

UNIVERSITY AT STONY BROOK • SUNY CURRENTS

— F O C U S —

THE FUTURE

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NEWS

Robert Borthwick, who graduated this spring with a degree in philosophy, is part of the growing trend of adults returning to campus.

Students in School of Allied Health Professions have an advantage over their classmates in the job market; the allied health student can expect five to eight job offers before graduation.



FOCUS

President John H. Marburger describes Stony Brook's next ten years as the "The Decade of Refinement."

At this year's final university convocation, Provost Jerry Schubel outlined the obstacles and opportunities facing Stony Brook's future.



EVENTS

June marks the beginning of the Norstar Bank International Theatre Festival.

Having crossed the "threshold of stability," Stony Brook maps its route to the 21st century.

Master Plan: A Vision of USB in 2015

It is the year 2015. Having graduated from Stony Brook in 1990, you have returned to the campus for your 25th reunion.

Imagine:

- walking from the Administration Building to the Science Quad along a broad grassy mall;
- browsing through small shops and boutiques under "the Bridge" (you know, over by the "old" student union);
- leaving the lacrosse stadium with a throng of 12,000 others, exultant over Stony Brook's defense of its national title.

Stony Brook faculty, students and staff have received their first glimpse of preliminary concepts proposed by architects who are developing a 25-year master plan for the university. The presentation, sponsored by the Long-Range Planning Committee of the University Senate, was made by Associate Provost Benjamin Walcott.

Dr. Walcott, who chairs a campus advisory committee working with the architects, will soon make the same presentation to a 14-member panel of community representatives who have been providing formal input to the process since last fall. This panel, the "Citizens Advisory Council on Campus Master Planing" was appointed by the Stony Brook Council and is chaired by Vincent Donnelly, former planner for the Town of Brookhaven.

Buildings in need of rehabilitation, a lack of parking and an inefficient road system are just a few of the challenges that the Stony Brook campus presents to Perkins & Will, the architectural firm working with the university on the project. Although the architects propose sites for several new buildings—such as a new art gallery and office building, an additional building for Life Sciences and an ambulatory care center in University Hospital—their focus is "less on expansion than on improvements to make the existing campus work better," said Dr. Walcott.

For the last eight months they have been

studying traffic flows, pedestrian patterns, signage and a long list of other factors that ultimately determine how the campus functions. "We are at the stage now of soliciting comments and testing solutions," Dr. Walcott said.

Although the university's current budget is uncertain (see story on page 4), the long-range prospects for implementing major aspects of the master plan are favorable, noted President John H. Marburger.

"The legislature sent a message with this year's budget bill that they want to develop strength in the SUNY system, not diminish it," he said. "The governor's

plant—which would generate major savings in the university's utilities bill—and faculty and staff housing.

The architects aim to produce a final plan by the end of the summer. Following is a summary of their major recommendations—"none of which," Dr. Walcott emphasized, "are written in stone."

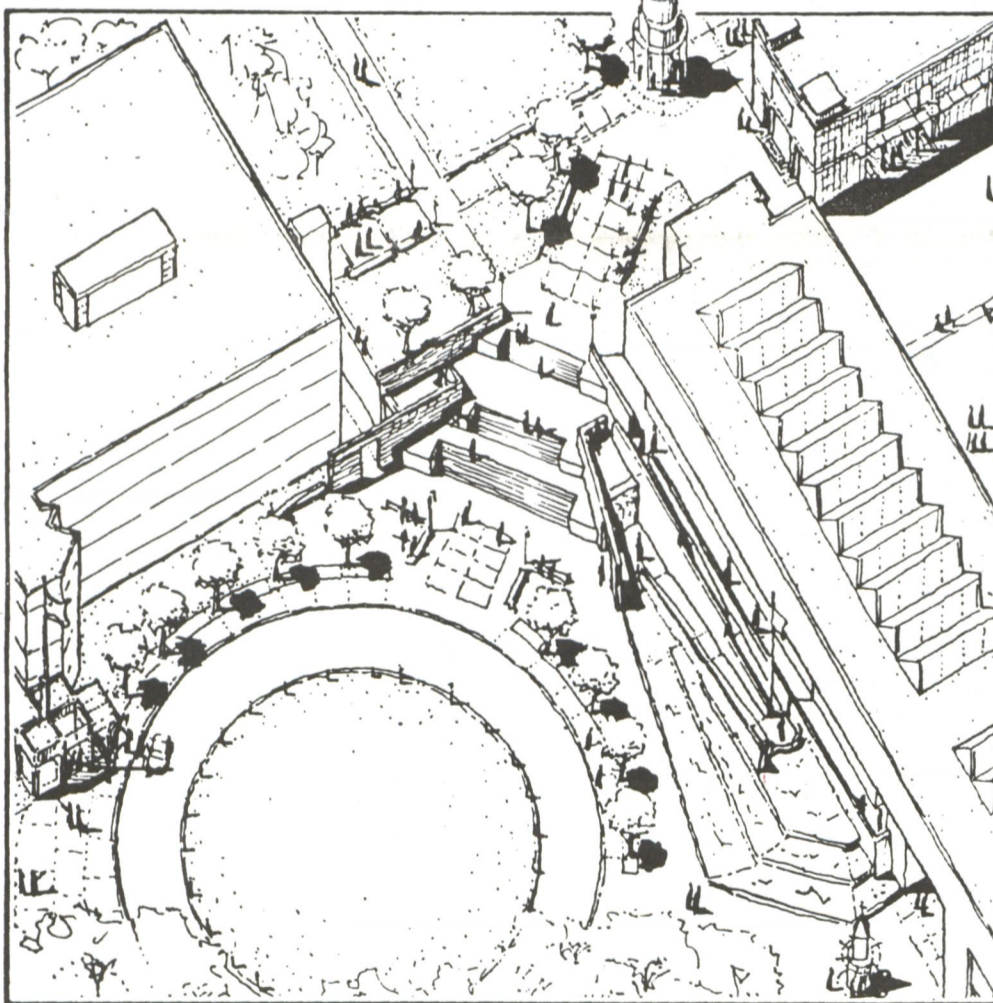
• **Academic Mall.** The university should regard as the central focus of the main campus the rectangular area defined by the Administration Building at one end and the Science Quad at the other. This area, designated the "Academic Mall," should be landscaped with grass and trees, and removable barriers should be placed around the perimeter to prevent unauthorized vehicular access. Landscaping of all adjacent areas should be oriented toward the Academic Mall.

• **Central Hall Conversion.** Central Hall, located at the center of the main campus and a key terminus for students entering the campus by bus, should be converted into a student activities area with theatre, ballroom and dining facilities. Via an arch cutting through the converted building, students and visitors will have direct and immediate access to the Academic Mall. Parts of the current Stony Brook Union should be converted into offices for student services.

• **Addition to Old Chemistry.** The proximity of Old Chemistry, the Melville Library and the new student center make this an ideal nucleus for students attending evening programs. Additional classrooms and offices should be built in Old Chemistry to accommodate the building's expanded role.

• **Service Access.** Because the current road system provides inadequate access to buildings by service vehicles, the mall has served as a "traffic lane" between buildings. The architects call for reworking the current road system to improve access and redirect vehicles away from pedestrian

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In the year 2015, visitors to the campus may find a dramatic "front stairway" leading from the Staller Center circle to the Academic Mall. This sketch, and others on page 8, are part of the preliminary master plan proposal prepared by architects Perkins & Will.

actions, moreover, are directed not toward a downsizing of the system, but toward management initiatives he feels will strengthen SUNY. Our work on the master plan reflects both a basic confidence regarding the future and a commitment to continue building a strong university for Long Island and the state."

In addition to financial support, the legislature has enacted legislation that makes it possible to use private funds in capital projects. For example, the legislature has acted specifically to allow the university to use private funds in developing a proposed hotel and conference center. Other projects that would draw on private funds are a proposed cogeneration

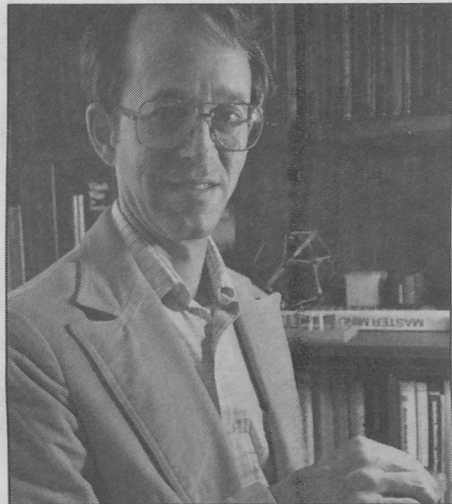
ALMANAC

KUDOS

Alan C. Tucker, professor of applied mathematics and statistics, has been named Distinguished Teaching Professor.

The designation is conferred by the State University of New York Board of Trustees to full professors who are excellent teachers, have provided academic advising to students, maintained high standards of student performances and continued to be active scholars. To be nominated, a faculty member must have completed at least three years of full-time teaching on the nominating campus and have carried a full-time teaching load.

His research is on finite mathematics with applications to management and computer sciences. Dr. Tucker has consulted with several corporations, including teaching problem-solving techniques and reasoning skills to employees of American Telephone and Telegraph (AT&T).



Alan C. Tucker

Eva Feder Kittay, associate professor of philosophy, has been awarded a Founders Fellowship of \$20,000 from the American Association of University Women (AAUW) to complete a book on the "dependency theory" of feminist thought. Dr. Kittay contends that women do not want equality with men as society exists today, but want to transform the values of society. In particular, women want the role of caring for dependents such as the young, the old and the infirm to be shared.

Currents, serving the extended community of the University at Stony Brook, is published monthly during the academic year by the Office of Public Relations, 322 Administration Building, University at Stony Brook, Stony Brook, N.Y. 11794-0605, (516) 632-6310.

Currents Weekly Update will not be published during the summer months.

Patricia J. Teed

Vice President for University Affairs

Dan Forbush

Associate Vice President for Public Relations and Creative Services

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Sue Risoli: Biological Sciences, Engineering, Marine Sciences Research Center, Physical Sciences and Mathematics

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Tamar Asedo Sherman: Arts & Humanities, Health Sciences Center

Mark Owczarski: *This Week and This Month*

Catherine Copeland: Briefings Editor

Tom Giacalone: Design Director

The University at Stony Brook is an affirmative action/equal opportunity educator and employer.

Kenneth R. Baynes, assistant professor of philosophy, won the prestigious Humboldt Fellowship to Germany, where he will conduct research in social philosophy.

Three faculty members and a graduate student in the Health Sciences Center recently received Catacosinos Awards for their work in cancer research.

Michael V. Viola, professor of medicine, oncology division, won a \$12,000 Catacosinos Professorship. Dr. Viola is studying the transition of the precancerous stages to invasive carcinoma.

Richard Miksicek, assistant professor in clinical pharmacology, received the Young Investigator Award of \$7,000 for his research in the involvement of hormones in gene expression.

Nancy Reich, assistant professor in pathology, received the Young Investigator Award of \$7,000 for her work on the molecular mechanisms of interferon action and oncogene expression.

Rakesh Verma, a graduate student in computer science, received a Catacosinos Fellowship in computer science, which includes a \$6,500 stipend and a full tuition scholarship.

The awards were established in 1979 by William Catacosinos, chairman of the board of the Long Island Lighting Company, to further cancer research at Stony Brook.

Ralf Spatzier, assistant professor of mathematics, has received a Centennial Fellowship from the American Mathematics Society, a professional organization for mathematicians.

Dr. Spatzier was one of three recipients of the award, which has been presented annually since 1974 to mathematics professors five to 10 years after they have earned doctorate degrees.

A grant of \$32,000 enables recipients to take time off from instructional duties to pursue research. Dr. Spatzier's research involves differential geometry, dynamical systems and the symmetry of patterns.

Edward S. Casey, professor of philosophy, won a Rockefeller Residency at Wesleyan University. The Rockefeller Foundation offers fellowships in the humanities at 21 sites for scholars whose work advances understanding of the modern world through clarification of the past or direct assessment of the present. Dr. Casey is interested in imagination and remembering.

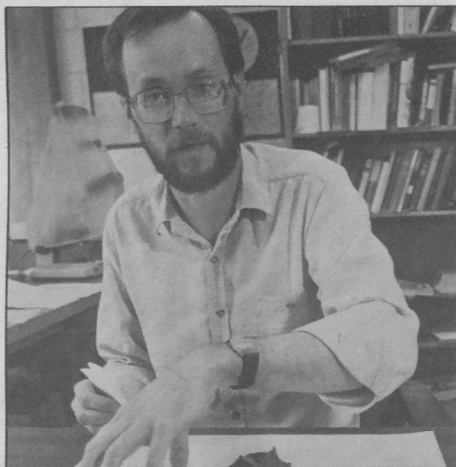
He will succeed **Michael J. Sprinker**, professor of English, in that residency.



