

State of the Campus Report

Rutgers, The State University of New Jersey

New Brunswick Campus

I. INTRODUCTION

Throughout the year 2001, Rutgers-New Brunswick has continued its steady decade-long march toward excellence, most significantly in the two areas that define our primary function: teaching and research. Increasingly, these fundamental activities have become more seamlessly integrated, as the New Brunswick campus works to transform itself into a more finely focused student-centered-research environment with wide participation in a great variety of scholarly endeavors by members of the community. These efforts will continue until all students are caught up in the intellectual life of this great University and all faculty members find ways to extend the classroom to introduce students, undergraduate as well as graduate, to the excitement of fundamental research in the labs, museums, libraries, and archives. Such cooperative teaching and learning opportunities have a powerful impact: in the classroom, as students involved in the creation of knowledge exhibit a heightened curiosity about foundational theories and historical systems of knowledge; in the labs, museums, libraries, and other primary research areas, as students gain a deeper understanding of the rewards of discovery and of directed scholarly research; and in the State, as more thoroughly engaged, broadly educated, and highly trained and capable students go on to assume their positions as citizens and workers after graduation.

Making the concept of a student-centered research university a reality has been a collective effort. Faculty, staff, and students on the New Brunswick Campus are working together in new ways to achieve excellence in all areas of University life—teaching and curriculum development, research opportunities, student life, facilities upgrades, etc. Physical improvements in classrooms and expanded support for the teaching that takes place in them have been priorities for a number of years. For example, a wide-ranging report on teaching assistants in New Brunswick that was issued this year offered a comprehensive list of constructive recommendations for helping TAs achieve a higher level of competency in the classroom. A number of these recommendations are now in the implementation phase. Classroom upgrades continue so that teachers may more easily take advantage of the new technologies. Programs designed to give students more opportunities to gain valuable research experience have been expanded. The fellowship support packages for graduate students are being re-examined and various efforts are underway to put into place discipline-specific packages that remain competitive with our peer institutions. Faculty hiring, at both junior and senior levels, remains at a high level, and the New Brunswick faculty continues to be distinguished by national and international awards and honors.

Rutgers is committed to fostering creativity, knowledge, and scholarship. This report documents many of the achievements of the New Brunswick Campus, its faculty members, and its students during the past year. Each of these honors, awards, grants, and patents enrich the University, its students and faculty, the State and its citizens, because as a State research university and a member of the American Association of Universities (AAU), the results of its research are shared with the community, for its progress and betterment. This report outlines some of the achievements in each of these areas to highlight the progress that we are making as we face the daily challenges engendered by our ambitions.

How do we measure success? In order for our claims of success to carry weight, it is essential that we define the measures that will tell us when we have achieved our goals. The University's Strategic Plan is the long term blueprint for our growth and aspirations. Clearly, by that measure, the New Brunswick campus has exceeded expectations in terms of progress. Other measures are less tangible but

certainly as essential: that our students leave the university as critical thinkers with an excitement about learning, an appreciation of diversity, and a desire to contribute to the world through service; and that our faculty members' fundamental research remains on the cutting edge and that beneficial applications for that research are developed and made available.

Over the past year we have had many opportunities to come together as a community, sometimes in great sorrow, sometimes in great joy. That we are an integrated community of learners, all teachers, all researchers, all seekers is the source of our strength. That we are a state university that benefits New Jersey not just by educating its citizens but by contributing in so many ways to its industry, its government, and its quality of life is a sign of our vitality. The tragic events of the year 2001 reminded us of the deep significance of the work we do, of the critical role education plays in shaping the world, and of the moral responsibility we have as individuals and as an institution to provide our students with an education that will prepare them to assume their roles in society, and, through their good work, make a difference in this troubled world.

II. REINVEST IN RUTGERS AND STRATEGIC PLANNING IMPLEMENTATION

A. Reinvest in Rutgers: Phases IV & V

This was the fourth successful year of the Reinvest in Rutgers Program, which has demonstrated its effectiveness in building programs and strengthening academic support through allocations of resources for activities that advance core priorities of a unit in the context of the University's Strategic Plan. In September of this year, President Lawrence announced that \$7.4 million would be allocated for the continuation of the Reinvest in Rutgers Program for a fifth year, bringing the total reinvestment to \$37.7 million.

Reinvest in Rutgers provides a comprehensive program of resources for building and strengthening academic programs. It offers an opportunity to respond to the strategic priorities of individual units, particularly emphasizing: the support of core programs by recruitment of high quality faculty with competitive start-up funding; the building of academic programs identified in the University's Strategic Plan that respond to emerging instructional and research needs; the strengthening of academic programs in the University's Strategic Plan with resources that respond to recommendations of external reviews and CSPAD; the enhancement of multi-disciplinary activities by supporting faculty collaboration within and across units on teaching and research projects that advance the goals of the University Strategic Plan; the promotion of innovative teaching and learning with the use of technologies that transform core curricula of a department or unit for large numbers of students; the addressing of state and national labor market needs in instruction by supporting the development of new curricula, certificate programs, and new options, minors and majors; the support of academic achievement in core programs by upgrading the infrastructure and renovating facilities that have high faculty and student use.

Reinvest funds are instrumental in our continuing successes in attracting outstanding faculty, especially junior faculty, to build interdisciplinary programs and to respond to emerging training and research opportunities in the targeted areas of engineering, information sciences, and life sciences. The high quality of the junior and senior faculty hires will ensure excellence in teaching at all levels of instruction and enhance the research capacity of the University. Support for new faculty positions from Reinvest funds was focused on these three areas, but the University Vice President for Academic Affairs has continued to work with the deans

of all the New Brunswick units in making critical faculty appointments in all the priority areas identified in the University Strategic Plan.

Graduate Student Support

A key element in attracting excellent faculty members to the University is the continued ability to attract excellent graduate students to work with them. Significant resources in the form of financial support and selective tuition remissions have been made available to recruit and retain the best graduate students, especially in the programs that are of the highest strategic priority. To compete with our peer institutions, deans must have the flexibility to tailor unit-specific strategies for increasing graduate student support with maximum effectiveness. The RIR funds and tuition remissions are designed to recognize and reward units that have successfully supported graduate and professional students on external grants and contracts, and to provide incentives for faculty to include graduate student support on future grant proposals.

Funds for the first part of this initiative were allocated to each graduate degree-granting college and school in New Brunswick, based on the unit's overall share of grant- and contract-supported graduate students in recent years and on the academic priorities specified in the University Strategic Plan. These graduate student support funds were used to recruit and retain excellent students, in many cases from under-represented groups in areas of greatest competition, by offering specially constructed grant packages, and to provide funds to support students in ways that allow them the advantage of opportunities such as presenting papers at conferences

Additional funds were provided to deans this year for increasing the regular base salaries of students appointed to state funded teaching assistant and graduate assistant positions. This salary supplement is derived from the Competitiveness Pool provision of the University contract with the AAUP. These funds have given deans a flexibility in funding that permits them to make more substantial offers to recruit and retain students, thus bringing their stipends closer to those offered by peer institutions in targeted fields.

Providing tuition remissions to be leveraged on a matching basis in new grant proposals submitted by the faculty for grant programs in areas that are the highest strategic priorities (engineering, computer science, life sciences) offers a strong incentive for faculty members to write students into their grants and are an effective method of supporting and retaining superior students. These tuition remissions helped to support students working on grants from such diverse sources as the National Science Foundation, the U.S. Department of Transportation, the U.S. Department of Agriculture, and St. Barnabas Healthcare, the Hudson River Foundation, and the American Association of Microbiology.

Reports from the deans on the priority and competitiveness funds and the tuition remissions describe the many ways that they have helped maintain and improve graduate student quality. Many reported that stipend enhancements have been instrumental in attracting top students to choose Rutgers over other excellent peer graduate programs, resulting in the recruitment of a highly select and diverse set of students. In some graduate programs, the funds are used to enhance multi-year packages for all students. It is clear that in some programs modest increases in stipend levels can make a significant improvement in the quality of students deciding to enroll at Rutgers. The University Vice President for Academic Affairs continues to consult with and work with the deans to provide the maximum flexibility in tailoring these resources to the needs of their graduate programs to insure that they are able to attract the best graduate students in the country to Rutgers-New Brunswick.

Computing

Initiatives to enhance computer use on campus continue, with RUCS, the New Brunswick Computing Advisory Committee, the Teaching Excellence Center, and the Office of the University Vice President for Academic Affairs coordinating efforts to insure that all members of the University community are equipped to meet the demands and take advantage of the opportunities afforded them by the University's investment in technology. Reinvest in Rutgers Funds have been used to help the campus community with the technical equipment and training that will allow all members to take full advantage of our state of the art computer network. One example of a RIR IV projects that provided funds to support specific academic objectives in this area was the **Graduate School of Education's** partnership with the New Jersey Department of Education's Virtual Academy through which a Distance Learning Classroom was upgraded with ATM connection and bandwidth consistent with RUNet 2000 standards.

RUNet 2000

Progress continues on developing an efficient Universitywide network infrastructure. More than 100 residence halls and nearly 60 academic buildings have been wired. This initiative has enabled faculty and students to take full advantage of the new technologies to enrich their teaching and learning experience at the University.

Libraries

Reinvest funds continue to support the University Libraries' Digital Library Initiative, which uses information technology to enhance collections, services and outreach. The Libraries now provide access to a large array of full-text electronic information and are using information technology to enhance all of their services. Reinvest funds permitted the Libraries to meet the price increases for current serials; purchase new electronic resources and convert current titles to electronic (*ScienceDirect* and others); increase the book approval plan and other book purchases to support targeted areas of excellence; and provide a user-driven document delivery system for article purchase. The Libraries added more than 45 networked electronic resources' scholarly indexes and abstracts, such as the *Web of Science*, *Biosis Previews*, *SciFinder*, and *EconLit* and full-text databases.

