events, such as annual conventions to ethnic and religious programs by groups and fraternities/ sororities, to providing cultural entertainment at the new University Café, our student organizations and administration bring in over 100,000 community visitors annually. In addition, campus-wide cultural facilities include a multitude of art galleries, museums, libraries, including The Frank Melville Jr. Memorial Library, and other halls, ballrooms, and spaces where the community partakes in University-wide cultural activities.

Athletic programs are as diverse and varied as the cultural offerings on campus. With the move six years ago to Division 1 and the opening of the Kenneth P. Lavallo Stadium in 2001 to house football, soccer and lacrosse, Stony Brook athletics is certainly on the rise. The indoor facilities include a 1,500-seat gymnasium, and a 4,000 seat main arena for basketball and volleyball as well as a pool, squash/ racquetball courts, and training rooms. The outdoor athletic facilities extend over 25 acres and feature the new 8,136 seat stadium, soccer fields, baseball and softball fields, and tennis courts. There is a total of 20 teams (10 men and 10 women) totaling over 400 athletes playing over 350 contests per year.

In addition to Stony Brook Students and Student Athletes having the opportunity to enjoy playing in and on the Stony Brook Facilities, the University is host to High School Playoffs and Championships in Football, Basketball, Wrestling, Lacrosse, Swimming and Baseball. Even before the end of their High School careers, local Student-Athletes are able to play at Stony Brook and for most it is truly a memorable experience. Each year between Stony Brook Athletics, High School Sports and Special Events, over 750,000 Community members pass through the doors and gates of athletic events. Stony Brook is fast-and-furiously becoming the Sport icon not only for Suffolk County, but also for all of Long Island. The Sports Complex also plays host to a number of other non-sport community programs, including various trade shows, and conventions including one of the biggest Science Fiction Conventions in the Country, ICON. Each year about 15,000 ICON fans pass through the Sports Complex over three days of seminars, games and trade show activities. This coming year, ICON will be celebrating its 25th year at Stony Brook.

All of the campus constituents continue to increase their programming and diversity to reach further out to the community. Attendance continues to grow at all Staller, Wang and Athletics events. Staller

attendance has more than doubled in the past five years with each year showing on average a 10-15 percent increase in attendance at all programs. The Wang Center had a very strong first year with a minimal promotional budget and expects huge increases this year. As the athletics programs continue to strengthen, the administration is seeing larger and enthusiastic attendance at all of its contests. With research, surveys and box-office data from Staller, Athletics, Student Activities and the Office of Conferences and Special Events, it is quite clear that the outreach is effective and growing. Audiences and participation in academic, cultural and athletic offerings only increase when the caliber of programming and offerings are of the highest quality and the service provided by SBU's facilities and staff match that level. Continued and extreme annual growth in community attendance is the best gauge of success. Based on these numbers, Stony Brook's community outreach with academic, cultural and athletic activities continues to be extremely successful.

Service to community

48. What are some of the specific and distinctive ways in which the institution—including its administration, staff, faculty, and students—provides support and expertise to the community (local, state/nation, and international)? For campuses with clinical facilities, be sure to describe the impact of your clinical services. Similarly, where appropriate, comment on how the campus provides service to K-12 schools beyond traditional student-teacher placements. How is the campus assuring a strong, positive relationship with its local community? How do you evaluate the effectiveness of these efforts?

The university has been extremely active in fostering working partnerships with a large network of educational institutions, economic development agencies, business associations and businesses. Members of the University Community serve in various capacities on various Regional Task Forces examining economic issues facing the region, as well as on a number of regional business and industrial organizations such as the Long Island Association, the Long Island Forum for Technology, the Hauppauge Industrial Association, and the Long Island Software and Technology Network. Stony Brook represents the Long Island public colleges and universities for the Manufacturing Support Group for the Empire State Development Corporation and present/participate at the Long Island Life Sciences Workforce Consortiums, Town of Oyster Bay, Town of Hempstead and Suffolk county Workforce Investment business partners and workforce development forums and meetings.

The University has also joined forces with Nassau Community College and Suffolk County Community College to create the Higher Education Advanced Technology Center, a virtual center the objective of which is to address emerging and critical regional workforce needs through collaboration of all the economic development partners. The starting point is with the university and community colleges partnering on specific programs. Stony Brook has worked with Nassau and Suffolk Community Colleges to develop programs in machining, software engineering and construction certification.

The Strategic Partnership for Industrial Resurgence(SPIR) was established on July 1, 1994, by the State of New York to utilize the extensive engineering resources of the SUNY system (the Engineering Colleges and Programs at Stony Brook Buffalo, Binghamton and New Paltz) to help industry in the State compete more effectively. SPIR fills a critical gap in existing State industrial assistance programs by providing technically advanced multidisciplinary assistance on a fast turn around basis. The intent is to help companies improve their market posture, retain existing employees and create new jobs.