Mark Schneider, professor and chair of the Department of Political Science, accepts a proclamation from **Diane Carr**, deputy commissioner for general services in Suffolk County. Issued by Suffolk County Executive **Patrick G. Halpin**, it designated March 4 "Mark Schneider Day," in recognition of his "concern and dedication to the graduate program at Stony Brook."

Robert Schneider, acting vice provost for research, and **George Pidot**, associate dean of the W. Averell Harriman School for Management and Policy, were among a five-member blue-ribbon team that developed a technical capabilities data base for Long Island's high-tech industry.

Funded in part by a State Urban Development Corporation grant, the \$250,000 project will provide the region with details on the make-up, activities and capabilities of the bi-county area's high tech industry and academic experts within its educational, medical and research and development facilities. Currently there are more than 1100 names in the industry data base and 300 faculty names in the academic data base.



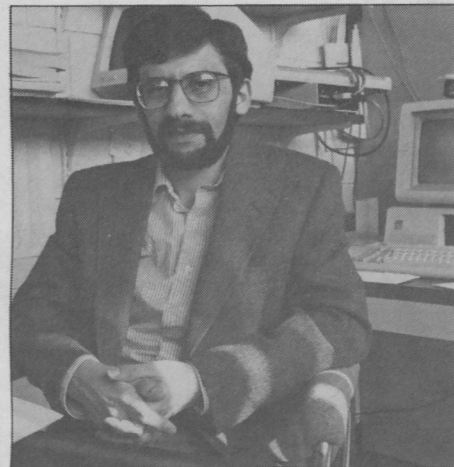
Scott M. McLennan

Scott M. McLennan, assistant professor of earth and space sciences, and **Vladimir J. Goldman**, assistant professor of physics, are among this year's recipients of the National Science Foundation's Presidential Young Investigator Awards.

The award is given to fund research by science or engineering faculty at the beginning of their careers. Each receives an award of \$25,000 each year for five years, and can apply for up to \$37,500 more annually through a combination of federal and matching private funds. The awards can be used to allow faculty members to

Currents extends congratulations to the many students who received recognition in year-end ceremonies. See page 9.

Don Ihde, dean of the Division of Humanities and Fine Arts and professor of philosophy, will be the Selfridge Scholar-in-Residence at Lehigh University this fall. During his one-week stay, Ihde will focus on the philosophy of technology.



Vladimir J. Goldman

reduce their teaching commitments in order to pursue research projects.

Dr. Goldman also received a Sloan Research Fellowship from the Alfred P. Sloan Foundation. Sloan Fellowships are presented to young scholars in the early stages of their careers. The grant of \$25,000 per year for two years is flexible, allowing researchers to shift the direction of their research. Dr. Goldman's research involves the development of artificial semi-conductor structures, with application to computing, electronics and communications.

BRIEFINGS

GRANTS

The following faculty members received Faculty Travel Grants totaling \$16,375. The grants are part of the Faculty Research Development Grant program and are designed for non-tenured, tenure-track faculty members.

Shyam Bajpai, Department of Electrical Engineering, to 1989 International Microwave Symposium, Long Beach, Ca.

Kenneth Baynes, Department of Philosophy, to Western Social Science Association, Albuquerque, N.M.

Patricia Belanoff, Department of English, to Institute for Critical Thinking, Chicago.

Miguel Berrios, Department of Pharmacology, to Joint Meeting of the American Society for Cell Biology and the American Society for Biochemistry and Molecular Biology, San Francisco, Ca.

Monica Bricelj, Marine Sciences Research Center, to the Fourth International Conference on Toxic Marine Phytoplankton, Sweden.

Hung Chen, Department of Applied Mathematics & Statistics, to joint IMS/Western Regional Meeting and Biometric Society and WNAR Annual Meeting, Davis, Ca.

Curtis Creath, Department of Children's Dentistry, to American Association of Dental Schools and American Association of Dental Research, San Francisco, Ca.

Harbans S. Dhadwal, Department of Electrical Engineering, to Fourth European Symposium on Particle Characterization, Nurnberg, W. Germany.

Dorothy Figueira, Department of Comparative Studies, to Southern Comparative Literature Association, Knoxville, Tenn., and American Comparative Literature Association, Waltham, Mass.

Stanley Fields, Department of Microbiology, to Genetics Society of America and Yeast Genetics Meeting, Atlanta.

Daniel Finer, Department of Linguistics, to Second Language Research Forum, Los Angeles.

Godlind Johnson, Engineering Library, to American Library Association Mid-Winter Meeting, Washington, D.C.

Robert Harvey, Department of French and Italian, to International Association for Philosophy and Literature, Atlanta.

Audrey Light, Department of Economics, to Meetings of the Population Association of America, Baltimore, Md.

Judith Lochhead, Department of Music, to American Musicological Society/Society for Music Theory, Baltimore, Md.

Gary Mar, Department of Philosophy, to

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For Adults, Completing a College Degree Can Lead to New Life

A truck driver who dropped out of college more than 20 years ago graduated May 21 *summa cum laude* with a bachelor's degree in philosophy.

"Life begins at 40," says Robert Borthwick who, at 40, is unique in that he is a member of both Phi Beta Kappa and the Teamsters Union. He was also inducted into the National Philosophy Honor Society with a 3.93 grade point average. In his 78 credit hours at USB, Mr. Borthwick received only one B+; all his other grades were A's.

Getting here was a long haul for Mr. Borthwick, a fuel truck driver for Meenan Oil Co., and for the nearly 6,000 other adult students who contribute to the "graying" of the campus. Adults comprise 31 percent of the student body at USB. Educators predict by the year 2000, half of all college students will be adults.

The burgeoning of part-time and evening programs increased the number of adults attending Stony Brook in recent years. Adults over age 25 account for three-quarters of the more than 4,000 students who attend the university on a part-time basis.

"Older people are coming back for a variety of reasons," says Paul Edelson, dean of USB's School of Continuing Education. "They're looking for career advancement, personal fulfillment, occupational retraining or new careers."

Accessibility is perhaps the most important factor in adults' decisions to go back to school as they juggle jobs and families, says Dr. Edelson. USB is making a college education accessible by expanding part-time offerings, scheduling

classes in the evenings, on weekends and in the summer, and by opening outreach centers from Shoreham to Great Neck, from Patchogue to Manhattan.

"We're trying to look at emerging professions and bring together university resources to create new areas of study," said Dr. Edelson. Approval from the state is anticipated for five new certificate programs: Long Island Regional Studies in conjunction with the Department of Political Science, Waste Management in conjunction with the Marine Sciences Research Center, Coaching in conjunction with the Department of Physical Education, and Child and Family Studies and Environmental/Occupational Health and Safety through the School of Allied Health Professions.

Mr. Borthwick plans to pursue a Master of Arts in liberal studies at USB and hopes to earn his Ph.D. and teach at the college level.

He dropped out of Brown University in 1966 after graduating from Island Trees High School in Levittown. While operating a landscaping business with his father, Mr. Borthwick began driving a truck during the winter. Truck driving soon became his full-time occupation.

Why did he go back to school after a long hiatus? "I had to push myself to see what I could do. It's rare that you get a second chance to do something in life."

He doesn't consider the time spent between colleges to be wasted. "I learned a lot, met some interesting people and did a lot of independent research," Mr. Borthwick says.

Tamar Asedo Sherman



Graduates enjoyed the sunshine and the ceremony at USB's 29th commencement exercise. ED BRIDGES

Thousands Attend USB Commencement

Some 4,000 USB students received degrees Sunday, May 21, in an outdoor ceremony which drew thousands more parents, relatives and friends.

Gray skies that brought an early morning shower cleared by the time the 10:30 a.m. procession stepped onto the athletic field, the platform party led by the *Saffron Kilts*, a Long Island piper band. Carrying bright red banners denoting their area of study, the candidates for degrees marched in to "*Pomp and Circumstance*" performed by the *Long Island Brass Guild*, a group composed of USB alumni.

In her commencement address, historian Joan Wallach Scott suggested the notion that universities stand apart from reality is "outdated and irrelevant." Universities, she said, "have changed from overwhelmingly elite institutions into diversified and

democratic institutions," bringing with them the "real" problems of society.

"If you think about it, many of you come from far less diverse places than this university and you'll probably go back to similar places. . . There might even be something to the idea that Stony Brook has been more 'real' than where you came from or where you're headed, more real in the sense that you had, at least once in a while, to deal with a tense, sometimes conflicted, but always diverse world," she said.

"Maybe thinking about Stony Brook as a 'real world' will make you critical of the next 'real world' you live in," she told the Class of '89. "Maybe it will let you imagine a way not just to live in that material world, but to change it."

Dr. Scott was one of three distinguished educators who received honorary degrees from USB on Sunday. Dr. Scott was awarded a Doctor of Letters. Honorary doctor of science degrees were conferred upon Dr. Martinus J.G. Veltman, the John McArthur Professor of Physics at the University of Michigan, and upon Dr. Karl K. Turekian, the Benjamin Silliman Professor of geology and geophysics at Yale and one of the nation's most distinguished geochemists.

Vicky Penner Katz

Allied Health Graduates Have Advantage in Job Market

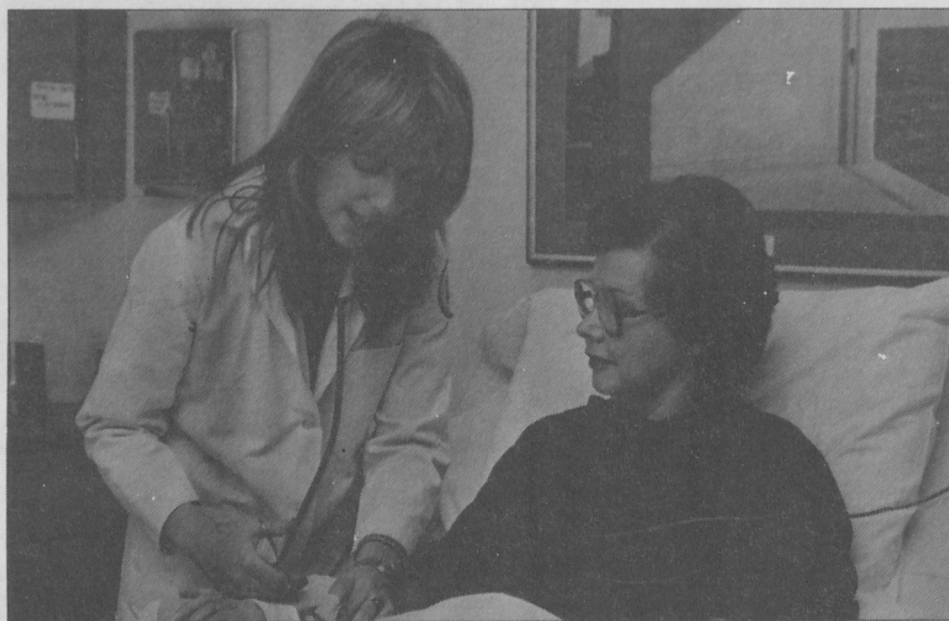
According to a career counselor at USB, it takes the average college graduate eight months to find a job. That is, unless the graduate earned his degree from the School of Allied Health Professions.

The student majoring in physical therapy, medical technology, cardio-respiratory science, physician assistants program and nursing is likely to have a host of job offers to choose from prior to graduation.

There are five to eight job openings for every graduate from an allied health program, says Edmund J. McTernan, dean of the School of Allied Health Professions says there are five to eight job openings for every graduate from an allied health program. Universities are not able to turn out graduates in these fields fast enough to meet the growing demand. Starting salaries have crept up to \$31,000 as the shortage of trained health care workers has intensified.

The demand is so great, he says, that many students in allied health programs are hired by hospitals shortly after they begin training in their junior year. "As soon as they learn how, many of our students are applying their skills," Dr. McTernan says.

Nurses, also in great demand, have their pick of jobs, says Rose S. Meyers, assistant dean of the School of Nursing. Most graduates don't accept a position, however, until August, after they have passed their state boards.



Students in the allied health programs receive extensive "hands-on" experience at University Hospital in completing their program.

Hospitals that are unable to hire qualified allied health professionals have to train their own to fill these critically needed jobs. An agreement between the School of Allied Health Professions and the Nassau-Suffolk Hospital Council to help ease the shortage is pending.

The school plans to open courses to hospital personnel and supervise their clinical practice if each participating hospital will contribute towards the salary of a staff member to do that supervision.

Some hospitals are in such need for allied health professionals that they will loan a student up to \$7,000 a year without interest until the student completes his or her training. Upon graduation, the student is not obligated to work at that facility. However, if the person should choose to work there, 20 percent of the loan would be forgiven for each year of service. One hospital in New York included subsidized housing in its package.