The Libraries also are involved in the support of digital video on the network through RU-TV and are supporting distance education activities at the University. A planning report on preservation of the library resources, both print and digital, has just been completed. Many collaborative activities have been established with faculty on the development of new digital collection and curricular materials. For example, through ELF, SROA, and the support of the University Vice President for Academic Affairs, *Luna* software, a powerful image database, and the necessary server have been purchased; the Libraries have established a Luna Working Group of librarians, teaching faculty, and staff to develop plans for implementing the Luna database across University departments. And, in collaboration with the faculty in Engineering, an electronic journal, *Boundary Engineering*, has been created and is mounted at the Scholarly Communication Center. A small library committee holds meetings with key faculty authors and editors to discuss issues related to scholarly communication. The continued close involvement of the Rutgers University Libraries in the Virtual Academic Library Environment in New Jersey (VALE), a statewide information infrastructure, helps provide scholarly information resources to the faculty and students of the entire State.

New Brunswick Multicultural Allocations

Reinvest resources to support the University's multicultural blueprint were renewed again in Phase V of the program. These funds are earmarked for the appointment of new minority faculty in under-represented disciplines, for supplementing unit resources for purposes that foster achievement of the University's diversity agenda, including recruitment and retention efforts in support of undergraduate and

graduate minority students. The wide range of programs and activities supported by these funds appear elsewhere in this report.

The Reinvest in Rutgers Program continues to have a powerful effect on programs, faculty, and students across all campuses. The funds enable the University to attract the best faculty and students and to create excellent educational and research programs, the quality of which continue to attract strong support, external awards and private gifts.

B. Strategic Resource and Opportunity Analysis (SROA) and Strategic Planning Implementation

The Strategic Resource and Opportunity Analysis (SROA) program continues to offer a strong pillar of support to the University's Strategic Plan by fostering innovative programs in targeted areas. This Program, now in its sixth year, has brought in more than \$275 million in external funds to date. The SROA funds are awarded through a peer-review process to support new academic initiatives across the University.

In 2001, fifty-one projects, including 22 new initiatives, were funded. A majority of these proposals requested funds for computer equipment, information technicians, or web enhancements. Many of these projects were cross-disciplinary or intercampus, such as the University Smart Growth Consortium, which involves faculty from Engineering, Cook, Bloustein, FAS-New Brunswick, and the Law Schools in Newark and Camden.

The Office of Institutional Research and Planning and the New Brunswick Office of University Publications continue work together to further the communication efforts associated with the Strategic Plan. Well designed and informative brochures, to be used in outreach efforts and in seeking external support, are being prepared to highlight exemplary efforts within each of the academic growth areas.

III. NEW INSTRUCTIONAL PROGRAMS

In response to the growing needs of Biomedical Engineering, the Department of Mechanical and Aerospace Engineering instituted a new biomechanics option for undergraduates. Students taking the new option are required to complete three senior-level departmental elective courses and a specialized laboratory in biomechanics. New undergraduate courses have been developed in addition to the biomechanics lab.

The School of Communication, Information and Library Studies launched its new undergraduate major in information technology and informatics in Fall 2001. Ninety students are enrolled in this program that explores the impact of technology on the individual, organizations, and society.

Livingston College has instituted a new minor in organizational leadership to help students prepare for leadership roles after they graduate. The minor will seek to enhance capabilities that are indispensable to good leadership in any organizational setting.

The School of Engineering has revamped its undergraduate concentration in packaging science and engineering. The program will teach students traditional packaging methods along with instruction in pharmaceutical, medical device, electronic and food packaging, fields crucial to the state's economy.

IV. SIGNIFICANT PROJECTS RELATED TO TEACHING AND LEARNING

A. Instructional Technology Initiatives, Teaching and Scholarship

Support of Instructional Technology Initiatives by the University Vice President for Academic Affairs is designed to foster excellence and innovation in instruction and enhance student learning by incorporating technologies into core curricula. The goal of the program is the improvement of teaching and learning for large numbers of students by creative use of technology in the entire curriculum of a school or in all sections of a core course. The Teaching Excellence Center works closely with the Instructional Technology Faculty Support Committee (ITFSC) and the faculty in the design and development phase of project proposals. Two new programs received support during this third year of the ITI Program.

The **School of Engineering** is introducing web-based teaching technologies through the **Mechanical and Aerospace Engineering** curriculum by developing web portals and online communities for all department courses. Web-based laboratories and experiments for four courses is being designed. This use of technologies will provide the opportunity for evaluating the impact of the learning process in the online communities and web-based laboratory instruction, assess the software, promote technological literacy, and enhance communication between instructors and students.

The **School of Education=s Educational Psychology Department** is receiving support to adapt sections of the introductory educational psychology course, *APrinciples of Classroom Learning,*@ with online technologies. The development of this software makes it possible to evaluate the impact of the learning process in online instruction in comparison with the standard instructional format, promoting technological literacy, examining costs associated with alternative forms of course delivery and identifying types of students who benefit from diverse teaching formats.

We now have a total of 12 ITI projects in operation, improving teaching and learning for over 8,000 students each year in a diverse array of courses from music theory to French to geography to calculus. The evaluation of learning outcomes remains a major feature of these projects. An award from the Mellon Foundation to evaluate the use of technologies will provide a benchmark of the relationship of web-based technologies on student learning as well as the cost effectiveness of new learning technologies that will benefit innovations in other disciplines.

One example of a highly success project is the development of Digiclass, a universally accessible, online learning environment, designed by undergraduates and funded by the **Teaching Excellence Center**, that offers students access to course outlines, notes, syllabi, study forums, and other classroom resources, including innovative exercises using graphics and Web links. Teachers can create their own course materials with little or no technical training: Word documents and PowerPoint slides are automatically converted to the Digiclass format.

The **Teaching Excellence Center**, under the leadership of Professor Gary Gigliotti, continues to play a leading role in expanding the opportunities of faculty using web-based technologies for teaching, offering services in faculty development, evaluation, assessment, and support for projects using instructional technologies. Workshops are offered on various topics, such as teaching strategies for a large lecture or the use of WebCt as a course development tool. The TEC consulting service offers assistance in areas such as improving basic teaching skills or improving use of resources available through computers, the internet, new media or courseware.

B. PROJECTS TO IMPROVE UNDERGRADUATE EDUCATION

Universitywide learning goals that were developed in response to a 1992 review of the undergraduate curriculum (the Qualls Report) continue to guide the campuses efforts to improve teaching and learning. Under the leadership of the Vice President for Undergraduate Education, Dr. Susan Forman, several innovative programs provide direct support to faculty, staff, and students actively engaged in improving undergraduate education.

Rutgers Dialogues Grants

In its eighth year, the Rutgers Dialogues Grants program, administered by the Office of the Vice President for Undergraduate Education, continues to support faculty and professional staff initiatives that focus on meeting the universitywide learning goals generated as a result of Rutgers Dialogues, the universitywide curriculum review. These goals define the skills and knowledge that all Rutgers University students will acquire to support their development as responsible citizens and productive contributors to society, in their workplaces and in their intellectual, cultural, and social endeavors.

Among the thirteen innovative projects that were supported on the New Brunswick campus this year were: *The Cultures of the Middle Ages* (**FAS-English and History**), which will focus on intercultural interaction in the Middle Ages; *Incorporating a Laboratory in Introduction to Pharmaceutics Course* (**College of Pharmacy-Pharmaceutics**), which will introduce a laboratory component into this required course and state of the art multimedia technology into both laboratory and lecture to enhance the learning experience of the students; and *A Hands-on Multi-Department Team Approach Incorporating Experiential Learning Strategies for the Solution of Complex >Real-world= Problems* (**School of Engineering-Mechanical Aerospace Engineering**), which will design new multidisciplinary course projects for a senior capstone course, Design of Mechanical Systems, that will encourage participation by students from several different disciplines, including physics, chemistry, environmental science, biology, and business.

Other Curricular Initiatives Related to Undergraduate Education

The Curriculum Seed Grant Program, administered by the University Vice President for Undergraduate Education, provides support to faculty members as they prepare major (over \$20,000) grant proposals to private foundations or public agencies. Priority is given to projects that have high potential for significantly improving the curriculum, for long-term institutional adoption, and for attracting external funding. Two grants were awarded in New Brunswick for the 2000-2001 academic year: *Adding Web-Labs to Wet Labs: Web-based Enhancement of Physical Science Labs* (**FAS-Chemistry**), a project that will develop simulations of physical chemistry laboratory experiments that students can run on the web, which will enhance more traditional Awet@ experiments that students carry out in the laboratory; and *Teaching How to Write about Numbers* (**Institute for Health, Health Care Policy and Aging Research**), which will create a series of workshops and course modules about writing about numbers, covering the use of quantitative material in scientific and scholarly manuscripts. Course modules will be developed for courses in **English** and **Sociology**, and in the **Edward J. Bloustein School of Planning and Public Policy**.

The Teaching and Curriculum Evaluation Grant program, another initiative of the Office of the University Vice President for Education, funded two projects on the New Brunswick campus this year. Teaching and Curriculum Evaluation Grants are intended to support initiatives focusing on development and implementation of teaching evaluation procedures that supplement the universitywide student ratings;

and/or development and implementation of curriculum evaluation plans. Priority is given to projects with multiple investigators and with high potential for impact in a department, school, or college. The two grants that received funding this year are: *Beyond the Limits of Tracking Statistics: Towards a Better Assessment of Instructional Technology in the Writing Program* (**FAS-English**), to evaluate the effectiveness of the Writing Program Website as an educational tool; and *Assessment of Student Self and Peer evaluations and Current Faculty Grading Practices of Individual Student Performance* (**College of Pharmacy**), to develop ways to improve the reliability and validity of grading required Doctor of Pharmacy experiential clerkship and seminar courses.

Undergraduate Research Programs

In working to make undergraduate research experience a central element in their education, students have the opportunity to apply the knowledge gained in the classroom to hands-on problem-solving situations. Undergraduates work closely with the researchers who are creating the knowledge that is shaping the world today and so become active participants in the act of discovery. In addition to gaining immediately practical skills in research, the students also enhance their critical thinking and communication skills, as well as their analytic abilities.