The SPIR program provides companies with:

- A source of properly trained students
- Leveraging of funds for research opportunities
- Access to university laboratories and computing facilities
- Utilizing the university as a catalyst to form partnerships with other companies and with federal agencies

- Technology transfer
- Increased visibility for and company and its products

Stony Brook University also has two New York State Centers for Advanced Technology (Medical Biotechnology and Sensor Systems) as well as a New York State Center for Excellence in Wireless and Information Technology. All three Centers have a mission of working with the industrial community as well as with other research institutions to promote the economic well-being of the State.

The Center for Excellence in Wireless and Information Technology is one of the five Centers of Excellence created by the Governor to help maintain and grow the state-of-the-art research capabilities of New York State. Stony Brook's Center is focused on research in wireless and information technology. The state has committed \$50M in funding for a new facility to house the Center. The Center has received more than \$150M in matching commitments from industry (cash and in-kind) and grants from Federal agencies. The Center has more than 40 business partners and its faculty are currently involved in more that fifty different research projects.

The CAT in Medical Biotechnology, established more than 20 years ago, through the CAT Centers program in NYSTAR, provides a vital link between the biomedical industry and a state-wide network of research, business development, and educational resources. Center programs are particularly well adapted to address the needs of small and mid-size companies. Collaborative research programs being developed focus on technological areas of importance to New York State's biotechnology industry.

At Stony Brook's State Center for Advanced Technology, the University provides an organizational framework and intellectual and material resources for the development of sensor-related technologies in New York State by facilitating partnership between NYS industry and university research, the most important outcome being new jobs and improved profitability and competitiveness of New York State businesses. The CAT has more than 50 industrial partners working with faculty from multiple disciplines at the University.

Stony Brook University has as part of its mission fostered the development of two Incubator Facilities on its campus. The Long Island High Technology Incubator (LIHTI), a private not-for-profit corporation incorporated on September 8, 1989, is a partnership between the Research Foundation and the Stony Brook Foundation Inc. LIHTI's founding premise was to target the development of new high technology companies in a limited number of overlapping technology growth areas including biotechnology, environmental technologies, electronics, information technologies and new materials technologies. LIHTI is dedicated to the creation of an environment where new and technologically innovative businesses can develop and grow through interaction with the Long Island research community, thereby fostering economic development and technology transfer as well as enhancing the educational mission of the University at Stony Brook and other institutions of higher education and research.

The second incubator, the Stony Brook Software Incubator is the result of collaboration between Computer Associates and the University. The University is a recognized leader in responding to the concerns of the region for assistance in manufacturing and software development. Among the resources available to the tenants of the incubators are the SPIR program, the Small Business Development Center, a comprehensive array of specialized resources, such as an extensive and robust network of industrial partners and strategic alliances, as well as numerous world class research centers and laboratories.

Additionally, Stony Brook University enables learning to a diversified community; the Marine Sciences Research Center provides a naturalist who provides interpretive descriptions of West Meadow Creek and Stony Brook Harbor in association with Ward Melville Heritage Organization. The Marine Sciences

research Center also provides an exhibit, educational materials and makes its research vessel, the Seawolf, available for many maritime festivals on the island

The MSRC has numerous times addressed local environmental problems by using them as class projects: e.g., a graduate course in "Oceanographic Problem Solving" has tackled such problems as: the causes of shoaling at the entrance to Stony Brook Harbor, the causes of and remedies for excess nutrient inputs to local ponds and waterways, effect of sewage effluents in Port Jefferson harbor, magnitude and causes of salt marsh loss, and others. These efforts provide a direct tangible benefit to the community that Stony Brook serves.

At Stony Brook University dance and music lessons and performance opportunities are offered on campus to pre-college students through special programs. These programs introduce students to Stony Brook University where later they may enroll. The Pre-College and Community Music programs also offers biannual adult chamber music workshops bringing together community members with faculty and graduate students from across the University.

The University also works with the Long Island Work coalition to enhance dialogue between the university and K-12 initiatives. SBU's Career Mapping award from the New York state Department of Labor which will involve 24 companies in the aerospace industry and many others in different industry sectors, includes monthly interaction with the economic development agencies, workplace literacy programs, workforce boards, BOCES, community colleges, business associations and labor department representatives to ensure that the industry specific workforce issues identified foster dialogue between all partners in the process (K-12 and upwards academically and outward to economic agencies) ensure that curriculum and services are appropriate.