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Internal Renovations To Begin at Chapin

Though major internal renovations will begin in July at the Chapin Apartment complex, thousands of dollars of interior improvements have been made to the facility in the past 12 months.

Workmen installed new siding and windows at a cost of just over \$1 million, and others upgraded heat and hot water systems. The funds to pay for these improvements came from the Department of Campus Residences operating budget.

In Buildings A and B, two heat pumps were replaced to improve circulation in the hot water cycle. Eight pumps were replaced that serve the hot water system and six modular control motors with transformers were upgraded. Workmen installed six pressure reducing valves on the make-up tanks and four, three-way mixing valves on the hot water system.

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THE FUTURE

The Master Plan: A Framework for University Refinement

The objective of the master plan "is, simply put, to make the campus work better," says President John Marburger. "Essentially, it provides a framework for solving certain operational problems."

That framework brings together initiatives directed in four major areas:

- Maintenance and repair of the university's infrastructure. "Too much of our energy goes toward addressing problems with the physical plant," he notes;

- Privately funded capital projects. The proposed hotel and conference center, cogeneration plant, ambulatory care building and faculty and staff housing are all projects that can be funded with "ingenuity and private financing," he says;

- Restoration of the "core" campus. Such buildings as Central Hall, Old Chemistry, Harriman and Psychology A—all built before the state made its commitment to build a major research university at Stony Brook—must be rehabilitated. "We need to refocus on the core, and bring back the life of the campus to the central mall;"

- Improvements in parking and traffic flow. A number of initiatives—such as concentration of parking outside the central campus and moving Center Drive to the north of the current Stony Brook union and fieldhouse—are "essential to reduce the intrusion of vehicular traffic on the life of the university community."

Such physical improvements are integral to a range of advances the university must achieve in its fourth decade, says Dr. Marburger. His vocation address last fall—excerpted below—provides a broad perspective on what he has described as USB's "Decade of Refinement."

The title for today's remarks is fallout from Stony Brook's master planning process. This semester we have architects from the firm of Perkins & Will working with us to lay out a Campus Master Plan for the next 10 years. The only record I can find of the first such plan is a collection of photographs from a mounted exhibit at the dawn of the sixties. It showed Stony Brook as a medium-sized brick-building college, arrayed conventionally enough in symmetrical fashion about a mall with a circular drive. That plan must have been drawn up even as a commission chaired by Henry Heald, appointed by the governor and the Board of Regents, was meeting to consider how New York would respond to the challenge of Sputnik.

The Founding Decade

Within months (in 1960) the Heald Report urged the state to build major university centers in Long Island and Buffalo. The State University of New York, little more than a decade old itself, responded with a resolution to build four centers. A new administrator, the first with the title of president, came to the nascent Long Island campus to wrench it onto a new course. His name was John Lee and he lasted eight months. Those of us who were not present then can see his role as shaped by tremendous forces, not the least of which was a sense of urgency in high places, overwhelming entirely the vision of collegial progress toward innovative

forms of undergraduate education in the new age. What followed was a turbulence that always heaves up when forceful leaders tug societies along faster than their natural flow.

These were the early events of Stony Brook's founding decade. Three years after the appearance of the Heald Report another gubernatorially appointed committee chaired by Malcolm Muir called for, and the SUNY trustees endorsed, a major research-oriented medical center at Stony Brook. In 1967 the period drew to a close with the first comprehensive Master Plan, mapping out the physical facilities within which these great visions would be realized. Gone was the symmetrical arrangement and circular driveway. The new plan superimposed structures on an underlying skeleton of existing buildings that were too small and more or less in the way.

The Master Plan of 1967 did not envision the oil embargo of the early 1970s, the subsequent leveling of Long Island's sizzling rate of growth, the financial crisis of New York City, the migration of industry to other states and countries. But every major building we see now was on that plan, in the place allotted and roughly of the size and functionality envisioned more than 20 years ago.



John H. Marburger

The University Center at Stony Brook looks today rather as it was meant to look. There are fewer buildings, particularly those providing faculty and staff housing, and we miss them terribly. But what is remarkable is the similarity of the reality to the vision. More remarkable is that the university—not just the bricks and mortar of it—has become so close to what those founding commissions had in mind. More about that later.

The Building Decade

The next 10 years were busy with construction. It is difficult to imagine a period of social history less congenial to such an enterprise. In the middle of the building decade, the state ran out of money, or at least slowed dramatically the expenditures for public higher education. Preoccupation with the impact of postwar technology on lifestyles, with social justice, with an unpopular war, and later with the implications of the oil embargo created unusually deep divisions among the communities that traditionally collaborate to weave the delicate magic of university life. The Stony Brook of the building decade is more obscure to us even than in the earlier years. So much of significance occurred for each part of the community, students, faculty, administrators and staff—but for each the significant thing was different.

Today I speak with alumni from the Building Decade who treasure their years here. Their experiences with their roommates, dormmates, classmates were profound, revelatory. For them the objectives of building a new campus were remote and secondary to their immediate interests. The same alumni speak of alienation from the campus establishment, including all

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Outlook Appears Cloudy for '89-'90 Budget

Governor Mario Cuomo and Chancellor Bruce Johnstone have announced a proposed plan to restore the SUNY budget and enable campuses to operate at last year's level. A deficit had been created when the governor vetoed that section of the bill which would have given the SUNY Board of Trustees authority to institute a \$200 increase in resident tuition.

Where does the proposed plan leave Stony Brook? To find out, Currents sat down for a briefing by Glenn Watts, who joined the university April 1 as vice president for finance and management. Mr. Watts was formerly director of budget, planning and analysis at the University of Wisconsin-Madison, his alma mater. Prior to joining UW-M, he served as chief of the education section of the Wisconsin state budget office.

CURRENTS: How much money would have been generated by the tuition increase anticipated by the legislature?

WATTS: About \$28 million per year for the entire SUNY system.

CURRENTS: Why was the increase needed?

WATTS: The budget proposal presented by the governor would have provided about \$47 million less for SUNY than what is needed to operate at last year's level. The legislature provided state support to partially fill the gap, and the tuition increase would have made up the difference, restoring the budget to last year's level.

CURRENTS: What happened after the governor vetoed the increase?

WATTS: The governor and his staff

worked with the chancellor and the central administration staff to develop an alternative way to fund the \$28 million budget gap, relying on a combination of new revenue, program changes and management improvements.

CURRENTS: Can you elaborate on the specific components of the proposal?

WATTS: Sure. There are five main pieces. Here's how they break down:

- \$10 million will be derived from tax funds that were to be used for building projects already in design or under construction. These funds will be shifted to the operating budget. Meanwhile, additional bond revenue will be used to continue the building projects. In effect, this would allow bond revenue to be used for operations.

- \$7 million will be derived from funding that had been added to the original version of the budget for the Tuition Assistance Program. The funding is not needed for higher award levels because tuition is not being increased.

- \$5 million of State University Income Fund balances—funds set aside to cover any potential revenue shortfall during the next year—are to be added to the budget. Current enrollment projections indicate that tuition income estimates will be met.

- \$1 million is to be saved by closing buildings when they are not needed for teaching, research or public service activities during the summer and holiday periods. Utility and possibly personnel savings can be used to meet other operational costs.

- \$6.9 million of current state fund operating costs will be shifted to self-supporting operations. That is, some user fees and charges will be increased and certain activities now paid for by state funds will be shifted to other revenue sources.

These items total more than \$28 million. If all of the revenue items identified reach their estimated levels, the proposal will allow SUNY to use \$1.9 million of the total to replace savings that had been anticipated from a six-month delay in the acquisition of equipment under the lease purchase program. These savings have proved to be unattainable.

CURRENTS: What kind of fee increases are being considered?

WATTS: There are several. The freshman and transfer application fee would be increased from \$18 to \$25, parking charges would be established, study abroad fees would be increased, and user charges for the New York Network would be raised. Also, alternative ways to meet student health service costs are being studied.

CURRENTS: What costs might be shifted from state funds to other sources?

WATTS: Some central administration staff would be shifted to the Construction Fund, and a portion of the salary costs of faculty engaged in sponsored research would be shifted to the federal government and external agencies.

CURRENTS: Can we be certain that all these things will take place?

WATTS: No. Several elements in this proposal, such as the bonding and TAP transfers, require approval by the legislature. Other components require a determination on distribution by SUNY central. We can make estimates on how the proposal will affect Stony Brook, but we won't really know until some time during the summer whether the budget gap has been closed.

Schubel: 'Surviving Fruitfully' Requires Ambitious Goals

After serving the Stony Brook community for three years as provost, Jerry Schubel will return to his former post as director of the Marine Sciences Research Center July 1. In his convocation address May 11, excerpted below, Dr. Schubel called for the university to expand its role in addressing regional problems.

We must continue to reweave the social and intellectual fabric of the campus... to enhance opportunities for student involvement, for engagement, for exploration; to increase the amount of physical and intellectual energy our students devote to the total academic experience.

Activities which have been identified through a number of national studies as having particularly pronounced effects on student bonding and persistence are: intercollegiate athletics; honors programs; and participation in faculty research projects.

Frequent interaction with faculty members is more strongly related to satisfaction with the college experience than any other type of involvement, or indeed any other student or institutional characteristic.

The greatest asset of any research university is its faculty — men and women at the cutting edges of their fields — scholars who are pushing back the limits of our knowledge; artists and musicians who stir our hearts and souls and cause our imaginations and our spirits to soar!

We have those individuals.

One of our major objectives has been to institutionalize and expand our opportunities for undergraduates to engage in research and scholarly activities with faculty and with advanced students through URECA, the Undergraduate Research and Creative Activities program.

URECA enables undergraduates to work side-by-side with scientists, scholars and creative individuals in the pursuit of their respective crafts. Over 400 students are participating in the URECA program this year.

Additional efforts to provide undergraduates with opportunities for extended contact with faculty members:

- The Honors College, which will admit its first class of students at the beginning of the new academic year. A Faculty Master, Eloy Carlson has been identified for the college.

- A Science/Engineering/Mathematics Residential College, which will open in September. It has been created through a partnership between the university and Long Island's high technology industries. Dr. Joseph Lauher of the Department of Chemistry will be director.

Students aren't the only ones who need to have the campus environment and culture enriched. Our faculty and staff are also anxious to have these improvements. We now have a University Club... not complete, but a good start. Our University Club is already open daily for lunch, and for dessert after selected evening performances at the Staller Center for the Arts. Some day it will be open for dinner as well, and will be a place where faculty and staff can enjoy an early morning cup of coffee and a bagel or donut and browse through a broad selection of newspapers...

Stony Brook: Quality and Size

What about our size? Are we preoccupied with growth? With size at the expense of quality? I think not. It is crucial that we increase our size.

We must continue to increase in size if we are to retain our current stature, let alone



Jerry Schubel

to grow. Our plans call for increasing the numbers of undergraduates, the numbers of part-time graduate students, and the numbers of graduate students. We must concentrate growth of enrollments in areas where full support is neither necessary nor expected to attract and retain excellent students.

To enrich the educational experience of all who attend, the university must attract better students from a broader geographical area in far greater numbers than we do. An increase in the number of out-of-state students, or even students from off Long Island, would change the cultural dynamics, the social fabric, of the campus dramatically... for example, by fostering a full campus life seven days a week.

The university's core campus full-time graduate enrollment is planned to increase by 28 percent between 1988 and 1993. If these students are to be supported, the funding will have to come largely from grants, contracts and fellowships.

Expanding external sources of support for graduate students is not easy. One of the happy consequences of our success in sponsored research has been to increase, by over a third in the last five years, the proportion of our graduate students who are fully supported on grant and contract funds.

However, tuition scholarships are provided to SUNY only in proportion to the allocation of state graduate assistantship funds.

Thus, we are facing a growing deficit in the tuition scholarship area. This year, the Graduate School announced a new policy calling for support for graduate students on research grants to be marginally increased, in the amount of 10 percent of out-of-state tuition, or about \$500, in order to address this deficit.

Part-time Graduate Students

Part-time learners are becoming an increasingly important part of the university community at Stony Brook and around the country. "By 1990, more than half of all students (in colleges and universities) will be learning part-time, including some of the most gifted," notes George Keller.

The university's core campus part-time graduate enrollment is planned to increase by 29 percent between 1988 and 1993, from 2211 to 2850.

Our School of Continuing Education, has a key role in this ambitious undertaking. CED has become a powerful force in

the university... not a peripheral, ornamental activity hanging off to one side, but an integral component of the University Center at Stony Brook.

The increased demand for non-traditional student experiences and adult learning options has created rich new opportunities for Stony Brook and our School of Continuing Education is moving aggressively to exploit them in partnership with other parts of the university.

One of our major goals is to expand the summer session and intersession offerings. If these are done properly, they may serve as revenue streams and as recruiting tools.

All these activities are exceedingly important to serve the region and to build our student numerator.