All of the upper-level undergraduate honors programs include research and fieldwork components. The number of students participating in upper level Independent Study, Scholars Projects, Research Projects, Thesis Projects, and honors projects continues to increase as more efforts are made to include students in actual research.

The Rutgers Undergraduate Research Fellows Program, administered by the Office of the Vice President for Undergraduate Education, supports research projects involving both faculty and undergraduate students. The goal of the program is to increase the number of undergraduates involved in research activities and to increase faculty/undergraduate student collaboration on research projects. Fifty students and their faculty mentors received funding from the 2001-2002 Undergraduate Research Fellows Program, 42 of them from the New Brunswick campuses: 20 in the **Faculty of Arts and Sciences**, 9 in the **School of Engineering**, 8 in **Cook College**, and 1 each in the **Edward J. Bloustein School of Planning and Public Policy**, the **Center for Alcohol Studies**, the **College of Pharmacy**, **Mason Gross School of the Arts**, and the **School of Social Work**. The range of areas in which undergraduates are directly involved in research demonstrates how widely the concept of a student-centered university has taken hold. The projects offer students a rigorous and sophisticated research experience, with the undergraduates exploring such topics as: A Do People Lie to Appear Unprejudiced?@ (Undergraduate Research Fellow Romain Walker and **FAS Psychology** Professor Lee Jussim); A Control, Design, and Testing of Shape Memory Alloy Actuators;@ (Professor Constantinos Mavroidis, Department of **Mechanical and Aerospace Engineering**, and Undergraduate Research Fellow Jason Nikitzuk); and A Developing Methods for Assessing Petroleum Biodegradation in Groundwater@ (Cook College=s Dr. Lily Young, **Environmental Sciences** and Undergraduate Research Fellow Joseph Battistelli).

The **Biotechnology Center for Agriculture and the Environment** hosted several undergraduate students this summer through the Biotechnology Summer Research Fellows program supported by a USDA Higher Education Challenge Grant to Dr. Barbara Zilinskas of the **Plant Science** Department.

DIMACS Research Experiences for Undergraduates Program brought in its largest class ever this year, with 20 undergraduates from all over the country and 3 undergraduates from **DIMACS** partner center DIMATIA, in Prague, for an eight-week summer session.

Fourteen undergraduates from under-represented minority groups began their summer research under the **Graduate School-New Brunswick=s** new Research in Science and Engineering (RISE) program. Almost all of the students come from historically Black- or Hispanic-serving institutions. The students work in laboratories on the Busch and Cook campuses in a broad range of science and engineering fields.

Rutgers Undergraduate Research Weeks celebrate the outstanding creative, scholarly, and scientific activities of Rutgers undergraduate students. Involvement in undergraduate research is a vital component of the undergraduate programs, and students and faculty across the curriculum work closely together on advanced research projects. These research experiences give students the opportunity to apply

the knowledge they have gained in courses to situations that require critical thinking, problem solving, communication skills, and advanced technical skills. Through this active learning experience, students understand how knowledge is created. The accomplishments of the hundreds of students who participate in this experience are highlighted during the month of April, where they have the opportunity to present poster sessions, research presentations, exhibits, symposia, and student conferences that are the products of their participation in the research experience.

V. MULTICULTURAL INITIATIVES

During the 2000-2001 academic year, the University completed its sixth year of its ongoing campaign to realize the goals proposed in the Multicultural Blueprint and to create among its students, faculty, and staff a vibrant culture that is knowledgeable about and tolerant of all of the ethnic and cultural traditions within its community. This program has gained momentum yearly, as projects evolve and are expanded, as new initiatives are pursued, and as the circle of those involved and affected grows ever wider. The University has made significant progress, not only in the scope of events and projects that have been mounted but, more importantly, in the way that multiple cultural perspectives and values have now become embedded in the fabric of the community. Many of the early initiatives designed to increase diversity and to foster an appreciation of the benefits produced by this increased diversity have been so strongly embraced by the community that they have become routine practices, not only in the unit that originated the practice but across the campus as others build upon these innovative programs.

University allocations were made to each New Brunswick unit and the Libraries to achieve these goals, with funds allocated from the Reinvest in Rutgers initiative and from resources of the University Vice President for Academic Affairs. Additional resources were provided from the SROA program in support of this initiative. Multicultural funds supported minority faculty development for individual faculty research, for conferences, and for computers and other office equipment. Start-up packages to help these scholars with their research needs were indispensable to the recruitment efforts. The following summaries represent a small sample of the rich and varied academic and co-curricular multicultural activities undertaken by the New Brunswick units and the Libraries that were funded in whole or part by these resources. A full report of these activities is prepared at the end of the Spring semester.

Among the many multicultural initiatives are the following:

The newly formed Asian Cultural Center is collaborating with the Center for Latino Arts and Culture and the Paul Robeson Center on the *Asian American Visual Artists Identification* project, to identify Asian American Visual Artists who have lived and worked in New Jersey, with the goal of establishing an artist registry. A major showcase statewide will be held in 2003-2004 to highlight the artistic talents of Asian American visual artists in the state and the ways they bring their heritage into transforming arts and culture. An expected outcome of this project will be student and faculty research on related subjects.

The *Committee to Advance Our Common Purposes* continues to play a vital leadership role in coordinating and promoting activities of cultural understanding and diversity. The *Seed Grant Program* continues to provide funding to faculty, staff, and students for building cross-cultural alliances with a minimum of two distinct cultures. These grants stimulate the development of innovative programs to improve multicultural understanding and foster a greater sense of community. After many years of excellent service, Dr. Sandra Harris (**GSAPP**) passed on the

leadership of this committee to Dr. Gustav Friedrich (**SCILS**) of Communication, Information and Library Studies beginning in Fall 2001.

The **Graduate School of Education's Multicultural Leadership Institute** teaches educators and administrators how to provide positive multicultural educational settings by introducing participants to activities that can be used in workshops and classrooms to address the process of multiculturalism from both a human relations and a change-agent perspective.

The **Graduate School of Applied and Professional Psychology's Committee on Diversity** meets monthly during the academic year to develop and implement initiatives that increase the awareness and competence of faculty and students concerning diversity or multicultural issues. The *Dean's Multicultural Advisory Council* is an alumni body with diverse alumni and several current students as participant observers who meet once each semester to offer suggestions to the Dean on increasing GSAPP's leadership in multicultural activities.

The **Edward J. Bloustein School of Planning and Public Policy's Race and Alienation Series** brought together students, faculty and staff members, and administrators to discuss issues of race, alienation, and color. The meetings helped the participants focus on themselves as part of a community and identify ways in which all could work together to build strong relationships among themselves and external communities of color.

The **Undergraduate Colleges** Douglass, Livingston, Rutgers, University College, CookCteach the importance of building on the strength of our diverse community both in student life programs and in academic programs. Among the programs that stress diversity are Douglass College's *Shaping a Life*, Livingston's *Global Futures Symposia*, and programs offered by Rutgers College's *Office of Emerging Populations and Special Efforts*.

The **School of Communication, Information, and Library Studies' Multi-Cultural Sensitivity in the Campus Newsroom** is a daylong media workshop that focuses on the discussion of issues related to the respectful treatment of colleagues in the campus media, with special attention given to gender, race, ethnicity, and sexual orientation.

The **Office of the University Vice President for Student Affairs** has sponsored a number of programs to promote diversity on campus, including the *Model UN Program*, the *Paul Robeson Scholarship Awards*, the *Liberated Gospel Choir*, and a *Dance Marathon*.

The **Paul Robeson Cultural Center** holds a *Multicultural Welcoming Ceremony* to introduce and welcome new students to the cultural community of Rutgers.

The **FAS Office of Minority Undergraduate Science Programs** provides academic support and enrichment programs, promoting persistence and high achievement of undergraduate students in science, math, computer science, and engineering concentrations, and enhancing entry into professional and graduate schools.

The **Graduate School-New Brunswick** supports FAS minority graduate students through the Diversity Advancement Program, providing fellowship support, loans, academic guidance, and networking opportunities. The Graduate School-New Brunswick is also part the GEM Consortium, providing fellowship support to graduate students in science and engineering.

VI. STUDENT AFFAIRS

Under the direction of Vice President for Student Affairs, Dr. Emmet Dennis, the Office of Student Affairs in New Brunswick continues to provide needed services for all students in New Brunswick. Among the initiatives of the past year were:

The Vice President for Student Affairs has launched a new program, The Board of Governors and Board of Trustees grants for innovations in student life. This initiative provides up to \$15,000 per project to fund projects designed to enhance student life and learning. The goals of the program are to integrate student life and learning, to promote and facilitate academic support for greater success, to foster community development, and to enhance the development of exceptional leaders and citizens.

The **Office of the Vice President for Student Affairs** has established a University/Fraternity-Sorority Relations Task Force.

The **Office of the Vice President for Student Affairs** hosted a meeting of registered Campus Ministries at which opportunities for partnership between Campus Ministries and Student Life staff were examined.

Career Services and the **Livingston Counseling Center** were awarded \$3,000 from the Innovations in Student Life Grants Program to support a career and psychological counseling program for first-year >at risk= students.

The **Rutgers University Health Services** now provides online self-assessment for students concerned with depression, alcohol, and eating issues. The website has also added new information about coping with and preventing bioterrorism and an electronic AAsk the Staff@ site.

The **Committee on Student Conduct** has completed a draft revision of the Student Code of Conduct.

VII. INTERNATIONAL PROGRAMS AND PROJECTS

To continue to be successful in the new global arena and to maintain our role as a leader in higher education, Rutgers must ensure that its students develop a broad understanding of the world, proficiency in other languages, and knowledge of other cultures; that its faculty are active in research projects which extend beyond the boundaries of New Jersey and that they are working with colleagues around the world; and that the university=s service programs touches (reaches) citizens of other countries. Success will depend upon our students, faculty, and staff building ties to societies and peoples beyond our borders. With these goals in mind, Rutgers Global Programs promotes development and cooperation not only with institutions abroad but also among the various departments and centers in New Brunswick, Newark, and Camden.