The campus radio station broadcasts are an important community service. Advance Placement (AP) courses for high school students, craft courses for anyone, and the Round Table for older individuals also bring the University and the community opportunities to participate. During Women's History Month in March Stony Brook University annually provides an exhibit at the Smithtown Township Arts council at Mills Pond House, in St. James. The community has responded very positively to this exhibit.

To assure a strong positive relationship with the local community SBUH has developed a network of community based outpatient and primary care centers. The University is continually striving to develop programs in response to community needs and requests while sustaining a solid presence in the community. SBU is the forerunner in delivering care to all of Long Island. Furthermore, many faculty and staff serve on local, regional, state, and federal boards and committees, for example: The State Committee on Emergency Preparedness, the Suffolk County Hispanic Advisory Committee, the Nassau/Suffolk Coalition for the Homeless, the Regional Perinatal Coalition, the Three Village Chamber of Commerce, the Suffolk Community Council, and the Ward Melville Heritage Organization.

The Long Island community relies on Stony Brook University Hospital (SBUH) to provide services not found elsewhere in Suffolk County and sometimes not found anywhere else on Long Island. Guided by the vision of being the first choice of people who can select the healthcare provider they prefer, Stony Brook also is serious about providing both specialized and routine healthcare to those without the means to choose. Stony Brook plays a critical regional role in the community by providing many unique medical services, including: Comprehensive Heart Center; Cancer Center; Regional Perinatal Center; Level 1 Trauma Center; Kidney Transplant Program; AIDS Center; Emergency Psychiatric Unit; and Burn Unit.

The Health Initiative for Underserved Communities plays a key function in improving access to medical and dental care in localities that have been underserved by health professionals. As the healthcare market becomes increasingly competitive, it is expected that underserved populations will grow. The

medical center ensures that low-income populations will continue to receive the care they need, even when private providers deny them care.

As one of five New York State Resource Centers for Bioterrorism and Emergency Preparedness, SBUH is working to respond to biological, chemical, and nuclear events through specialized facilities, upgraded information systems, staff training, and work flow improvements. Dr. Mark Henry, Chair of the Department of Emergency Medicine, is a participant on regional and national committees related to the security and preparedness of Long Island.

In pursuing its education and research missions, SBUH is the primary training site for more than 522 residents and fellows. Along with the School of Medicine, it is the center for continuing medical education for the region, serving thousands of physicians and many hospitals in Suffolk and Nassau Counties. Research on a myriad of subjects is ongoing in the various divisions of the Schools of Medicine and Dental Medicine.

Some key examples of how SBUH provides services to K-12 children beyond the traditional student-teacher placements are the following:

Heart Links Project

Clinicians work with schools administrators and staff to develop and implement a comprehensive nutrition policy in the district. The scope of the program includes evaluation of the school lunch program and the inclusion of nutrition lessons in the physical education curriculum.

School Re-Entry Program for Children with Cancer

The School Re-entry program is comprised of physicians, nurses, child life specialists, and educational liaisons working with school personnel, teachers, school nurses, counselors, social workers, psychologists and other staff members in a collaborative effort to facilitate the child's return to the classroom. Returning to school offers the child/family a sense of normalcy "back to routine life", a sense of purpose/achievement, a time to transform fear to hope for the future, and allows time to socialize with peers. Often, school work can be a distraction from treatment or painful procedures.

Pediatric Healthy Heart Clinic

The division of Pediatric Cardiology offers a risk clinic for children 8-18 years of age with risk factors for heart disease such as high cholesterol, obesity and high blood pressure. This 12-week nutritional counseling and exercise program meets twice a week.

Stony Brook University Hospital and Health Sciences Effectiveness of efforts can be measured by:

- Level of community participation in hospital sponsored programs,
- Level of participation of faculty/staff in community programs and organizations,
- Patient satisfaction scores,
- Public opinion surveys,
- Community support for fundraising activities,
- Letters from the community,
- Patient Relations complaints, and
- Calls to Healthcare Teleservices.

The effectiveness of the Long Island high Technology Incubator can be seen not only from the many testimonials it has received from its graduates such as Renaissance Technologies, Viatronix, and Poly Therm Corp. but more importantly from some of its achievements: LIHTI was ranked a top-performing technology incubator in a 2002 report produced by the National Business Incubation Association (NBIA) following a 12-month analysis of U.S. technology business incubation programs; was ranked in the top ten programs in the study in terms of both average employment growth and average revenue growth achieved by client companies. As New York's most successful incubator, LIHTI reached full

occupancy within six months of opening in October 1992 and has hosted conferences on business plan development, high-tech marketing, financing the new venture, and employee compensation plans as well as served as home to 71 companies; 62 percent are still in business as of 2003, 44 companies have successfully graduated from the program and are generating over \$100-million for the local economy. LIHTI companies have created more than 1,000 high paying jobs. Five graduates are public corporations with total capitalization of over \$385 million. An original anchor tenant, Renaissance Technologies, Inc. is now a \$5 billion company generating \$2 billion each year in New York State.