In order to achieve our goals we must also enlarge the size of the research enterprise.

The university is a select participant in the Federal Demonstration Project in which eight major federal agencies are following common procedures simplifying the administration of grants. It will afford principal investigators greater authority and flexibility in the management of their funded projects.

Need for Research Growth

The magnitude of our achievement in developing research at Stony Brook is especially compelling when one considers our youth and the stringent financial circumstances in the state and nationally over the last several years.

When one compares our record with those of our peer institutions, however, it is apparent that there is more work for us to do in developing funded research. A cursory review of NSF and NIH summary reports suggests that their average per funded faculty member is several times higher than ours in more areas than we can be happy about, including some departments where the aggregate potential for sponsored research is impressive.

We should look for major overall growth in the College of Engineering and Applied Sciences, especially the Departments of Electrical Engineering and Applied Mathematics and Statistics; in some of the clinical areas of the health sciences, where recent developments have been encouraging, and in the social and behavioral sciences, particularly in psychology and sociology, which are among our strongest departments.

We are delighted by the success of our colleagues in the humanities in obtaining nationally competitive faculty support and will continue to assist these efforts, while urging them — with their colleagues in the sciences — to give more attention to multi-participant projects... the kinds of initiatives which have been so successful in such areas as computer science and where some of our sister SUNY institutions have achieved great success in the humanities.

Centers and Institutes

Although the initiative of individual faculty will continue to be the central focus of the research enterprise, we now have new centers of multidisciplinary strength to help expand and enrich the research and graduate effort.

For the first time in its history, Stony Brook has a rich, diverse array of scholarly institutes and centers: units large and small; applied and basic; units that link different segments of every division and corner of this great university. Not a substitute for individual research, they are a complement.

All our new institutes and centers transcend departments. It is increasingly apparent that the search for new knowledge requires new combinations and recombinations of academic competence. Most of the pressing problems and opportunities facing society must be attended by multidisciplinary teams.

Institutes and centers offer those multiple connections. They offer us opportunities for synthesis and for development of new conceptual paradigms.

Regional Support

Long Island deserves a premier research university. Long Island needs one. If it is to have one, it shall be Stony Brook. We will need help: resources from the state, but we will also have to give of ourselves and our talents. It will take a more generous Stony Brook, a less introspective and a more outward directed university.

Long Island needs its academic and research resources to diversify its economic base into new technologies and markets and secure a prosperous future.

Our university is strong and it will survive... The question is whether it will flourish, whether it will thrive... President Richard Cyert of Carnegie Mellon remarked: Danger stems from too great an emphasis on survival... The university must not only survive, it must survive fruitfully.

That is good advice. If Stony Brook is to 'survive fruitfully,' I believe we must continue our young tradition of articulating and pursuing ambitious and important goals... of taking risks in pursuit of those goals.

Stony Brook has always been brash, bold, impatient... we mustn't lose those qualities. We must be willing to continue to take risks, to continue to explore new approaches to timeless questions as well as to new problems.

Stony Brook has just entered its third decade. In another seven months, we all will be entering a new decade, the decade of the 90s. It will be a decade that will challenge the region.

President Marburger has stated eloquently that the fourth decade for Stony Brook will be the Decade of Refinement. It must also be the Decade of Responsiveness, of reaching out, of reinvigorating, of revving up... of resilience, of resurgence, of renaissance.

Stony Brook is a better university today that it has ever been in its entire history. Never before has the quality of our faculty been higher.

Never before have the quality and diversity of our academic programs at all levels been greater. Never before have the size, diversity and stability of our research enterprise been greater. Never before have the responsiveness, comprehensiveness, and effectiveness of the university's outreach programs been greater, never.

As Long Island's major research university and engine of economic growth, Stony Brook has an unfinished agenda of essential projects that will require patience and constancy of commitment to reach fruition — just as we will have to give our lacrosse team up to a decade — but no more — to reach the top 10.

Stony Brook is rich in opportunities. Remember what Pogo said about opportunities. "Some opportunities are so large they are insurmountable."

Ours are large, indeed they are enormous, but they are not insurmountable.

University Refinement

continued from page 4

but a few favorite faculty. (Not always the same faculty. It appears that practically every professor was someone's favorite.) For faculty, the times must have been simultaneously exhilarating and appalling. Seven buildings on the average were completed each year. The administration concentrated its attention, rightly in my opinion, on forcing the pace of construction while the momentum held. Subtle notions of management; organization, communications, information, control, lines of responsibility, employee development, training, maintenance, ceremony — were implemented to the least degree permitting the campus to operate at all.

But it was not only buildings that got built during that decade. It was then that our exceptionally strong departments developed stability and form. Superstars came and went, but by and large the balance of movement was favorable and Stony Brook built a reputation for high faculty standards that commanded national attention. Near the end of the decade, an updated Master Plan in 1976 acknowledged Long Island's change of course but added little to the original conception of what the campus should be and how it should work. Stony Brook had not yet settled into an operating pattern that could give practical guidance for the next phase of development. In particular, the consequences of rapid construction and inadequate maintenance, the dominating influence of the automobile, the shortage of affordable housing in the region, and revolutionary changes in health care patterns were critical elements missing from the plan. Looking back now on the 1976 Master Plan, one has the impression that the campus it described existed wholly apart from its history and its environment.

The Decade of Consolidation

When I came to Stony Brook early in its third decade, the last major facility of the building years (the Fine Arts Center) had been completed. My predecessors Johnny Toll, Alec Pond and Dick Schmidt had themselves begun the long process of transition from a building to an operating mode. Stony Brook had entered the Decade of Consolidation. The poisonous budget atmosphere of the last years of the building era continued to plague campus efforts to clean up literally thousands of leftover physical plant problems. Many buildings had opened without the usual addition of maintenance personnel, and budgets for supplies and materials went rapidly backward in these years of soaring inflation. But the social atmosphere was easier, if less exciting, for universities. Students were looking more carefully at the origins of their discontent. They were more willing to work systematically for improvements in their own quality of life. Faculty could see the need for attention to academically peripheral operations that were nevertheless essential to the survival of the campus. Everyone was relieved that the construction had come to an end and that now the campus could begin to operate normally.

Stony Brook during the Decade of Consolidation was preoccupied with administration: reorganizations, new ways of budgeting, of working with unions, governance groups, student organizations. Personal computers, inexpensive office automation and clever software became available at precisely the right time to help with the more complicated 'software' the university needed to make its hardware work: a hundred buildings, 12 miles of roads, two power plants employing a rare hot water technology, many elevators

barely functional, endlessly increasing outdoor lighting, laboratories, animal care facilities, and a great diversity of people to keep it all going.

Academic programs have been subjected to the same preoccupation. The past 10 years have seen unprecedented activity in curriculum experimentation, advising systems, administrative relocation of programs, systems of evaluation, decentralization of authority. Student Affairs, University Affairs, Athletics, Residence Life, all experienced a complete metamorphosis during the Decade of Consolidation. The effort has been more difficult than I expected, and progress has been uneven. But Stony Brook works better each year, and we now know that continued attention produces continued improvement.

The Decade of Refinement

And so we come to the end of the beginning. We have Founded, Built, and Consolidated. What next, Stony Brook?

What's next should by now be obvious to all. An institution works best when its motion springs from the energies of its people. All this mud and sweat and pain brought about the conditions for getting something done — or more accurately, for getting many somethings done. Scholars study and write about their various fields; students of all ages learn and grow and commence to powerful careers; artists bend their talents to enrich culture; professionals bridge the gap between practice and scholarship. Physicians heal, teachers teach, and all try to make sense of what is happening around us and communicate our insights to the world. If Stony Brook is ever to achieve its place in the highest rank of universities, it will be because we excel in these diverse but elemental roles.

The most important task for us now is to do what we have already begun to do, only better. More important than new buildings is to do more with the buildings we have. More important than new programs is to make the programs we have excellent. More important — than floods of new students is the enrichment of the student body in talent and diversity. More important than distinctiveness is distinction. Our mandate is broad and we have set ourselves an enormous stage. Few are yet aware of the multiplicity of our accomplishments. Our fame will not be decided by any one initiative. It will be determined by our ability to produce excellence in each of our ventures, not as a special case, but as a matter of course.

That is not to say that growth and consolidation are finished. We need certain additional programs. We need housing. We need research space. We need certain specialized teaching facilities. We need more student activity space, more study space. But these will not be projects that dominate the attention of the entire campus. They will develop in a more or less normal mode alongside the really important work.

Excellence as Routine

Our task is to make of Stony Brook a machine for the creation of excellence. Exceptional accomplishment must be routine. I am not suggesting that excellence may be achieved without supreme effort. But that effort is more productive as it is more concentrated on the central issue. We spend too much of our time fighting alligators instead of draining the swamp. The barriers our students must overcome to realize their full potential should be only the ones they find within themselves. The time our faculty have for scholarship should be wholly productive. Each victory should be over a worthy opponent.

Faculty Excellence

Stony Brook's accomplishments during the past year are a remarkable indication of what we can do now that we are geared up for it. The inside covers of today's program are filled with the names of recent faculty honors and awards. Anatomy professor John Fleagle became Stony Brook's second MacArthur Fellow within two years. No other SUNY campus, and only three others in New York have as many. Our tally of National Academy members increased by one with the election of Ellis Johnson in Applied Math and Statistics to the National Academy of Engineering. Chunhul Zhang of that department and Johanna Stachel in the Institute for Theoretical Physics received Presidential Young Investigator awards. Last week we celebrated the opening of the Howard Hughes Medical Institute Laboratory centered on Neurobiology Professor Paul Adams, our other MacArthur Fellow. Stony Brook faculty proposals attracted two site visits, out of only 48 nationwide (in response to nearly 400 proposals) for the prestigious (but as yet inadequately funded) NSF Science and Technology Center program. There were only five such site visits in the state, the others at Columbia, Cornell and Rochester. Stony Brook was also in good company with this year's five Guggenheim Fellowships, tied with Harvard. None were awarded to faculty at other SUNY institutions. A glance at the program shows all sectors of the university receiving impressive honors this year. . .

Maintaining Faculty Excellence

Stony Brook is in the envious position of having the solid accomplishments necessary to support a stronger image. Our image building is a process of providing eloquent brokers to link faculty, student and alumni accomplishments with interested publics. The accomplishment is there, and it will continue to be there in the future, as I predicted in my 30th anniversary address. Stony Brook has passed the threshold of stability. We are increasingly attractive to the best faculty. Striking evidence for this can be seen in the recent round of new arrivals: National Academician James Glimm, one of the nation's leading applied mathematicians, will come from the Courant Institute to chair our own department in that field. He will enjoy the company of Fields Medalist John Milnor who will come to us from the Institute for Advanced Study to establish a Mathematics Institute as part of the SUNY Graduate and Research Initiative. Milnor has been described as one of the world's greatest living mathematicians.

Other recruitments were equally impressive, including two new deans: Professor Jordan Cohen, formerly Medical Director of Michael Reese Hospital in Chicago now our new Dean of Medicine and Professor Andrew Policano formerly at the University of Iowa, Dean of Social and Behavioral Sciences. The program shows all the senior faculty appointments. I am particularly pleased to draw attention to the appointment of our long-time friend and ally Lee Koppelman, who will lead the creation of the Center for Regional Policy Studies, another venture of the Graduate and Research Initiative. . . .

The Diverse Face of Excellence

The time is past when we could say we have an excellent faculty when so few are representatives of significant minority populations in America. The latest statistics on Black and Hispanic faculty are gloomy. None too soon did Vice Provost Lichter and his colleagues convene a na-

tionally acclaimed conference last fall on how faculty can assist in encouraging more young minority scholars to choose faculty careers. But it is not only meagre availability that is keeping our statistics down. I have become convinced that departments will need to extend their range of interests to accommodate the fields of excellent minority scholars as they become available to us. We are not doing that often enough to take advantage of the opportunities that do present themselves. Our success in attracting and keeping talented minority students, faculty and staff is highly sensitive to the social atmosphere of our campus.

In last year's convocation series, Provost Schubel introduced the important concept of bonding to the university. 'Bonding' can be enhanced through events and activities specifically designed to bring people together, and I am pleased to see more such opportunities on campus: the Faculty Club in the Chemistry Building produced by Provost Schubel's office, the Employees Activities sponsored by the Office of Human Resources and the Employee Relations Council, an increasing number of awards, recognition dinners, etc. But we must work harder to avoid certain kinds of personal behavior that can destroy bonding before it has a chance to form. We need to value simple courtesy in dealing with each other, to try harder to understand the conditions of each others' jobs, and to acknowledge cultural differences as normal. As an institution seeking to prepare people for a society enriched by many cultures, we are especially obligated to create an atmosphere of objective and tolerant treatment of persons from different ethnic, religious or national origins.