Effective, active international policies and programs are the best way to advance Rutgers= missionBresearch, teaching, and service--in the world arena. Global Programs is fully committed to enhancing Rutgers= initiatives and leadership in the international arena through sound, well-administered programs and policies that support the work of the Rutgers faculty.

The academic year 2000-2001 was the fourth year of a new model for the structure and function of Global Programs at Rutgers. During the year, a great many international activities took place across all the campuses, in the academic departments and in the colleges. This report highlights only a small number of the programs that Global Programs lent a hand in supporting.

Global Interactive Courses

Global Programs is pioneering a new way to internationalize the curriculum using high technology. The new E-learning communities are, for the most part, virtual and asynchronous, with little face-to-face contact between the course instructor and the students. Despite interactive discussions, on-line group meetings, and telephone counseling, in many cases, students neither meet nor interact with their professors or their fellow classmates. Such on-line courses merely try to compensate for the physical separation of the participants. In marked contrast, the Global Interactive Courses exploit in a positive way the geographical distance that exists between students. Adding cyber components to traditional brick-and-mortar classes, these courses use the varied milieus and backgrounds of the students to explore cultural differences, as well as national modes of perception and analysis.

In a Global Interactive Course, a member of the Rutgers faculty teams up with a member of the faculty in one of our partner institutions abroad to develop a joint undergraduate course. The course is offered at both locations simultaneously, each taught by the local faculty member. A syllabus, a reading list, and assignments are prepared which are exactly the same for the two classes. The two brick-and-mortar classes are linked by one common cyber-classroom which is set up by the two faculty. Through this cyber-classroom, the students and faculty are able to work together on projects and assignments. Each professor gives the lectures in the same sequence and at relatively the same time at their respective institutions. After each class, one of the students is assigned to summarize (in English) the lecture and discussion; this summary is placed on the web. At the beginning of the following class, the students and faculty analyze the discussion of their overseas partner to learn how the other culture approached the same material. The students= joint projects are the core of the course. Each Rutgers student is paired with an overseas student, and each pair is charged with a single project. Using the course website, each pair of students works together to formulate the questions related to their project, collect the data for their project, and work together to analyze the data and create a unified report and which will then be put on the website. Assessment of each student is done by the course instructor of the student=s home school. Assessment is based upon class participation, tests, and the quality of the project. The goals of these courses are to: challenge the ethno-centrism of both faculty and students to approaches to issues and conclusions reached; give the faculty members from Rutgers and from the overseas university the experience of working together to plan and teach joint courses; expand the of cultural awareness of the faculty and provide a more nuanced view of societal values, approaches to material, and the analysis of data; allow the students and the faculty to question the cultural influence on themselves as well as on their peers in another country; encourage active discussion rather than passive observation; use high technology to bridge geographical space to explore cultural patterns of thought and perceptions; give students and faculty members an unparalleled international learning experience without leaving their home universities.

At the heart of successful multicultural living is the ability to interact and work with people whose most basic cultural assumptions are strikingly different. While Rutgers students have the opportunity to read and hear about different cultures in an abstract way, they are rarely engaged in face-to-face interactions with people of different cultures. This project is designed to promote and enhance cultural understanding among undergraduates from Rutgers and their peers at institutions around the world. Global Interactive Courses are classroom-based courses which use high technology to not only bridge geographical space but to capitalize upon the diverse settings. Global Interactive Courses are applicable to all disciplines. Global Interactive Courses enable Rutgers to use its international partners in

a new, dynamic way. Global Programs are pioneering this new form of international educational initiative. A sampling of the interactive courses that are underway or in development demonstrates the ways that these courses seek to provide a unique interactive learning experience.

- < Douglass College and Global Programs along with Ewha Womans University in Seoul, Korea, have jointly created a Global Interactive Course on women and leadership. Founded in 1886, Ewha Womans University is the world's largest institution of its kind, with 14 colleges, 62 areas of study, and 9 graduate schools. The course, *Psychology of Women and Leadership in a Global Community*, will be a seminar with a strong discussion component. It is open to sophomore and junior students enrolled in the Douglass Scholars Program, and at Ewha the students will be selected by the president of the university. Classes will meet twice a week for 14 weeks during the spring 2002 term. The course will pair 12 students from Douglass with 12 students from Ewha. Each Rutgers/Ewha student pair will engage in regular e-mail dialogue and will work on a joint project.
- < During the 2001-2002 academic year, students at Ritsumeikan University and Rutgers University are exploring different aspects of the political and cultural history of Japan and the United States in the course, *The Japanese Discovery of America: A Program in Japanese and American Cultural Studies*. The class included two readings, six video lectures, and a discussion of the reading and lectures. The course explores the political and economic contexts for the cultural contacts between Japan and the US, and the role of Rutgers University in the history of those contacts. An unforeseen topic was assessing the impact of the tragedy on 11 September on the relations between Japan and the US, and the dangers of cultural imperialism in the post-cold war era. In addition, the students worked to choose the appropriate documents from the American political tradition to read together in the Spring term. In Spring 2002, the Ritsumeikan students will be at Rutgers for a five-week experience of study abroad and will be hosted by the Rutgers students. During this time, the Ritsumeikan students will attend at least two regularly scheduled lecture courses at Rutgers, participate in a Citizenship and Service Educational (CASE) experience in the local schools, take a field trip to visit the United Nations in New York, travel to Washington DC, and take a course titled *Democratic Theory and American Political Culture*. CASE will work closely with the Ritsumeikan/Rutgers program to design an appropriate service experience, most likely in the New Brunswick public school system, which will introduce the Ritsumeikan students to American public education and offer them the opportunity to participate in a cross-cultural learning experience with American school children.
- < In development now is a course between St. Petersburg State University and Rutgers on *Global Media and Society*, which will examine world events in print and broadcast media from American, European, and Russian perspectives. Throughout the term, the class will examine ongoing or developing events. The themes explored during the course will be political, religious, health, economic, military, and domestic issues as well as regional crises and sports; the choices will depend on the latest world developments. The course will ask how global events are shaped by the media: Is there a national or global agenda? Does the media break or reinforce cultural stereotypes? Can technology be used more effectively to bring students and working journalists together to overcome these stereotypes? Does each country have its own propagandistic goal? What are the linguistic barriers in journalism? How are the stories put into cultural and national contexts? What are the professional differences from country to country? Does the reporting differ between the printed and broadcast media? Is there a different reality from one country to another, and from story to story? The Rutgers students will be undergraduates in New Brunswick and Rutgers Study Abroad students studying at one of our European locations. The students at the

School of Journalism at St. Petersburg State University will be undergraduate students studying international journalism.

- < The course, *US and Europe as Seen from Abroad*, will be a collaboration between the Rutgers and the University of Leiden, Netherlands, American Studies Programs. Lectures will discuss historical essays such as Mark Twain's writings while he was in Europe and De Tocqueville's work while he was in the US. Contemporary works will include Jean-Jacques Servan-Schreiber's, *The American Challenge*, from the 1960s, and other, more recent works. Student projects will consist of paired Rutgers and Leiden students interviewing selected groups about their impressions of the US and Europe. For example, one pair might interview a 75 year-old person about his/her impression, another pair would study people 30 to 40 years old, other groups would interview police officers, local politicians, etc.

Coordination of International Activities on Campus

Rutgers' talented faculty members are successfully working abroad or with international partners, and on international topics. As was highlighted in the strategic planning process in 1996, the faculty wants administrative help in coordinating its projects and is looking for ways to bring all of the Rutgers community together. Global Programs reached out to large numbers of the Rutgers community during 2000-2001. Some of the highlights of Global Programs this past year include:

- < Global Programs helped faculty members who wanted to develop and host scholarly conferences on campus, including the *Dialogue of the Americas II*, which brought together four mothers who, through their hardship and loss, influenced their countries with the editors of major newspapers of the Americas to discuss: Prospects for Democracy in the 21st Century; Economic Integration; Security and Urban Violence; and Education and Culture in the Technological age.
- < During the strategic planning process in 1996, there was discussion about how faculty never had a chance to meet with colleagues across disciplines. Several events were held to bring together groups from different parts of the Rutgers academic community.

Development and Support of Area Studies Programs

In an effort to support area studies at Rutgers, Global Programs got involved in several new projects and continues some successful ones:

Latin America:

Global Programs, Cook, and Engineering are continuing its partnership with the University of São Paulo in Brazil in advancing undergraduate research projects in a wide variety of fields including Engineering, Agricultural Economics, Economics, and Food Science. Students from the University of São Paulo have been on campus at both Cook and Engineering, and Rutgers undergraduates went to São Paulo to present papers. This project has been expanded to involve FAS and other faculties.

The Rutgers University Global Programs office, in conjunction with the Latin America Studies program (RULAS), is continuing to establish, in Guadalajara, Mexico, an interdisciplinary academic center engaged in the study of hemispherical affairs. The Center will be devoted to supporting innovative work in areas of culture, politics, history and language that further understanding of the hemisphere's increasing interconnectedness. Of particular interest to the Center's activities will be topics concerning Latin America's political, cultural and economic

relationship to the United States and Canada.

Europe:

Global Programs and the Center for Russian Central and East European Studies (CRCEES) are working together to transform it into the Center for Comparative European Studies. This new center will develop a new, innovative, multi- and inter-disciplinary undergraduate curriculum that will reflect the dramatically changed realities of today=s Europe.

Global Programs and the government of Hungary have renewed their longstanding relationship this past February. Founded in 1991, Rutgers= Institute for Hungarian Studies has continued to focus on Hungarian Studies. Over the past ten years, through the support of the Fulbright Commission and the Ministry of Culture and Education, Rutgers has hosted visiting scholars.

Africa:

Global Programs has been assisting the Department of Anthropology at Rutgers in advancing the cooperation with the Koobi Fora Field School in Kenya and the National Museums of Kenya. The project combines large-scale inter-disciplinary research and teaching on an international scale in East Africa. Koobi Fora is a renowned locality in human origins field research. The National Museums of Kenya is one of the finest educational and research institution on the African continent. Rutgers= Anthropology Department has built one of the three or four best teaching and research programs in human origins and human evolutionary studies over the last decade. Most recently this includes, a B.Sc. undergraduate tract in Evolutionary Anthropology.