The effectiveness of the SPIR program can be measured by its impact in generating Federal funds, the number of companies that it has assisted and the number of jobs created or retained. Since its inception ten years ago, SPIR has generated over \$70 million in Federal Funding, worked with in excess of 200 companies, and created or retained over 8,000 jobs.

The effectiveness of the three New York state centers can be measured in the amount of federal and other funding that they have been able to generate.

Overall Institutional Reputation

49. While SUNY does not endorse *U.S. News & World Report's* or any other specific higher education ranking format, prospective students and their parents increasingly turn to such rankings to guide their application decisions. Where appropriate (see Appendix C-17 for a summary of SUNY campus data used in the latest *U.S. News* ranking; and College Board Survey benchmarking data), comment upon the data for your campus and any plans to improve your campus' standing in the rankings. Please indicate any national recognition (for example, for community colleges, through the League for Innovation) your institution has achieved, and describe plans to enhance this profile and your campus' reputation.

Stony Brook ranked 117th in the US News & World Report list of best national universities in fall 2003, and expects the rank to improve in 2004 because of improvements in several ranking variables. The University's selectivity, SAT scores and freshman retention rate have increased, and actual increases and improved reporting have increased the six-year graduation rates used in the rankings. The most problematic ranking variable is its alumni giving percentage, which placed Stony Brook last among the top 126 doctoral universities. Current efforts to enhance alumni relations and fundraising will improve our standing.

In the most recent ranking of Universities world wide by the *Times Higher Education Supplement*, Stony Brook ranked in the top 50 North American Universities, and 136th in the world. This ranking was based on reputation and objective measures and accords well with other objective assessments in contrast to the rankings by US News.

Stony Brook's admission into AAU was its most important recent national recognition. Within AAU, the University is proud of the results of a recent analysis of faculty productivity using ISI Thomson Scientific citation data for 1998-2002. Stony Brook ranked 17th out of 62 AAU institutions on a measure of the impact of faculty scholarship—the number of citations per paper, 37th on the number of citations, and 47th on the number of papers

Outstanding faculty also give Stony Brook national and international recognition. For example, in 2003-04.

- James Glimm, a mathematician, was one of eight recipients of the 2002 National Medal of Science, the nation's highest honor for researchers in science and engineering.
- Richard Lin, a hematologist, won a Presidential Career Award—the highest honor the U.S. government can bestow on an outstanding scientist or engineer beginning a research career.

- John Milnor, a mathematician, was awarded the 2004 Leroy P. Steele Prize for Mathematical Exposition, one of the highest distinctions in mathematics.
- Patricia Wright, an anthropologist, received the Officier de l'Ordre National de Madagascar—the highest honor that can be bestowed on a civilian by the government of Madagascar
- Paul Lauterbur, whose research conducted at Stony Brook University led to the development of Magnetic Resonance Imaging (MRI) and revolutionized healthcare in the latter portion of the 20th century, was awarded the Nobel Prize in Medicine.

Stony Brook is also proud of recognition as a contributor to minority education. The *Princeton Review's The Best 351 Colleges*, 2004 Edition includes Stony Brook on its top-20 list for a diverse student body. *Black Issues in Higher Education* (21:8, June 3, 2004) listed Stony Brook 61st among the top 100 minority baccalaureate degree producers and in many of its discipline and ethnic-group specific tables.

SBU is widely recognized as the flagship campus of the SUNY system (e.g., Webster and Skinner, 1986) and rankings based on the 1995 National Research Council Assessment of Research Doctorate programs show it as the leading public university in the northeast (between 35 and 40 nationally) for doctoral education and research. Studies of faculty scholarly productivity using the NRC data and independent data (Graham and Diamond, 1997, Diamond and Graham, 2000) show that Stony Brook's faculty are even better than this, with rankings typically in the range of 25-30 nationally and in, or close to, the top ten public universities in the nation.

In conclusion, Stony Brook is well placed to achieve its aspiration to be recognized as one of the top ten public research universities in the nation, as one of the top 25 research universities in the United States and the best public research university in the eastern United States. We look forward to discussing with SUNY actions that System Administration can take to support this effort by investing in Stony Brook's excellence to ensure our ability to compete successfully on the national stage.