An important part of Stony Brook's process of refinement will be the development of behavior among students and employees that celebrates personal diversity and makes everyone feel a productive part of our machine for excellence.

Excellent Curriculum

The concept of Stony Brook as a machine that creates excellence is particularly clear in the process of education. Set aside the negative connotations of an 'educational machine.' I am referring to the wholly positive notion that the wheels of the university should mesh together to help our students at each step in their passage through our particular brand of higher education. From recruitment and admissions, through registration, billing, advisement, course selection, instruction, and evaluation, to commencement, career placement, and continuing education, the university should present a helpful and consistent aspect to each student. Current actions carried out under the vigorous leadership of Acting Vice Provost for Computing and Communications Robert Schneider are bringing better technology to bear on these operations. But it is not only the various systems of keeping track that need to mesh and produce consistent results. We also bear responsibility for the coherence and consistency of the content of our educational offerings.

The graduate curricula are usually fixed by the canons of each well-defined field of scholarship. Everyone agrees that within the sum of these fields there are all the necessary elements of an excellent undergraduate curriculum. But no one department feels responsible for shaping this potential into a coherent scheme. The undergraduate curriculum, insofar as it goes beyond a departmental specialty,

continued on next page

must be the responsibility of a 'meta-department.' At Stony Brook this function is performed by the Office of Undergraduate Studies. Steady curricular improvement requires faculty responsiveness to the direction provided by this metadepartment. Currently, each advance in curricular quality is gained in special initiatives at tremendous expense of time and energy. But like the other forms of excellence we have been discussing, continued excellence in undergraduate curriculum requires institutionalization of the curricular improvement process.

That will not occur until each faculty member and each department chair understands that curricular improvement is part of the normal job description and that its direction comes at least partially from outside the department. The dawning consciousness of this idea, already well advanced in some departments, is part of the Refinement I am speaking of today. Vice Provost for Undergraduate Studies Aldona Jonaitis deserves much praise for lifting the groaning weight of our current general education program out of the murk and shoving it toward dryer ground. Please lend her your oars.

Excellent Students

The point of all this curricular excellence is to produce excellent students. A peculiar attitude regarding student excellence pervades higher education today: one would think that the objective is to admit the most excellent students to our programs. That seems to me somewhat wrongheaded. Our objective must be to produce excellent alumni. Our product is the 'value added' of education. I am reminded of the studies widely publicized earlier this year that disclosed a debilitating American attitude toward learning mathematics. Here we act as if mathematical talent were a gift from heaven to a rare few, and if you don't have it, don't even think about a career like engineering, science or economics. In other countries, it is assumed that anyone can learn mathematics, and consequently everyone does. Is our attitude toward 'admission standards' any more rational than our attitude toward learning mathematics?

I am not suggesting that anyone can take full advantage of a Stony Brook education regardless of preparation. But I deplore the fixation on credentials at matriculation as opposed to excellence at commencement. Our objective should be to encourage talent and aim for diversity among our students reflecting the diversity that we find in society at large. I too would like to see a higher percentage of our entering freshman class devoted to high-achieving students, because we are not getting our share of such students now. The real problem with the Stony Brook freshman class is that we do not have as much control over its composition as we would like. That can be fixed by refinement of the recruitment process to increase the applicant pool and the yield rate on offers of admission. I am very pleased to report that our new Dean of Enrollment Management, Theresa Larocca-Meyer, has already introduced substantial improvements in our recruitment and admission process that are certain to produce some of the necessary refinements. This is also the time to congratulate Vice President for Student Affairs Frederick Preston on his persistent and highly effective efforts to improve the entire cycle of student services. The task of consolidation of this formerly chaotic area was begun by his predecessor Elizabeth Wadsworth, but Fred has completed the task and initiated an entirely new level of refinement. . .



Excellence Everywhere

"In her fourth decade," I asserted last year, "Stony Brook must value excellence not only in academic affairs, but in every aspect of her operation" and furthermore, "Stony Brook will look better and work better" and "we must decrease the time it takes to get things done to carry out our mission." All of these assertions were linked to the determination to refine management and its associated technology to a level of quality "commensurate with our stature as a great research university." To achieve this I promised that "Stony Brook will continue to make bold administrative changes to adjust to changing needs and environments."

Apart from the spectacular successes in faculty recruiting, no other campus events of the past year promise as profound an impact during the Decade of Refinement as the changes that followed the work of the Committee on Administrative Organization chaired by Robert Liebert. Using their report as a guide, and working with administrative colleagues who were prepared through two years of thoughtful analysis, we have introduced a new generation of leadership in the areas of administration, finance, and campus services.

One important change is an expansion of my office by transferring certain functions and positions from other areas. Professor Stan Altman is serving as Deputy to the President for two years to define the position for a permanent successor. Carl Hanes has become Deputy to the President for Special Projects, the most important project being the creation of a cogeneration facility for the campus in order to provide utilities below current cost. He is also working closely with Professor Peter Kahn whom during the summer I appointed Presidential Fellow on Energy Conservation. Together, and in collaboration with physical plant personnel and others throughout the campus, they have achieved an exceptional reduction in our rate of energy consumption. This is especially important because of the substantial underfunding of our utility budget this year. The changes in my office are generally in accord with the recommendations of the Organization Committee that urged an increase in administrative mechanisms to ensure accountability in the behavior of other campus units.

It is difficult to trace specific results to any such general reorganization, but to my eyes the campus does look better. It seems to me that it is working somewhat better too, with the decentralization of purchasing, improved bus service, better bookstore operation, better management information to administrators, more training, and more reporting in critical areas such as dormitory conditions. These areas are

being transformed by new ideas brought by managers new to their roles at Stony Brook: Dick Brown, Richard Young, Tony Aydinalp, Dick Wueste, Louis Rose, George Mahshi. They are part of the new era of refinement.

The Master Plan

On top of all this we have in progress the updating of the Comprehensive Campus Master Plan. The aim of that exercise is to map out refinements to the physical situation of the campus. Key issues are traffic flow, access to buildings, parking, improvement of the campus/community interface, landscaping, creation of formal spaces, signage, etc. In each case we expect to identify 'capital' projects for special funding to solve major long-standing problems. SUNY is cooperating closely in this venture.

The Cost of Refinement

But can we afford these refinements? Aren't widely publicized state financial problems a major obstacle to further progress at Stony Brook? Before I address this question, let me point out that only 43% of Stony Brook's combined annual budget comes from state tax dollars. The rest comes from tuition, hospital revenues, dormitory fees, federal grants and contracts, fund raising and corporate sponsorship. The operations supported by these revenues are relatively stable with respect to fluctuations in state support. Furthermore, we are proposing that some of our most needed projects should be funded from non-state financial sources. The conference center project, still moving toward a construction start date within the next 10 or 12 months, will be privately financed. Similar arrangements can be made for faculty and staff housing, the cogeneration facility, the ambulatory care extension to University Hospital, the proposed incubator building, and others. These projects can move ahead as long as the need exists for them. . .

Doing More with More

As we make our case for scarce state support and manage our resources ever more jealously, we must continue to increase support from the other sources. The flat spot two years ago in our dramatic growth in sponsored research has kinked back up again into the old exponential pattern. This is an extremely important source of funds for the campus, and I have pledged my full energy in securing the greatest possible benefit from it. I have worked for years with SUNY administrators and other university center presidents to get more of the indirect cost portion of sponsored support back to the campus. Our labors are beginning to have some effect, and none too soon. This is a refine-

ment that will help us weather the serious budget storms ahead.

In mapping out new ways of using our resources and tapping new reservoirs of support for Stony Brook, no one has been more imaginative and energetic than our Provost Jerry Schubel. Lest there be any doubt at all about it, I am stating here clearly that the changes Jerry is making in the use of funds available to the academic sector have my full support and will be a permanent part of the refinement of Stony Brook budget practice. I refer to his insistence on efforts by units seeking funds to garner funds from other sources, of his habit of providing seed funds for worthy projects that can eventually fund themselves, of his ideas about how overhead from sponsored research should be used, of his desire to fund more technical support to investigators from such funds, of his demand that tough decisions about priorities be made by deans and department chairs. We may be able to refine how we go about implementing Jerry's philosophy, but we are not going to find a better sense of what is needed for the budget environment of the future.

Foundation of Future Success

The effective implementation of the philosophy of selfhelp that Jerry espouses requires additional investment of resources at the interface between us and our potential benefactors. Vice President for University Affairs Patricia Teed has wrestled with the problem of escalating demands for services far in excess of the capacity of her office to deliver them. But the results, at least in fund-raising, are astonishing. Under the able directorship of Denise Coleman the assets of the Foundation have grown fivefold in four years to their current value in excess of \$10 million.

It is the Stony Brook Foundation with its subsidiaries and partnerships that provides the vehicle for non-state development of the major capital projects I mentioned earlier. The Pollock/Krasner House and Study Center is now a going operation under the auspices of the Foundation. On other development fronts, the organization of our alumni is progressing geometrically, and our Annual Fund Drive, introduced by Denise only four years ago, will bring in more than \$200,000 this year. This is truly one of the mechanisms whose refinement will produce endlessly to our benefit. . .

Optimism or Empiricism?

Because I have been consistently upbeat about Stony Brook's growth and survival, I have been called an optimist. But I no longer think of my attitude as one of optimism. I am a scientist, and I take reality more seriously than I do my dreams and ideas about what may be. If you look back over the 30 years of Stony Brook's history, you will see what I see: strife and turmoil, even at the beginning. The campus has nearly always been perceived as poised upon the brink, or on the threshold, or facing great opportunities and great perils. For 30 years. And all that time we were growing and getting better.

Isn't it time, after 30 years, that we faced up to the fact that Stony Brook is after all a pretty stable phenomenon? As we enter the Decade of Refinement, let us institutionalize our confidence about the future. Let us not be shaken by every detraction. We are good. We are getting better. And the pace is accelerating. With your help, and God willing, the Decade of Refinement will last for centuries.

Master Plan

continued from page 1

traffic. For example, it is proposed that Center Drive be moved to the north of the current Stony Brook Union Building and fieldhouse, eliminating the roadway that students currently must cross from the direction of the Melville Library and Staller Center for the Arts.

- **Parking.** Two parking garages should be built on main campus and two should be built at the Health Sciences Center. The many small lots adjacent to academic buildings on the main campus should be consolidated in larger lots further out from the interior, freeing up space for improved service, handicapped access and aesthetics. South 'P' lot should be landscaped and—as a security measure—a kiosk placed at its center to house a satellite office of Public Safety.

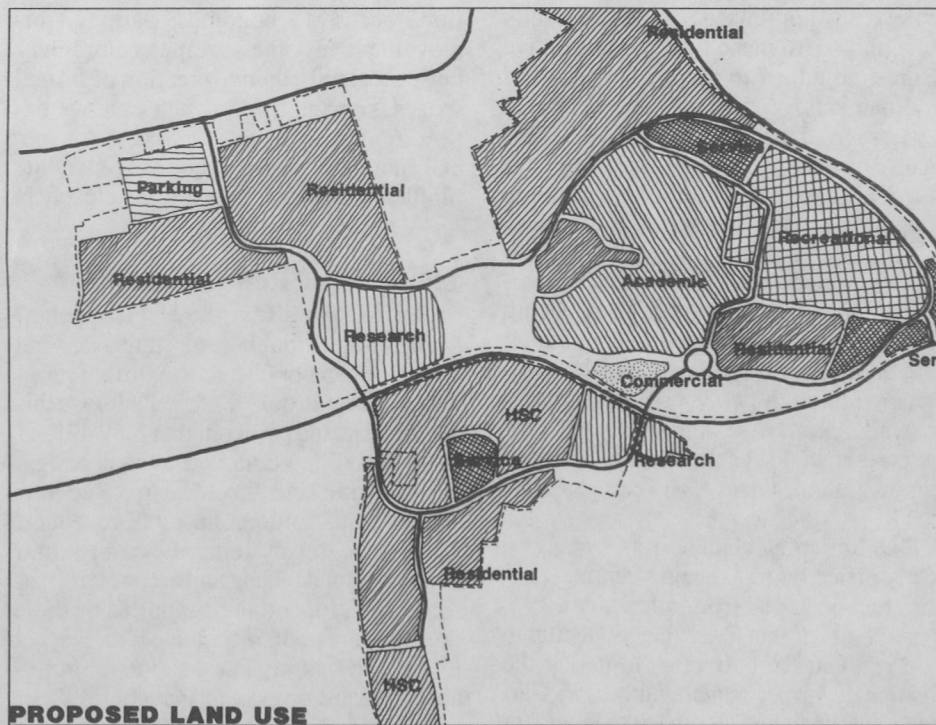
- **Athletic Facilities.** The gymnasium should be expanded to include an Olympic-sized swimming and diving pool, and a stadium for lacrosse and football—seating as many as 12,000—should be constructed.