Coordination of Special Projects

Emergency Medical Assistance:

For the fourth year, Global Programs was able to offer special emergency medical assistance to all Rutgers faculty and staff who travel overseas through ACE Insurance. The ACE Medical Assistance plan includes hospital admission deposit, medical monitoring, dispatch of a doctor or specialist, emergency medical evacuation, and medically supervised repatriation. In addition, there is pre-trip medical referral information, emergency medication, embassy and consular information, lost document assistance, emergency message transmission, medical emergency cash advance, legal assistance, translator/interpreter access, medical benefits verification, and medical claims assistance. There is also assistance in terms of emergency travel arrangements, transportation to join disabled member, return of minor children, return of traveling companion, and return of vehicle. Over 500 faculty and staff enrolled in this program in 1998-2001.

Overseas Alumni Development:

In an effort to reach out to alumni abroad, Global Programs has been trying to assist the Alumni Office with organizing events overseas, in particular, a special meeting of the Rutgers Club in Japan and India.

Study of the Impact on Foreign Students at Rutgers

Rutgers-New Brunswick continues to have the largest population of foreign students of any school in the state of New Jersey. Since the students and their families contribute to the New Jersey economy, Global Programs thought it would be useful to determine exactly how much our visiting students add to the state=s economy. Preliminary findings from the Office of Institutional Research show the total

estimated economic impact of foreign students at Rutgers is \$51,581,353, creating approximately 3000 jobs each year in the state.

Global Program as the Office of International Protocol

Official Visitors:

During the past year many visitors came to Rutgers from abroad. Global Programs was pleased to be able to arrange and host our many visitors. Among our many official visitors were: the Senior Vice-President, Jilin University, China; Vice-President, University of Limerick, Ireland; Delegation of social studies high school teachers from Nagoya Prefecture, Japan; Journalist, Poland; Director-General of the National Museums of Kenya; Vice-President, Ritsumeikan University; His Excellency, Ambassador of Mozambique; His Excellency, Ambassador of Japan; Senior Officials from Ewha Womans University, Seoul, Korea; Senior Vice-President, University of Sao Paulo; and President, University of Riga. Special Visiting Faculty were also supported by Global Programs through university agreements with Jagiellonian University.

Coordinate University Agreements:

As a major research university, Rutgers is continually interacting with universities abroad, and Global Programs creates and coordinates these agreements. This past year four new agreements were put into place: Beijing Normal University; University of Leiden; P. N. Lebedev, Russian Academy of Sciences, Moscow ; and the University of Sao Paulo, Brazil. Several additional agreements are underway with European and Asian institutions and it is hoped that they will be successfully completed next year.

Expansion of Study Abroad Opportunities for RU Students

Because of a larger number of options and because of increased recruitment, Study Abroad has become an increasingly popular undergraduate option for Rutgers students. A new summer program was launched with the Jewish Federation of New Jersey. Plans are underway to expand programs to East Asia and South America in 2002.

Study Abroad in America at Rutgers

Study Abroad in America at Rutgers, a program where overseas students have the opportunity to enroll in regular university classes on a short-term basis along side of American students, is in its fourth year. In the spirit of Rutgers Study Abroad, Global Programs has established a program, with no known parallel in other American universities, whereby students from abroad will be able to enroll as non-matriculating students at either Douglass, Rutgers, or Livingston College for either one term or a full academic year.

VIII. SPECIAL STATE TECHNOLOGY RESEARCH AND WORKFORCE PROGRAMS

The New Jersey Commission on Higher Education (CHE) offered a number of opportunities for Rutgers-New Brunswick to compete for special funding. The funds awarded will offer substantial support in areas that directly affect teaching and research at the University and in the State.

The CHE's High-Tech Workforce Excellence Grants, designed to enhance successful technology-related programs to help satisfy demand for qualified workers in the state's high tech economy awarded \$1.6 million to Rutgers for its project *New Directions for the High-Tech Computer Science Workforce*. Through e-learning and traditional classroom teaching, this project will expand instruction in key

computer science areas, including computer vision, animation, and graphics (such as modeling techniques for medical imaging). In addition, Rutgers-New Brunswick's nationally-ranked **Computer Science Department** will use grant funds to develop scalable asynchronous e-learning tools to increase student capacity, develop a new undergraduate computer science course to emphasize teamwork in software development, and expand the pool of qualified instructors and mentors through faculty hires and additional student teaching assistants. A second Rutgers project, *Nanomaterials Science and Engineering (NMSE): An Enabling Paradigm Shift for Photonics, Energy, Electronics, and Biology*, was awarded \$2.5 million. This project, which will develop a dynamic, state-of-the-art interdisciplinary undergraduate curriculum in nanomaterials science, will have a significant impact on the future growth of a broad array of high-technology industries.

The New Jersey Commission on Higher Education Teacher's Effectiveness Grants were awarded to programs that enhance the quality of teacher preparation programs, improve teacher effectiveness, and increase capacity to prepare effective new teachers. The **Graduate School of Education** received \$499K to implement a model science classroom at the Lincoln Professional Development School in New Brunswick and model preservice and inservice science professional development programs for teachers throughout the State. Rutgers also received \$496K from the CHE's Teacher Quality and Capacity Grant program. These funds are provided to address four goals: making teacher preparation a top institutional priority, increasing capacity to prepare effective teachers to fulfill growing demands and shortages, linking teacher preparation to the content standards for P-12 students, and expanding collaborative efforts with P-12 schools.

The Commission on Higher Education also provided more than \$2 million to Rutgers through its High-Tech Research Capacity Grants. Rutgers funds will be used for seven multidisciplinary projects in: food sciences; biotechnology; large-scale, wireless sensor networks; biological, mathematical, and physical sciences; molecular and cellular pharmaceutical sciences; and information processing in complex biological systems. The various projects entail acquiring and building advanced instrumentation, upgrading laboratory facilities, and recruiting outstanding new faculty with complementary research expertise and proven ability to secure external funding.

IX. STUDENTS

A. New Brunswick Student Body

The New Brunswick student body accounted for 71% of the 50,350 University students in Fall 2001. The total New Brunswick Fall 2001 enrollment was 35,651 (see Table 1), 414 more students than the New Brunswick enrollment in Fall 2000. In New Brunswick, 55% of the students are women, consistent with the nationwide trend that has emerged in the last decade of women comprising the majority of college students. The number of New Brunswick undergraduates who are members of a minority group (African-American, Native American, Asian/Pacific Islander, Latino, or Puerto Rican) rose in Fall 2001 to 35%.

Students registered for full-time study (28,445) constituted 80% of New Brunswick enrollments in Fall 2001. Approximately 38% (2793) of all graduate enrollments (7299) in New Brunswick are full-time students. In 2001, 16.3% of the entire New Brunswick student body entered Rutgers as a resident of a state other than New Jersey; this represents a slight decrease from the past two years (17.25% in 2000; 16.5% in 1999; 15% in 1998).

In Fall 2001, New Brunswick undergraduate enrollment rose to 28,352, an increase of 413 students over the Fall 2000 total and the highest campus total on record. Livingston College=s enrollment continues to rise: a 7.2% increase (+279) in students in 2001 (7.4%) following a 7.2% increase in Fall 2000 and a 6% increase in Fall 1999. Douglass College also continues its steady increase in enrollment, 3.9% in 2001, following 2000's 4% increase. Cook College=s enrollment, which had declined in 2000 by 3.5% (-112) increased 4.2% (+134) in 2001. Mason Gross School of the Arts increased enrollment by 4% (+26) and the School of Engineering by 3.2% (+72).

The academic quality of our students continues to rise. In Fall 2001, the combined average SAT scores of regularly admitted first-year students across all the New Brunswick undergraduate day colleges was 1234, continuing the trend of rising scores: 1204 in AY 2000, and 1197 in Fall 1999 and Fall 1998. The FAS and the College undergraduate honors programs continue to contribute to our success in enrolling high-achieving students. The Outstanding Scholars Recruitment Program (ORSP) has been another factor in our ability to attract very strong students to Rutgers-New Brunswick.

In Fall 2001, the New Brunswick Graduate Schools enrolled 7,299 students. In Fall 2000, the enrollment was 7,298, which was a 2.8% decline from the number registered in Fall 1999. The College of Pharmacy=s 19.5% (+40) increase in graduate enrollment follows its 7% increase in 2000; this is the fourth year of increased enrollment and is a result of the School=s successful six-year doctoral program. The School of Management and Labor Relations enrollment rose by 17% (+41) and Graduate School of Applied and Professional Psychology by 10.8% (+20). Declines in enrollment were experienced by the Graduate School of Education, with a 4.5% (-63) drop, the School of Social Work, with a 4.3% (-38) drop, and the School of Communication, Information and Library Studies, with a 2.4% (-10) drop.

TABLE 1
NEW BRUNSWICK ENROLLMENT (HEADCOUNT) BY UNIT
FALL 1997 THROUGH FALL 2001

	Fall 1997	Fall 1998	Fall 1999	Fall 2000	Fall 2001
<i>Undergraduate</i>					
Douglass	3,014	3,064	3,099	3,226	3,354
Livingston	3,160	3,336	3,536	3,791	4,070
Rutgers	10,680	10,737	10,993	10,875	10,740
UC-NB	2,846	3,018	3,308	3,256	3,165
Cook	3,284	3,309	3,231	3,119	3,253
Engineering	2,206	2,192	2,190	2,265	2,337
MGSA	546	570	617		625
Pharmacy	879	860	825	782	782
Total Undergraduate	26,615	27,086	27,799	27,939	28,352
<i>Graduate</i>					
Pharmacy	112	173	191	205	245
EJB	91	77	97	146	147
GS-NB	4,018	3,830	3,697	3,589	3,596

GSAPP	178	171	177	185	205
SCILS	441	426	431	403	393
SMLR	202	288	284	239	280
GSE	1,525	1,461	1,461	1,403	1,340
MGSA	224	225	234	247	250
SSW	1,014	1,024	937	881	843
Total Graduate		7,693	7,675	7,509	7,299
Total All	34,420	34,761	35,308	35,237	35,651

Source: Registrar's Annual Fall Enrollment Reports

B. Financial Aid Summary for AY 2000-2001

Approximately 68.4% of New Brunswick students 18,362 undergraduate students and 5,756 graduate students received \$180,558,291 in financial aid through the University Office of Financial Aid during AY 2000-2001. Financial aid dollars were fairly evenly divided between grants and loans.