- **"Front Door."** Signs and ornamental walls or gates should be placed at the north and south borders of the campus on Nicolls Road, reinforcing a sense of Stony Brook as a single campus. A traffic circle off the current main entrance should be built to improve the flow of cars in the vicinity of the Administration Building and Staller Center. A dramatic "front stairway" should bring pedestrians from the Staller Center circle onto the Academic Mall.

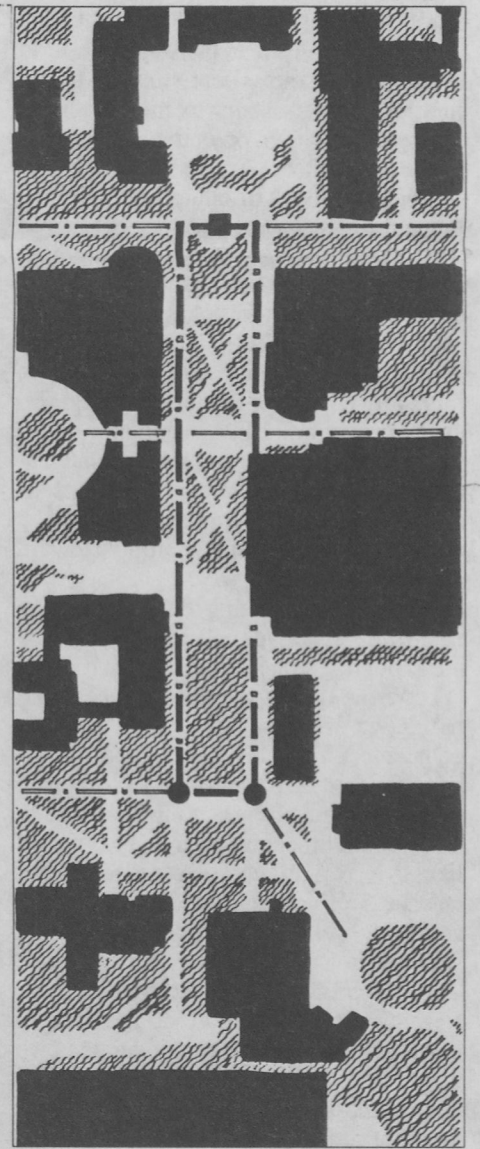
- **Housing and Buffers.** Student enrollments are projected to increase relatively slightly over the next 25 years, but additional construction is needed to house graduate students who currently live off campus. To effectively recruit faculty and staff, moreover, the university must counter the high cost of living on Long Island by offering housing at reasonable prices. The architects propose that the university designate for such residential uses sites in the vicinity of South "P" lot, west of the Chapin Apartments and north of the Veterans Nursing Home, and near Kelly Quad in the northwest corner of the campus. Noting that the buffer between the university and surrounding neighborhoods has deteriorated in several places, the architects recommend significantly enhancing the buffer around the entire perimeter. The architects also recommend building day care centers on both sides of Nicolls Road in those areas developed for residential use.



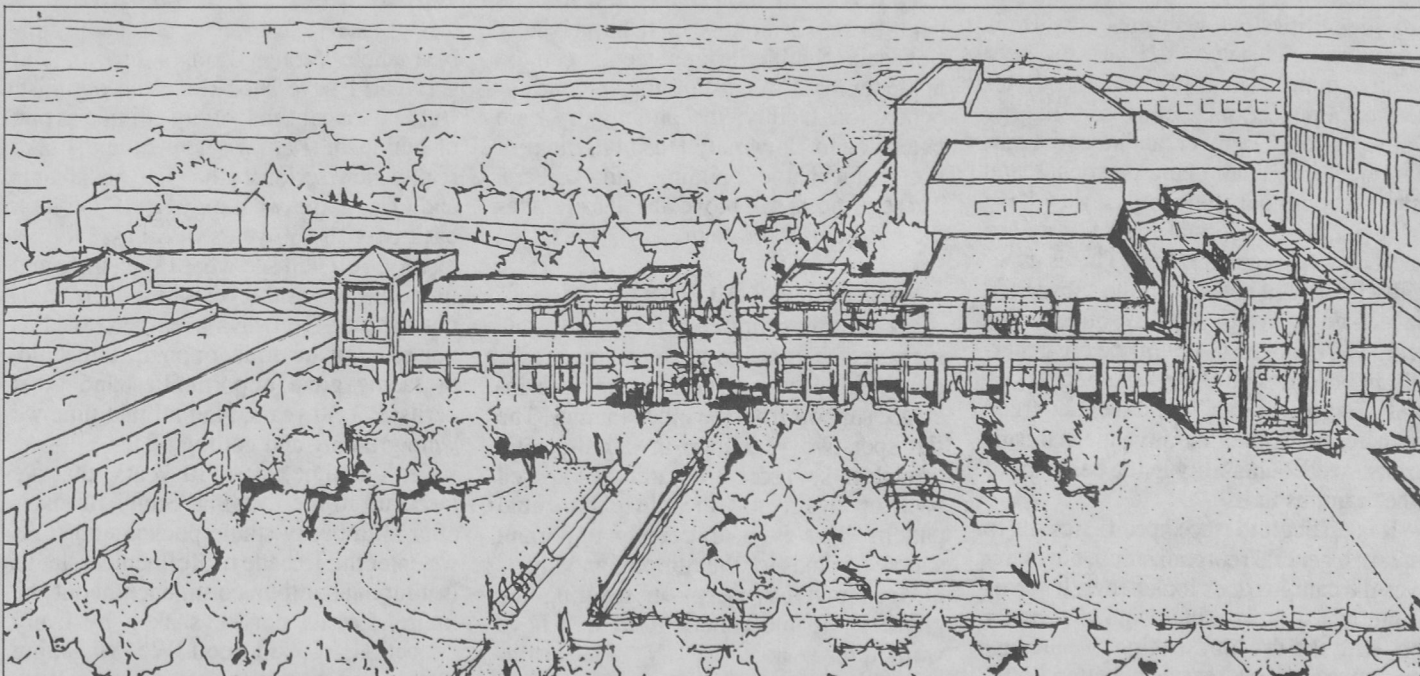
The overall plan of the core campus. Black areas indicate the construction of new buildings or additions to existing structures. Other significant features include the relocation of Center Drive, a defined Academic Mall, and the conversion of Central Hall into a student activity center.



PROPOSED LAND USE
The proposed master plan defines the use of university property.



The university would regard as the central focus of the main campus the rectangular area defined by the Administration Building on the east end, and the Science Quad on the west end. This area, designated the "Academic Mall," would be landscaped with trees, grass and benches. As core buildings on the mall, Central Hall, Old Chemistry and Melville Library would undergo extensive renovation. Additional classroom and office space would be constructed in Old Chemistry to accommodate its increased use. Removable barriers would also be constructed to limit vehicular access to emergency vehicles on the mall.



With Center Drive relocated to the north of the Stony Brook Union, the bridge connecting the union with Melville Library would be redesigned and enclosed. Small shops would be placed under the bridge.

Academic, Personal Achievement Recognized in Student Awards

At year-end ceremonies, more than 100 students were recognized not only for their academic achievements, but for their contributions to the university community as well. Additional award recipients will be acknowledged in Currents' July issue.

Ward Melville Valedictorian Award, to Dina L. Sbare, is given to the graduating senior who has attained the most outstanding academic record during four years at Stony Brook. This is USB's most distinguished undergraduate honor.

H. Lee Dennison Valedictorian Award, to AnnMarie Cassandra, is presented to the graduating senior who entered Stony Brook as a transfer student, completed at least 60 credits of letter grade work at USB, and attained the most outstanding academic record at USB in that work.

University Association's Junior Class Award, to Keith Ebenholtz, Christine Carniaux and Michelle Pine, is presented to "outstanding juniors in recognition of academic excellence and personal contributions to the university community."

Class of 1970 Scholarship, to Veronica DiFresco and Jennifer S. Greenfield, is awarded to "freshmen in good standing who have made the most significant contributions to the university."

Undergraduate Research and Creative Activities (URECA) Award, to Matthew D. Sims, Demetrius Moutsiakis and Lisa A. Hannan, is awarded to assist students pursue projects related to their major.

Elizabeth Couey Award, to Peter Kang,

is presented to a graduating senior who exemplifies "those qualities which made Elizabeth D. Couey unique and the most human of beings: to listen with understanding, to guide without boundaries, to give and take with love, and to grow with the passing of each day."

Creative Writing Awards; Playwriting, Frances L. Baer; Poetry, Peggy Roth; and Fiction, Joann Kirkland.

Senior Scholar Athletes of the Year, to Noreen J. Heiligenstadt and Robert Henry.

Freshman Essay Contest Winners; first prize, Tracy Gaylord; second prize, Kevin Stevens; third prize, Jared Feldman.

Babak Movahedi Senior Leadership Award, to Michael Randall, is presented to "a graduating senior who has made a significant change in the campus environment by bringing together various constituencies through the development of community life."

Larry Roher Undergraduate Entrepreneurial Achievement Award, to Jeffery Brenner, is presented to an undergraduate "who has assisted in Stony Brook's quest for excellence and improved quality of life through innovative thought and actions."

Ashley Schiff Scholarship, to Nancy Schaefer, is awarded to "a sophomore in good standing who has made a significant contribution to campus life and/or has made contributions toward conserving and preserving the local environment."

The Senior Leadership and Service Award is presented to graduating seniors "who have made an outstanding contribution to campus life through leadership or community service: The following seniors received the award:

Jeffrey Altman, computer science and business management; Ricardo Avila, computer science; Fern Becker, social sciences; Gerard Brandenstein, liberal studies; Jeff Brenner, business management; Alfonso Ciervo, chemistry; John Cucci, psychology; Mark Defranza, physics and electrical engineering; Zachary Dowdy, English; and Luis Gomez, Hispanic languages and literature.

Also Kim Hutchinson, liberal studies; Marc Joachim, political science and philosophy; Peter Kang, liberal studies; Josie Larouche, liberal studies; Christine K. Liese, philosophy and French; Lily Liy, liberal studies; Ramin Mollaaghababa, chemistry; Kathryn Robshaw, liberal studies; Robert Shapiro, political science; and Gerry Shaps, political science.

Also Kyle Silfer, humanities; Gary Stuart, liberal studies; Elyse Sussman, liberal studies; Kurt Widmaier, liberal studies; Brian Wildstein, chemistry; and Christine Wolff, economics and business management.

The Undergraduate Excellence Award recognizes "the special achievements of undergraduates who have demonstrated excellence in a wide range of categories including, but not limited to, the performing and creative arts, academic research, leadership, and service to the campus community." The following students received the award:

Kenneth Abbott, earth and space sciences; Karen Acuna, physician assistant; Glen Anderson, chemistry; Crystal Avery, English; Jorge Baez,

biochemistry; Fern Becker, social sciences; Kathy Bedrick, biology; Anna Bentsianov, biochemistry and Russian; Chantal Bernard, political science; and Gerard Brandenstein, liberal studies.

Also Thomas Burger, sociology; William Capozzi, theatre arts; Ron Capri, liberal studies; Tina Ya-Ting Chan, mechanical engineering; Christopher I-Ming Chen, undecided; Joseph Citeno, mechanical engineering; Michael Doall, psychology and biology; Mark Defranza, physics and electrical engineering; John Dougherty, economics and French; and Zachary Dowdy, English.

Also Diane Egan, English; Nancy Gade, biochemistry; Yen Giang, political science; Ramin Ghobadi, biochemistry; Aleksey Gleman, liberal studies; Freddy Gomez, biochemistry; Joan Hainsley, nursing; Nadine Halko; Britt Hansen, studio art; and Leslie Hathaway, liberal studies.

Also William Hawkins, biological sciences; Clifford Heller, electrical engineering and computer science; Melinda Hess, cardiorespiratory sciences; Beth Hofer, physical therapy; Marie Iacobellis, political science; Ken Ilchuk, liberal studies; Christopher Jay, economics; William Kaneversky, philosophy; Paul Klyap, interdisciplinary social science; and Fardad Kordmahaleh, electrical engineering.

Also Esther Lastique, history; Gregory Laub, biological sciences; Susan Levy, social welfare; David Lewis, psychology; Kyle Liese, philosophy; George Linger, engineering sciences; Barbara Miller, studio art; Noreen Mimmo, medical technology; Ramin Mollaaghababa, chemistry; and Suzanne Nevins, liberal studies.

Also Eric Noel, electrical engineering; Donna Panico, nursing; Dave Peng, engineering; Janie Phear, physician assistant; Jon Ryan, business management and economics; Talin Shahinian, English; Diane Shaljian, English; Amelia Sheldon, English; Nadine Shelton, business management and economics; and Kyle Silfer, humanities.

Also Ingi Sökk, music; Mitchell Solovay, history; Christina Vaccaro, theatre arts; Gina Vanacore, applied mathematics and economics; Joel Velasco, biochemistry; Jeanie Waters, political science; Mary Ann West, chemistry; Helen Willeboordse, philosophy; and Christine Yu, computer science.

Students Honored by Grumman

Fourteen students enrolled in the College of Engineering and Applied Science received undergraduate scholarships and a graduate fellowship from the Grumman Corp. of Bethpage.

Sharon Grosser, Grumman's manager of community support programs, said, "Grumman is pleased to honor these students, and to assist them as they acquire knowledge and expertise that will benefit Long Island's high technology industry."

James Emslie received the first \$10,000 Grumman Fellowship in Engineering, which was funded by a \$125,000 endowment from Grumman. Mr. Emslie, who received his undergraduate degree from Stony Brook in mechanical engineering, will pursue his master's degree in engineering at USB.

Grumman provided \$2,000 scholarships to undergraduate students and incoming freshmen for the first time in fall 1987. It has pledged to continue the annual scholarships while contributing funds to build an endowment of \$275,000 to ensure the funding in perpetuity.

This year's freshman recipients

were: Matthew Bilello, mechanical engineering; Gregory Burke, mechanical engineering; Michael Lubrano, mechanical engineering; Christine Quiery, electrical engineering; and Bonnie Smart, electrical engineering.

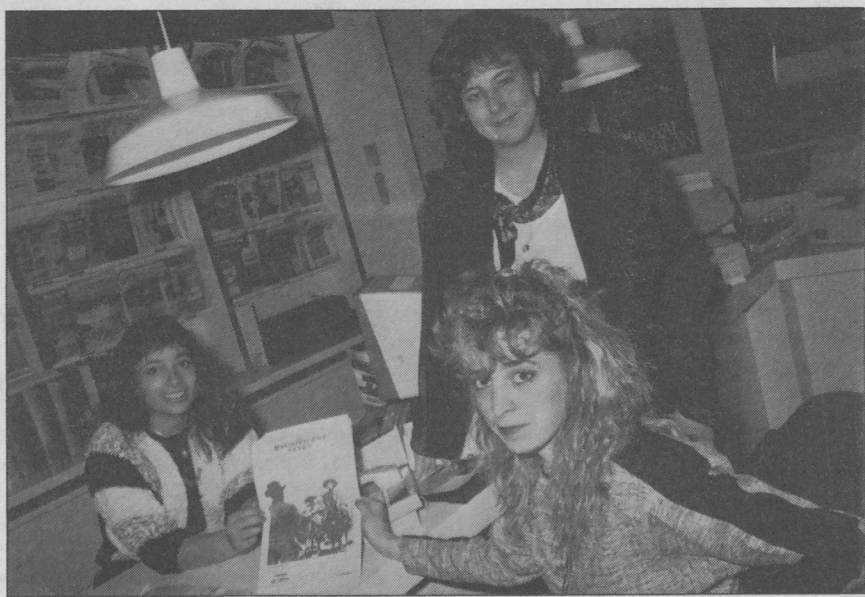
The continuing student recipients were: Rajesh Bendre, senior, electrical engineering; Craig Bratter, junior, electrical engineering; Wallace Marshall, senior, electrical engineering; Eric Olsen, sophomore, electrical engineering; Arun Seraphin, junior, engineering science.

Four students received scholarships for minority undergraduate education, given this year for the first time. The \$2,000 awards were created with a \$5,000 donation from Grumman and an additional \$3,000 from SUNY's Empire State Minority Honor Scholarship Program.

Recipients were Joseph Citeno, senior, mechanical engineering; Adolph Everett, senior, mechanical engineering; Gustavo Nino, senior, electrical engineering; and Noel Doharris, junior, electrical engineering.

Sue Risoli

The Magnificent Seven Grand Prize Winner



Jody Rivera, left, of Omega World Travel, and Sue Walsh, center, from Auxiliary Services present Wendy Holland with a trip to Florida on USAir. The trip was the grand prize of the Magnificent Seven promotional event at the bookstore which was sponsored by Omega Travel.

Women's Studies Program Recognizes Four Seniors

Four seniors were recognized by the Women's Studies program for their exceptional efforts.

Janet Burns was honored for completing her coursework in the evening while working as a computer analyst during the day. She majored in social sciences with a minor in women's studies.

Certificates were also given to Susan Helms, Sondra Stanton and Shawna Young for their efforts to raise women's issues on campus and in organizing "Take Back The Night" in April to promote women's safety.

Flotation in Salt Water May Help Those with Cerebral Palsy

Floating in a clam-shaped fiberglass tank filled with warm salt water may not appeal to everyone, but its beneficial effects on children with cerebral palsy may help these youngsters learn to walk and move like their peers.

Physical therapists Patricia Ramo and Janice Sniffen of the School of Allied Health Professions are conducting a pilot project called R.E.S.T. (Reduced Environmental Stimulation Therapy), floating children with cerebral palsy for 20 minutes in a saturated Epsom salt solution.

Flotation tanks have been around for decades, but the idea never caught on, even though proponents claim the therapy can relieve stress, chronic pain, hypertension and enhance creative and learning processes. Its effects on patients with Parkinson's disease, arthritis and strokes are also being studied at USB.

Two tanks manufactured by Enrichment Enterprises of Babylon have been provided to the school by the Sensorium Corp. of Huntington, which is seeking therapeutic applications of the tank.

"Out of curiosity, I wondered what would happen if children with CP floated in this tank," Ms. Ramo said. With this in mind, Ms. Ramo and Ms. Sniffen

identified a dozen children they had worked with for a one-time float. Parents were asked to fill out a follow-up questionnaire. In some cases, the results were dramatic.

Smiling and excited, eight-year-old Diana Passarelli of Smithtown, who is unable to walk, was handed into the arms of Ms. Sniffen, who was seated in the tank. The child lay back in the soothing water while Ms. Sniffen guided her body and supported her head.

Within seconds, the little girl's normally taut, high-pitched voice dropped and her enunciation became more distinct as her throat and neck muscles relaxed. After she was lifted from the tank, Diana could stretch out one of her normally bent legs and nearly accomplished the same with the other.

"We see a significant increase in flexibility without pain as compared to a half-hour of stretching by a therapist," said Ms. Ramo.

Ms. Ramo also reported that some of the children slept through the night for the first time after floating.

Not everyone had as dramatic results as Diana's. Twelve-year-old Jamie Schagat of East Islip, who can walk on her own, felt good after her float and her range of



Janice Sniffen, a physical therapist in the School of Allied Health Professions, supports Diana Passarelli in the flotation tank. The water is skin temperature salt water.

motion increased. But the following day, she had difficulty standing because her muscles had relaxed to the point that her legs would not support her — temporarily.

"We're willing to try therapy that might help her or someone else," said Marjory Schagat, Jamie's mother.

No one is drawing conclusions just yet. "It looks promising," the researchers say. "It's a useful tool, but we have to be

selective about the kids who use it." Ms. Ramo is quick to stress the results are temporary. "This is not a cure."

The researchers do not yet know the effects of regular, frequent floats, Ms. Ramo said. She still wants to explore what the optimum treatment might be, whether floats should become a regular part of the physical therapy program for children with cerebral palsy.

Tamar Asedo Sherman



After a 20-minute float, Diana's muscles relaxed significantly. Patricia Ramo, left, a physical therapist in the School of Allied Professions works with Ms. Sniffen, center, to straighten Diana's legs. Diana was able to straighten one leg completely and almost accomplished the same with the other.

Social Welfare Students Support, Help Homeless Families in Suffolk County

Life is a bit more manageable for homeless families in Suffolk County, thanks to people like Lorraine Petraitis, William McDonald and Lauren Zambrelli, graduate students in the School of Social Welfare.

"Homeless families who are moved from one community to another lose whatever support systems they had," says Betty-Jean Wrase, associate director of child welfare training programs for the university.

"Single mothers with preschool children have no one to watch their kids while they look for housing or get food," she says. "Many homeless people don't have transportation, so they can only shop within walking distance."

That's where the field placement

students come in, not as babysitters or drivers, but as counselors and helpers.

Often serving as advocates, the students help obtain the necessary services for the homeless families. All students in social welfare must fulfill field placement requirements. Eight have decided to work with homeless families at the Ronkonkoma Inn, the North Brookhaven Family Shelter, the Lakeview Motel in Yaphank and the Starlite Motel in West Babylon.

"A homeless family's primary goal, of course, is to find housing, but they also need food, clothing, medical care and schooling," notes Ms. Wrase.

If a child is moved from one school district to another, the county will provide

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Regular Exercise More Important Than Type in Weight Loss Program

People often claim they are just too busy to exercise regularly. That leads Steven Jonas, M.D., a professor of community medicine, to conclude that the biggest barrier to regular exercise is not the exercise itself, but the regularity of it.

Author of the book called *I-Don't-Eat (But-I-Can't-Lose) Weight Loss Program*, Dr. Jonas insists that dieting without exercise is, in most cases, doomed to failure. A convert to exercise, he found himself huffing and puffing at the top of a convention center ramp before he decided it was time to do something about his sedentary lifestyle at the age of 44.

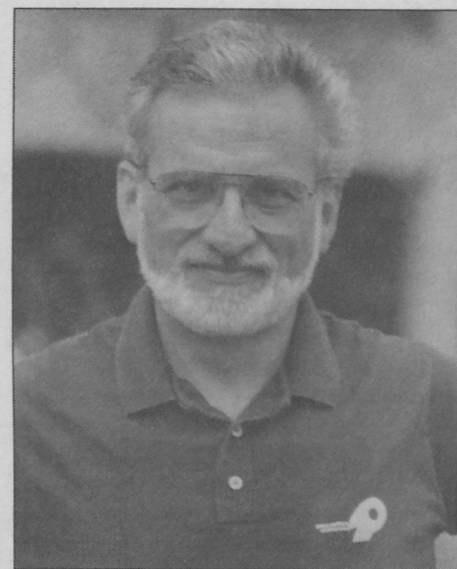
Eight years later, Dr. Jonas now finds himself more fit than ever before. He is now hooked on exercise to the extent that he regularly participates in triathlons and marathons.

Most weight loss books devote only a few pages to exercise, but his book claims that exercise and diet are integrally bound. Published by Rawson Associates, his book was selected as one of the year's six best diet books by *USA Today*.

Dr. Jonas contends that many people gain weight as a result of chronic dieting. They are suffering from a condition he calls "Low Calorie Overweight," brought on by years of dieting. The body reacts as if it is being starved. As a result, the body reduces its resting metabolic rate, making it difficult to lose weight even on a highly restrictive diet.

His "IDEAL" (I Don't Eat A Lot) plan, developed in conjunction with Virginia Aronson, a dietician and former nutritionist and writer at Harvard, combines low-fat eating with regular exercise for a healthy lifestyle and gradual, permanent weight loss.

Many people say they can't find the time to exercise. Dr. Jonas recommends a



Steven Jonas

10-minute walk, three times a week. After two weeks, increase to 20 minutes three times a week. By the time four weeks have elapsed, people are developing the habit of exercise.

The hard part is not mastering the exercise or chosen sport, says Dr. Jonas, but mastering the schedule. Once you get into the habit, keep it up. Avoid getting discouraged by setting appropriate goals.

"It doesn't matter what the exercise is," Dr. Jonas contends. It doesn't have to be aerobic, either. "Any exercise is useful in a weight loss program. Aerobic exercise is just more efficient." Exercise increases the body's metabolic rate so that calories are burned faster, even when the body is at rest.

Dr. Jonas has written seven books, including *PaceWalking: The Balanced Way to Aerobic Health and Triathloning for Ordinary Mortals*.

Tamar Asedo Sherman

'Captain Can' Delivers Message to Area Youth

Wearing dark blue tights, a blue cape and red briefs, Captain Can stood ready to battle his archenemy Trash Man in a skit before more than 80 students at Ward Melville High School in East Setauket.

The mock duel was part of a presentation about recycling by USB students who are members of the New York Public Interest Research Group (NYPIRG). The NYPIRG students are taking their show on the road to elementary and high school students on Long Island to educate them about the need to recycle.

"We're beginning with the high school and elementary students so they can carry the message home to their parents," said

NYPIRG projects coordinator Kit Kimbely. "Also, they are the future citizens, businesspersons and legislators of society."

The presentation includes a skit about the history of the world set to rock music. As part of the play, Trash Man and his cohorts run around the stage dumping garbage. Then Captain Can comes to the rescue by battling Trash Man and his evil ways.

NYPIRG has also worked to encourage USB students to recycle on campus. Seven NYPIRG student interns and other interested students have worked with the USB administrators to establish a paper recycling program for the residence halls.

Under the program, spearheaded by Curtis Fisher, student representative for the campus recycling committee and NYPIRG campus recycling project leader, students dump their paper trash in boxes located in common areas in the residence halls. The trash is then picked up by campus custodians.