Overall, approximately \$91.6 million, or 50.8% of all aid awarded to New Brunswick students, was in the form of grants. State grants totaled \$29.3 million and accounted for 32.0% of grant funds to New Brunswick students. Federal grants equaled \$16.7 million, or 18.3% of all grants. University grants equaled approximately \$41.0 million and or 44.8% of the grant funds awarded. Private grants accounted for the remainder of the grants awarded, at \$4.5 million, or approximately 4.9% of the total.

Approximately \$82.3 million, or 45.6% of all aid awarded in New Brunswick was in the form of loans. In the seventh year of our participation in the Direct Lending Program, total loans equaled almost \$76 million, and accounted for 42% of all student aid received in New Brunswick. Of the total loan amount, nearly all (92.4%) was awarded through the federal loan programs, with state, university and private loans together constituting the remaining 7.6% of the total loans funds awarded.

Federal Work-Study award totaled \$6.5 million, or 3.6% of all financial aid dollars supporting students on the New Brunswick campus.

C. Academic Degrees Conferred (see Tables 2 and 3)

The total number of degrees conferred in New Brunswick in AY 2000-2001 was 7344, 54 fewer degrees than in AY 1999-2000, when 7,398 degrees were awarded. At the undergraduate level, 5,497 degrees were awarded, 113 fewer than in AY 1999-2000. Bachelor of Arts degrees accounted for 69% (3,779) of the undergraduate degrees awarded in 2000-2001, 29% were Bachelor of Science degrees, and the remainder were Bachelor of Fine Arts and Bachelor of Music degrees granted by the Mason Gross School of the Arts. Rutgers College granted 45% of the New Brunswick bachelor degrees. Of the 1607 Bachelor of Science degrees awarded last year, 328, or 21%, were jointly granted by the New Brunswick School of Business and one of the undergraduate colleges.

The campus conferred 1847 advanced degrees last year. 59 more than in 1999-2000. Doctorates accounted for 26% (481) of these degrees and Masters degrees and 74% (1362), similar to the proportions reported in the last three years. The number of doctorates awarded increased in every unit. At the Masters level, the Graduate School-New Brunswick saw an increase in most of its degrees awarded (MS +109, MA +17). In the professional schools, increases were recorded in the Mason Gross School of the Arts (MFA +4, MM +2) and the School of Social Work (MSW +11). At the School of Management and Labor Relations, the number of MLER degrees increased (+15) while the MHRM and the MLIR decreased (-58 and -6). At the Edward J. Bloustein School of Planning and Public Policy, the number of MPP degrees increased (+7) while the MCRP and MCRS decreased (-7 and -2). Both the Bloustein School and SMLR instituted new Master degrees in 1999-2000, and the declines may indicate a redistribution of students into these new programs. The School of Communication, Information and Library Studies showed decreases in both the MCIS (-18) and the MLS (-3). Declines were also recorded at the Graduate School of Applied (-1) and Professional Psychology and at the Graduate School of Education (-14).

Table 2
New Brunswick Undergraduate Degrees (2000-2001)

	BA	BS*	Total
Cook College	33	508	541
Douglass College	587	64	651
College of Engineering	406	0	406
Livingston College	545	172	717
College of Pharmacy	0	162	162
Rutgers College	1856	598	2454
University College	352	103	455
Total	3779	1607	5386
	BFA	BM	Total
Mason Gross School of the Arts	75	36	111
Total NB Undergraduate Degrees	3854	1643	5497

**Joint BS degrees awarded with the New Brunswick School of Business are as follows:
Douglass College, 17; Livingston College, 39; Rutgers College, 246; University College 26; Total: 328.*

TABLE 3
NEW BRUNSWICK ADVANCED DEGREES 2000-2001

DOCTORATE DEGREES	UNIT	NUMBER
Doctor of Pharmacy	COP	88
Doctor of Psychology	GSAPP	22
Doctor of Education	GSE	32
Doctor of Philosophy	GS-NB	334
Doctor of Musical Arts	MGSA	5
TOTAL NB Doctorate Degrees		481
MASTERS DEGREES	UNIT	NUMBER
Master of City and Regional Planning	EJB	21
Master of City and Regional Studies	EJB	1
Master of Public Affairs and Politics	EJB	11
Master of Public Policy	EJB	10
Master of Psychology	GSAPP	25
Master of Education	GSE	280
Master of Arts	GS-NB	87
Master of Arts-Teaching	GS-NB	1
Master of Philosophy	GS-NB	3
Master of Public Health	GS-NB	50
Master of Science	GS-NB	416
Master of Science-Teaching	GS-NB	0
Master of Fine Arts	MGSA	48
Master of Music		MGSA 14
Master of Communication and Information Studies	SCILS	19
Master of Library Service	SCILS	111
Master of Human Resource Management	SMLR	49
Master of Labor and Industrial Relations	SMLR	8
Master of Labor and Employee Relations	SMLR	18
Master of Social Work	SSW	190
TOTAL NB Masters Degrees		1362
OTHER DEGREES	UNIT	NUMBER
Specialist in Education	GSE	4
Artist=s Diploma in Music	MGSA	0
TOTAL NEW BRUNSWICK OTHER		4
TOTAL NEW BRUNSWICK ADVANCED DEGREES		1847

D. Student Awards and Honors

Sunit Jariwala (**Rutgers College**) and Grishma Satish Shah (Douglass) were named to the 2001 All-USA College Academic Second and Third teams, respectively, in the 12th annual competition sponsored by *USA Today*.

Avram S. Fechter (**Rutgers College**) was selected as a 2001 Truman Scholar. The prestigious award recognizes top college juniors with exceptional leadership potential who are committed to careers in government or public service.

Joseph Califf (**Evolutionary Anthropology-GSNB**) has been chosen as a member of the inaugural class of Gates Cambridge Scholars, a select group of graduate students from around the world who will study at the University of Cambridge, England. The competitive scholarships are awarded based on the candidates' intellectual abilities, leadership capacity, and commitment to use their knowledge to contribute to their discipline and ultimately to the benefit of society throughout the world.

School of Engineering Seniors Jeong Bae Kim and Brenton Nickles have been selected as the first UNISYS Senior Scholars. They will work on several projects in mechanical and aerospace engineering, including visualization of compressible turbulent flows and modeling of biomaterials. The Scholarship provides each student full tuition for one year and access to the School's UNISYS research cluster.

Nicole Nolan (**Literatures in English-GSNB**) won a Woodrow Wilson Dissertation Grant in Women's Studies.

Aparna Joshi (**SMLR**) received the Academy of Management's award for Best Dissertation in the Gender and Diversity in Organizations division.

Marla Nelson (**Urban Planning, GSNB**) won a National Science foundation dissertation fellowship.

Mason Gross School of the Arts DMA candidates Greg Giannascoli, marimba, and Mark Snyder, oboe, were named winners in the Artist International New York Recital Debut Competition.

Seth Cable (**Rutgers College**) won a 2001 Andrew W. Mellon Fellowship in Humanistic Studies.

Ingrid Dahl, **Douglass College**, was the recipient of one of three awards announced at the Governor's Conference Series on Women's Issues.

Jeannette Pevez and Taliah Roach (**Livingston College**) were among the fifteen students from New Jersey to receive citations from the New Jersey General Assembly in recognition of their outstanding scholarship.

Brian Clancy (**Art History-GSNB**) was awarded a Henry Luce/ACLS Dissertation Fellowship in American Art.

Kate Goldman (**Spanish-GSNB**) received a Fulbright Dissertation Fellowship to study in Chile.

Eric Kaldor (**Sociology-GSNB**) received a Fulbright-Hays Fellowship from the Department of Education which will enable him to do extensive fieldwork in Hungary for his dissertation.

Sarah Young (**Rutgers College**) was awarded a three-year National Science Foundation Graduate Research Fellowship. Ms. Young, a Rutgers Undergraduate Research Fellow, conducted research on the development of novel lightweight electro-rheological fluid-based actuators at the MAE Robotics and Mechatronics Laboratory.

X. ADMINISTRATION

A. New Administrative Appointments

Stanley B. Messer was named Dean of the Graduate School of Applied and Professional Psychology (**GSAPP**) in July. Dr. Messer is a faculty member in the department of clinical psychology. He replaces Dr. Sandra Harris, who has returned to the faculty to pursue teaching and research.

In August, Holly M. Smith was appointed Executive Dean of the Faculty of Arts and Sciences-New Brunswick and Dean of the Graduate School-New Brunswick. Dean Smith comes to Rutgers from the University of Arizona, where she was the Dean of the College of Social and Behavioral Sciences and a member of the Department of Philosophy.

Linda Stamato, deputy director of Rutgers= Center for Negotiation and Conflict Resolution (CNR) at the Edward J. Bloustein School of Planning and Public Policy, was named acting Dean of Douglass College, effective August 1, 2001. Dean Stamato previously chaired Rutgers= Board of Governors.

XI. FACULTY

A. The New Brunswick Faculty Body

Full-time Teaching Staff

In Fall 2001, there were 1901 full-time faculty members on the New Brunswick campus, an increase of 49 faculty over the previous year.

Table 4

Full-time Faculty, New Brunswick Only 2000-2001, 2001-2002		
	2000-2001	2001-2002
Professor (I & II)	738 (40%)	751 (40%)
Associate Professor	480 (26%)	487 (26%)
Assistant Professor	377 (20%)	407 (21%)
Instructors/Assistant Instructors	210 (11%)	220 (11%)
Other	47 (3%)	36 (2%)
Total	1852 (100%)	1901 (100%)

Source: Office of Institutional Research

The overall distribution of the New Brunswick faculty at these ranks has varied very little over the past several years. Approximately 65% of the full-time New Brunswick faculty in the year 2001 were tenured.

Part-time Teaching Staff

The size of the University's teaching staff fluctuates by semester, based on course demand, faculty leaves, and student population. By maintaining such a flexible teaching staff, the University is able to respond to specific situations and provide the staff needed for the courses required by students. The part-time teaching staff are valuable members of the community. Courses taught by skilled and experienced professionals actively involved in the field on a day to day practice level offer students an important window into and preparation for the workforce. A detailed report on part-time teachers will be submitted to the Senate Executive Committee later in the semester.

B. New Faculty Appointments

The continuing strong faculty recruitment effort in New Brunswick has resulted in the addition of 85 new clinical track, tenure track, and tenured faculty members to the academic units and libraries of this campus. Of these appointments, 16 were tenured appointments, with 5 at the rank of Associate Professor, 7 at the rank of Professor I, and 4 at the rank of Professor II. Of the 69 clinical- and tenure-track appointments, 65 were at the rank of Assistant Professor and 4 at the rank of Associate Professor.

Thirty-eight of the new faculty members, or 44% of the 85 new tenure-track and tenured appointments were in the Faculty of Arts and Sciences, while 12 were at Cook (14%), 9 in the School of Engineering (11%), 8 in the Graduate School of Education (9%), 6 in the School of Communication, Information and Library Studies (7%), 4 each in Mason Gross School of the Arts (5%) and in the School of Social Work (5%), 3 in the College of Pharmacy (4%), and 1 in the School of Management and Labor Relations (1%). Among the sixteen tenured appointments, 12 were in FAS: History (3), Mathematics (2) and Philosophy (2), English (1), Statistics (1), Sociology (1), Geological Sciences (1), Classics (1); one

appointment was split between FAS and the School of Engineering; and one appointment each was made in The College of Pharmacy, Mason Gross School of the Arts, and the School of Engineering.

Of the sixty-nine new full-time faculty hired in tenure-track positions in New Brunswick, 33 (48%) were women, continuing the steady movement upward of recent years (43% in 2000; 40% in 1999). Nineteen of the 69 new tenure-track appointments (27.5%) are members of minority groups.

C. Faculty Awards and Honors

The Rutgers-New Brunswick faculty continues to achieve broad recognition for their research and other scholarly activities in the form of external grants, and in awards and honors from their peers, professional associations, and other foundations and agencies. Although space permits a listing of only a few of these honors, even a small sampling such as is given below makes apparent the range and the excellence of our faculty.

Many of our faculty members have received the highest recognition by their peers in being named fellows of prestigious scholarly organizations. Among the many honored are:

American Academy of Arts and Sciences

Charles R. Gallistel (**FAS-Psychology/Center for Cognitive Science**)

American Association for the Advancement of Science

Edward Arnold (**Chemistry and Chemical Biology/CABM**)

Jolie A. Cizewski (**FAS-Physics and Astronomy**)

Joan G. Ehrenfeld (**Ecology, Evolution, and Natural Resources-Cook**)

Paul B. Kantor (**Information Science, SCILS**)

Thomas K. Rudel (**Human Ecology-Cook**)

American Geophysical Union

Paul Falkowski (**Institute of Marine and Coastal Sciences**)

American Institute of Certified Planners

Donald A. Krueckeberg (**Urban Planning and Policy Development-Bloustein**)

American Psychological Association

Angela O'Donnell (**Educational Psychology-GSE**)

Ecological Society of America, Aldo Leopold Leadership Program Fellow

Steven N. Handel (**Ecology, Evolution and Natural Resources-Cook**)

Gerontological Society of America

Ellen Idler

Institute of Food Technologists Fellow

Thomas Montville (**Food Science-Cook**)

Soil Science Society of America Fellow

Robert Tate (**Environmental Science-Cook**)

Below are a few of other awards and honors received by faculty this year.

Fred Roberts (**DIMACS**) received the National Science Foundation Science and Technology Centers Pioneer Award.

Mario Szegedy (**FAS-Computer Science**) received the Gödel Prize for outstanding papers in the area of theoretical computer science.

David Mechanic (**Institute for Health, Health Care Policy and Aging Research**), has received the Distinguished Career Award from the American Sociological Association.

Fang Liu (**Pharmacy/CABM**) has received a \$200,000 Kimmel Scholar Award from the Sidney Kimmel Foundation for Cancer Research. The honor recognizes young scientists who have already established exceptional reputations as cancer researchers through publications in leading peer-reviewed journals.

David Levering Lewis (**FAS-History**) received a second Pulitzer Prize for biography, for his book, *W.E.B. Du Bois: The Fight for Equality and the American Century, 1919-1963*, the second volume in a two-volume series. The first volume, *W.E.B. Du Bois: Biography of a Race, 1868-1919*, received the 1994 Pulitzer Prize for biography.

Herbert Neuberger (**FAS-Physics and Astronomy**) has been named a Guggenheim Fellow for 2001.

Carolyn Rovee-Collier (**FAS-Psychology**) has received the Society of Research in Child Development 2001 Distinguished Scientific Contribution Award.

Lesley Mandel Morrow (**Learning and Teaching, GSE**) was elected to lead the International Reading Association, an organization of more than 90,000 members that champions high levels of global literacy primarily by promoting excellence in reading instruction.

Dean Mary Edna Davidson (**School of Social Work**) received the Commissioner=s Award from the U.S. Department of Health and Human Services Administration for Children and Families, in recognition of her Aoutstanding leadership and service in the prevention of child abuse and neglect.@

Associate Dean Michael Greenberg (**Urban Studies-EJBSPPP**) was honored by the New Jersey Public Health Association with the Dennis J. Sullivan Award for Aoutstanding and dedicated service and effective contributions to the advancement of public health in New Jersey.@

XII. ACADEMIC PROGRAMS

A. New Academic Programs and Program Changes

New Program Approved

Master of Quantitative Finance (Rutgers Business School: Graduate Programs-Newark/New Brunswick)

Program Nomenclature Changes

Master of Science and Doctor of Philosophy program in Chemistry changed to Chemistry and Chemical Biology (Graduate School-New Brunswick)

Master of Education in English/Language Arts Education changed to Master of Education in Literacy Education (Graduate School of Education)

Master of Library Service degree changed to Master of Library and Information Science (School of Communication, Information, and Library Studies)

Other Program Changes

Baccalaureate program in Administration of Justice curriculum revised and renamed Bachelor of Arts in Criminal Justice (moved from School of Social Work to the Faculty of Arts and Sciences-New Brunswick)

Bachelor of Arts in Labor Studies and Employment Relations offered jointly by the School of Management and Labor Relations and the New Brunswick liberal arts colleges

Unit Reorganization

Edward J. Bloustein School of Planning and Public Policy reorganized. Faculty in the former Departments of Public Policy, Urban Planning and Policy Development, and Urban Studies and Community Health consolidated into a single, school-wide faculty. Faculty members affiliate with one or more program areas: undergraduate, including public health and urban studies; master=s program in urban planning; master=s program in public policy; and the doctoral program.

Unit Nomenclature Changes

College of Pharmacy changed to the Ernest Mario School of Pharmacy

Faculty of Management changed to the Rutgers Business School-Newark and New Brunswick. Its component units, the School of Management-Newark, the School of Business-New Brunswick, and the Graduate School of Management now known as Rutgers Business School: Undergraduate-Newark, Rutgers Business School: Undergraduate-New Brunswick, and Rutgers Business School: Graduate Programs-Newark/New Brunswick, respectively.

New Department Established

Department of Women=s and Gender Studies (Faculty of Arts and Sciences-New Brunswick)

Departments Consolidated

Departments of Plant Science and Plant Pathology consolidated to form Department of Plant Biology and Pathology (Cook College)

Department Nomenclature Change

Department of Chemistry changed to Department of Chemistry and Chemical Biology (Faculty of Arts and Sciences-New Brunswick)

New Centers Established

Center for Early Education Research (Graduate School of Education)

Equine Science Center of Excellence (Cook College)

Food Policy Institute (Cook College and the New Jersey Agricultural Experiment Station)

B. External Reviews

External Reviews are an important element in ensuring excellence in all New Brunswick programs, and each year a number of academic departments and programs. For each external review, three to five faculty experts from other universities around the country are invited to campus for three days to critically assess the faculty, the undergraduate and graduate curricula, and the research, teaching, service, and outreach activities of a department or school. In 2001, the following academic programs in New Brunswick underwent review:

FAS Anthropology
FAS Geological Sciences
FAS History
Cook Animal Sciences
Cook Environmental Science
Cook Landscape Architecture

In addition, a school-wide review was conducted at the School of Communication, Information, and Library Studies. In Spring 2002, reviews are scheduled for Cook Biochemistry and Microbiology, FAS Economics, FAS Physics, as well as the New High Energy Theory Center, the Laboratory for Surface Modification, and the Bureau of Physics Research.

XIII. Research and External Funding

In 2000, grants awarded to faculty and programs at the University reached an all-time high of over \$222 million. The New Brunswick campus played a major role in achieving this extraordinary level of support, receiving a large number of significant awards in highly competitive areas, a tribute to the excellent scholarship and intellectual leadership of the faculty.

Table 5
External Funding by Sector

	University-wide		New Brunswick	
	FY 2000	FY2001	FY 20001	%
Federal	\$107,358,807	\$123,025,352	\$100,158,935	81%
State of New Jersey	\$ 26,260,137	\$ 36,403,646	\$ 28,820,017	79%
Corporations	\$ 14,450,367	\$ 16,674,427	\$ 15,339,832	91%
Foundations/Other	\$ 37,739,185	\$ 46,258,855	\$ 39,524,575	85%
Total	\$185,808,496	\$222,362,280	\$183,843,360	83%

Faculty members university-wide were successful in receiving a total of \$222,362,280 in external awards for research, training, and public service projects during FY2001. Federal support for research and development rose to \$123 million from \$107 million in the prior year. State support for research and development rose from \$26 million to \$36 million. The performance in other sources of support, including Foundations, continued the rising trend of recent years, jumping from \$37 million in 2000 to \$46 million in 2001. Table 5 shows the comparisons for each year and also the significant amount of funding that was brought in by the New Brunswick Campus. The last column of Table 5 provides the percentage share for each sector awarded to the New Brunswick Campus. Public funding remained the mainstay of support for academic research and development. Overall, the \$123 million in Federal support derived primarily from NIH, NSF, and DOD (see Table 6).

Table 6
Three Highest Sources of Federal Funding FY2001

	University-wide	New Brunswick New Brunswick	%
NIH	\$42,124,252	\$36,063,167	85.7%
NSF	\$34,919,193	\$29,951,565	85.7%
DOD	\$ 7,620,548	\$ 7,594,113	99.6%

A significant number of faculty members receiving large awards from Federal Agencies and corporations every year. During the 2000-2001 academic year, 64 faculty and staff investigators were awarded grants that exceeded \$500,000.

Table 7
Summary of Awards by Discipline, FY 2000 and 2001
New Brunswick Campus

Discipline	FY2000		FY2001		% Change
	# of Awards	\$ Awarded	# of Awards	\$ Awarded	
Agricultural/ Environmental Sci.	370	\$38,419,254	376	\$45,655,819	18.8%
Biological Sciences	176	\$28,226,594	155	\$32,597,289	15.5%
Engineering Sciences	211	\$23,765,334	233	\$27,649,900	16.3%
Professional Schools	242	\$20,074,503	290	\$26,810,458	33.6%
Social Sciences	124	\$10,751,225	148	\$20,249,250	88.3%
Physical Sciences	152	\$15,605,293	164	\$18,403,658	17.9%
Math & Computer Sci.	65	\$ 6,472,652	87	\$ 7,206,727	11.3%
Other	20	\$ 3,466,219	16	\$ 3,543,931	2.2%
Humanities	37	\$ 1,713,253	33	\$ 1,467,478	(14.3%)
Arts	9	\$ 470,200	10	\$ 258,850	(44.9%)

Technology Transfer

University income from royalties generated by patents can be leveraged by the University to further its research and development efforts. Our office of Corporate Liaison and technology Transfer (OCLTT) reports that Rutgers ranks high among public AAU institutions in terms of the dollar amount of royalties received. In FY2001, the University's patenting and licensing activity continued to grow: 142 new invention disclosures were submitted to OVLTT, 129 U.S. patent applications were filed, and 35 new U.S. patents issued. The value of royalties received in FY2001 (\$4,763,245) and publicly traded equity acquired through licensing at the end of FY2001 (\$499,007) exceeds \$5.3 million. Cumulatively, 43 new companies have been spun off from Rutgers, based on Rutgers technology, and another five are in negotiation. A significant portion of this income was derived from patents and licenses developed by New Brunswick faculty.

Research: Some Examples

The Rutgers-New Brunswick faculty continues to create new information, promote scientific inquiry, make new discoveries, generate new resources, and educate students. The faculty continues its efforts to engage in research that furthers the goals of the Strategic Plan, bridge the disciplines, and build partnerships with other universities and industry. Rutgers remains a leader in New Jersey in the use of high technology to serve the State and to demonstrate its benefits to the citizens. A few faculty research projects are describe below to demonstrate the mutually beneficial relationship between the academy, the government, and industry that serve the public interest.

Renping Zhou (**School of Pharmacy**) was selected by the Michael J. Fox Foundation for Parkinson's Research to receive one of 15 grants to pursue a cure for Parkinson's disease. Zhou

will receive \$100,000 over two years to fund his research on ARegulation of Dopaminergic Pathways by Eph Family Receptors. His proposal was selected from a field of 200 submitted by scientists representing 20 countries. Dr. Zhou=s research focuses on the molecular mechanisms that regulate nerve connections in neural structures of the brain.

The **Graduate School of Education** has been awarded a \$5.3 million grant from The Pew Charitable Trust to establish a national institute for the research and support of early childhood education initiatives. The National Institute for Early Education Research, which will be directed by GSE Professor Steven Barnett, will build on the existing work of GSE=s Center for Early Education Research to enhance the early education field=s capacity to conduct and communicate policy research and analysis on a national level.

Dr. Lily Young (**Environmental Sciences, Cook**) has been awarded a \$1.03 million, five year contract to investigate how microbes can be used to detoxify arsenic and chromium contaminants at Superfund sites, to learn how microbes can be managed and used effectively to reduce toxic chemicals to harmless wastes and, ultimately, to develop a process to use the microbes to clean up contaminated sites.

The National Center for Neighborhood and Brownfields Redevelopment (**EJBPPP**) received a \$70,000 grant from the Geraldine R. Dodge Foundation to conduct a study on the capacity of existing infrastructure (water, sewer, roads, emergency services, and schools) to meet the planned redevelopment and growth in six older urban towns in Somerset County.

Eduardo Sontag (**FAS-Mathematics**) was awarded a grant of \$404,000 from the Air Force Office of Scientific Research in support of his work on feedback control on nonlinear systems.

The **Food Policy Institute** has been awarded \$2.5 million over four years to develop a national program to increase public awareness and acceptance of food biotechnology. The institute will serve as a national resource center and conduct consumer opinion surveys and provide educational, policy, and outreach programs.

Eileen White (**Molecular Biology and Biochemistry/CABM**) received a National Institutes of Health-National Cancer Institute Merit Award totaling as much as \$4.5million over 10 years. The funding will help support White=s groundbreaking research into why cancer cells continue to proliferate when normal cells eventually die. Her work has implications not only for cancer research but for research on such diseases as AIDS, amyotrophic lateral sclerosis, and lupus.

The National Institutes of Health has chosen Rutgers as the location for a Phase I Center of Excellence in Biomedical Computing and has provided a three-year grant for \$1.5 million. Ronald Levy (**FAS-Chemistry and Chemical Biology**) is the principal investigator.

The Center for American Women and Politics (**CAWP**), working with the Princeton Survey Research Associates, conducted a survey of state legislators, designed to provide longitudinal data about women in state legislatures for CAWP=s database and to assess women=s impact on the legislative process and legislative policy priorities in comparison with the impact of men. The study was funded with a \$200,000 grant from the Barbara Lee Family Foundation.

XIV. IMPROVEMENTS TO FACILITIES

A major focus of University Facilities has been to manage the Higher Education Capital Improvement Program (HECIP). The University Board of Governors adopted a \$200 million budget for HECIP in April 2000 with an allocation of \$169 million from the state (including a 25% University match) and an additional contribution of \$31 million from the University. This program will significantly reduce the backlog of deferred maintenance and code compliance requirements of the University, which have been estimated to be approximately \$500 million.

HECIP has progressed on schedule and on budget. A total of nineteen academic and administrative building projects have been completed, fifty-four are under renovation, and seventy-two are in design or planning. The majority of the work is expected to be completed by the end of the 2002/03 academic year.

The **Jane Voorhees Zimmerli Art Museum's** new Dodge Wing added approximately 15,000 square feet of exhibition space, allowing it not only to display more fully its growing collection of Soviet Nonconformist art but also to present for the first time in several years its collections of ancient art, European painting and sculpture from the 14th through the 18th centuries; European and American 19th century painting, and 20th century American and European painting and sculpture. The new wing brings the museum's total exhibition space to 35,000 square feet.

Several major construction projects are in advanced stages of planning or underway that will increase the teaching and research capacity of the University. Several examples of these projects are: (a) The Human Genetics /Biomaterials Building providing training and laboratory facilities for the Department of Genetics under the leadership of Dr. Jay Tischfield and the New Jersey Center for Biomaterials directed by Dr. Joachim Kohn; (b) The Biomedical Engineering Building that will house programs in Biomedical Engineering and feature advanced visualization technologies for education and research; (c) the conversion of Davidson Hall into classroom and laboratory facilities for Rutgers University Computer Services and Rutgers Television Network with video-voice conferencing and recording studios; (d) The Multispecies Aquaculture Demonstration Facility in Cape May County that will enable scientists to conduct training and research related to the development of aquaculture as a large-scale industry; and, (e) the conversion of 151 Ryders Lane for the Douglass Developmental Disabilities Center which sponsors education, training and therapy for individuals with autism. Also, the Addition to the Laboratory for Cancer Research was completed and occupied in the late summer 2001 to support the work of Dr. Allan Conney and his colleagues in the College of Pharmacy. These six major capital projects have a combined budget of nearly \$80 million with funding from grants, private gifts and state funds.

There are some notable improvements planned and under construction in University Housing and other heavily used student facilities. For example, the landscape areas of the Livingston Quad Housing will be upgraded. The College Avenue entrance and interior landscape of the Bishop Quad Housing are being renovated. A new bikeway system project will connect the Busch and Livingston Campuses, including the construction of a new bikeway along Cedar Lane to River Road. Recreation improvements have been completed on the Busch Campus including the resurfacing of the tennis courts and the installation of a new sports club field at the intersection of Bartholomew and Brett Roads. A second floor addition to the Cook Student center will provide new study and lounge space. Finally, the University has moved forward with the state mandated program for improving safety in student residences by installing automatic fire suppression systems. Rutgers will install sprinklers or modify existing systems in 157 buildings by 31 July 2004 at an estimated cost of \$35 million to comply with the legislated fire safety project.

XV. CONCLUSION

This report has detailed only a few of the many achievements of Rutgers-New Brunswick over the past year, but even this abbreviated outline reveals a campus that is vital, exciting, and moving forward in all areas. The campus is rich in faculty and student talent, rich in opportunities for them to use that talent, and rich in an intellectual climate that grows more vibrant and challenging each year. This State of the Campus Report provides an opportunity to reflect on how much has been achieved through our collective efforts and to energize us to work together as a community dedicated to learning and scholarship to achieve even more.