As part of the effort, three aluminum can recycling and deposit redemption machines will be installed on campus in the Stony Brook Union, and in two residence halls, Schick College and Hand College.

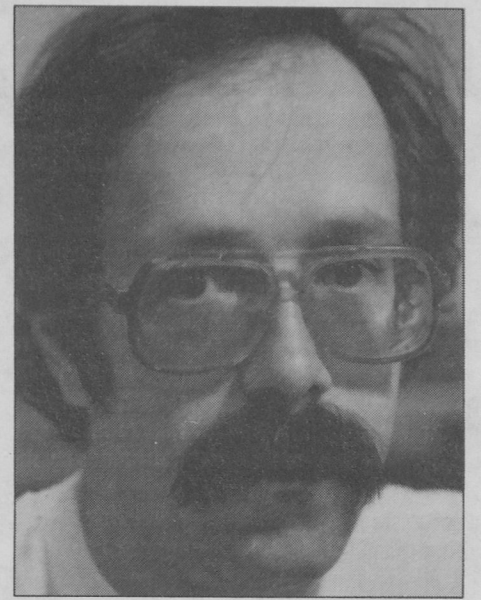
USB stepped up its campus recycling program in September, 1988, by placing paper boxes in offices and encouraging faculty and staff to recycle. The program has recently been expanded to University Hospital and the residence halls.

USB has saved \$10,000 to \$13,000 a month on its garbage bill since its recycling program began, said Ken Fehling, campus waste management and recycling coordinator.

Currently, the university spends \$19,000 to \$24,000 a month on garbage collection, \$1,000 to \$6,000 below its \$25,000 budget, and recycles 10 tons of paper each week. Mr. Fehling said the university hopes to trim more than \$100,000 off its \$380,000 a year garbage bill for the main campus and the Health Sciences Center.

Not only is the university saving, but it is also making money. The university is selling computer paper for \$162.50 a ton; office ledger for \$62.50 a ton; newspaper and magazines for \$10 a ton; and cardboard for \$12.50 a ton. Mr. Fehling noted that this income is returned to the recycling budget.

Wendy Greenfield



Richard S. Finkelstein

Computer Technology Used to Build Sets for Soviet Performance

The musical *Peter Pan* is about to embark on a three-week tour in the Soviet Union; the sets were designed by Richard S. Finkelstein, assistant professor of theatre arts.

Performances by the Albany-based Empire State Institute for the Performing Arts (ESIPA) have been sold out in Moscow's *Natalia Sats* Musical Theatre for six months.

Sets that Mr. Finkelstein designed for ESIPA's home in the unique "Egg" theatre in Albany had to be redesigned to fit the massive stage in Moscow. "While the design for the curved Egg was based on visionary geometric possibilities, the design of the theatre in Moscow was based on sheer power and majesty," he said. The stage there is only slightly shorter than the main stage area at The Metropolitan Opera in New York City.

"We needed to formulate a design scheme capable of effectively filling a giant opera-scale stage. It had to delight audiences used to the splendor of the Bolshoi Ballet and Opera, and then had to work equally well within that egg-shaped space suspended seven stories above-ground in Albany."

Relying extensively on the DesignCad computer program, Mr. Finkelstein updated, refined and revised all spatial relationships and dimensions. "DesignCad 3-D is masterful at generating two-dimensional perspective views from three-dimensional spatial forms. The theatre designer, however needs more," he said.

"The theatre designer must be able to reduce three-dimensional spatial forms to a foreshortened perspective view, also in 3-D." For the nursery sets, for instance, he had to build a set to look twice as large from the audience as it is in reality.

"To this end, every wall had to be angled differently along two axes by traditional formulas dating back to the Renaissance," according to Mr. Finkelstein.

Readjusting the staging was especially difficult for scenes that feature six people flying, he noted. The stage in Moscow has different rigging with overhead lighting bridges that are large, cumbersome and unevenly spaced. "Scenery cannot fly through these structures. Neither can humans," he noted.

And while many artists are afraid of technology, Mr. Finkelstein says he feels comfortable with both hand-drafted and computer-generated designs. "Drafting full elevations and sectional views would have been an absolute nightmare without the aid of CAD technology," he said.

Tamar Asedo Sherman



PAT COLOMBARRO

Students perform a skit about the benefits of recycling at Ward Melville High School. From left, Mike Doall, Mark Acriche, who plays Captain Can, Sean Murphy, Tony Aibe and Peggy Parro.

Behavior Problems Averted with Improved Communication

When children act out due to frustration, boredom or lack of attention, and their behavior becomes problematic or violent, what is the most effective way for the parent to respond?

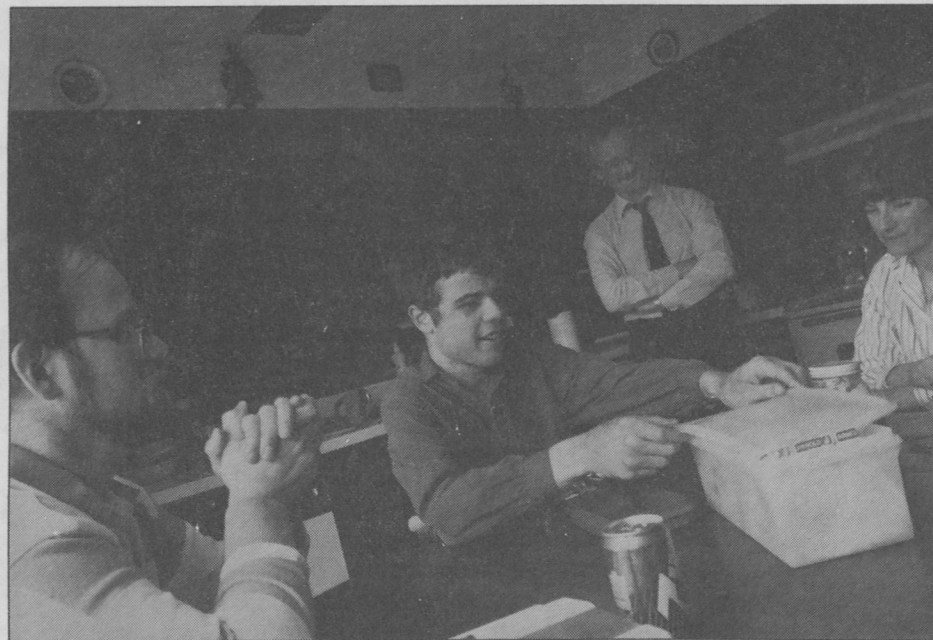
"Communication," says Edward (Ted) Carr, a psychologist at USB. Dr. Carr's position represents one side in the current controversy whether children with severe behavioral problems should be punished for their aggressive and sometimes self-injurious behavior.

USB and five other universities nationwide have received a \$4.5 million, five-year grant from the National Institute on Disability and Rehabilitation Research, part of the U.S. Department of Education, to develop non-punishing treatments for children with severe behavior problems. One of the major goals of the grant is to establish national policy in the field.

Government interest in the problem began three years ago when a child died after receiving punishing treatment at the Behavioral Research Institute in Providence, R.I. It was never proved that the treatment caused the child's death, but the case touched off lawsuits that are currently in litigation.

A second aspect of the grant is to train undergraduate and graduate students in non-punishing treatments and to give workshops to staff who work daily with developmentally disabled children.

Dr. Carr conducts his research at the Suffolk Child Development Center, which operates branches in Smithtown, Greenlawn, and on the USB campus. Funds from the grant will also be used to develop treatments that can be used in the child's home or in group homes, rather than an institution.



ED BRIDGES

George Innes, second from left, who is developmentally disabled, makes his lunch with the assistance of Gene McConnachie, a graduate student in the Department of Psychology, who works with George. George's mother Natalie Innes, right, and psychology professor Ted Carr, second from right, look on.

"In the past, a child with severe behavioral problems was seen as psychotic, and the behavior as something we had to get rid of," Dr. Carr said. "Our approach is that the behavior serves a purpose. Even in extreme cases, the individual is trying to communicate something. We must try to figure out what goal the person is trying to achieve. Then we can design a treatment to help achieve the goal."

Dr. Carr's view is that in many cases, severe behavior problems are a primitive form of communication: either the child is

trying to avoid a boring or difficult task, or is seeking attention. Because of poor communication skills, the child will resort to such behavior as banging his head against a wall or punching himself. The treatment is to make the task more interesting or simpler, or to teach the children to ask for help.

"In the long run, punishment is not a treatment because it fails to address the cause of the problem," Dr. Carr said.

Dr. Carr's research will be presented at the National Institutes of Health consensus conference Sept. 13 in Washington, D.C.

Wendy Greenfield

Family Medicine Program Revives Lost Art of the Housecall

The house call is making a comeback. Faculty in the Department of Family Medicine, who have been making house calls for years, are training third-year medical students and medical residents in the art of home visits. Each Friday morning, a medical team, including a resident, a nurse and an attending physician, visits elderly patients who can't make it to the hospital's family medicine clinic.

Medical students are now required to attend lectures on home visits and accompany the medical team on their visits. They also visit patients at home as part of a "nursing home without walls" program.

"The goal is to show residents how to make house calls a reasonable and practical part of their training," said Robert Schwartz, M.D., associate director of the residency program and assistant professor of family medicine, who has been making house calls since 1981.

Dr. Schwartz said that by visiting elderly patients in their homes, he is able to see how they live and whether they need certain services. He checks for things like loose rugs or grab bars in the bathroom. He peeks into the medicine cabinet to make sure patients are using the proper drugs. He also checks for things such as emergency numbers on the refrigerator, if the patient has his own room or if the patient is getting the proper nutrition.

"You can walk into somebody's kitchen and tell if they have the appropriate foods to make meals," he added.

Roxanne Fahrenwald, M.D., assistant professor of family medicine and director of the outpatient clinic, said some patients have difficulty traveling to the clinic and

are not themselves by the time they arrive.

"You get a better picture of what they're like in the home," she said.

Dr. Fahrenwald recalled an elderly woman who appeared to be losing weight. After visiting the woman's home, Dr. Fahrenwald discovered a problem; the woman had trouble cooking because she couldn't fit her walker into her tiny kitchen. Dr. Fahrenwald solved the dilemma by having hand rails installed and having low shelves built so the woman could reach her pots and pans.

Assistant professor of family medicine and director of undergraduate education for the Department of Family Medicine Jeffrey Trilling, M.D., said sometimes a treatment can be very simple.

He told the story of an 86-year-old woman with severe arthritis who confined herself to bed because she was afraid of falling. When Dr. Trilling visited her, he found she was afraid to get out of bed because the linoleum floors were slippery and the stockings she wore made it even more treacherous. His prescription: a new pair of sneakers.

"Home visits allow you to look at a patient more holistically," Dr. Trilling said. "It gives you a flavor for what's going on."

Dr. Trilling tries to instill that feeling in medical students. Third-year medical students who rotate through family medicine must attend lectures about the value of home visits. He also has organized a program with the Lutheran Home in Smithtown in which medical students make home visits with nurses to encourage people to live at home rather than in a nursing home.

Dr. Schwartz says home visits can trim costs for both patients and hospitals.



Robert Schwartz, assistant professor of family medicine, right, helps John Antes of Stony Brook clear his medicine cabinet of unnecessary medication.

Providing care in the home can, in many cases, prevent hospitalization.

"The medical profession and the government are looking for creative ways

to cut costs," Dr. Schwartz said. "Perhaps home visits, a thing of the past, might have a place in the future."

Wendy Greenfield

Three Students Suspended, Fourth Cleared in Campus Hazing Incident

Three students have been suspended for a year and a fourth cleared of charges of hazing a USB senior last February during unauthorized pledging by members of Kappa Alpha Psi fraternity.

The sanctions were imposed following completion of a campus administrative hearing that began April 24 but had to be postponed until May 8 after participants got into a lunch hour scuffle.

The three, all seniors, were found guilty of violating Section A.1.a. of the Student Conduct Code which prohibits students from assaulting, threatening, hazing or otherwise physically or psychologically abusing any other person on the campus or on university property.

One of the three faced the additional charge of violating Section A.1.b. of the Student Conduct Code, which says that no student shall take, possess, damage or deface any property not his or her own on the university campus or university property. He was found not guilty of that charge.

Sanctions were determined by the hearing officer and were subject to appeal to the vice president for student affairs within 10 days of notification. Two of the students were notified on Monday, May 15; the other was notified on Tuesday, May 16. An appeal was filed.

All three students were suspended from the university, two for a year and one-half,

the other for two years. The suspension included the spring 1989 term which at the time of issuing the sanctions, was over except for final exams.

Two had anticipated participating in graduation exercises on May 21. The university action meant they were ineligible to do so. (The other student was to have graduated in December 1989).

The sanction would have required all three students to repeat any coursework completed during the spring semester. On appeal, the sanction was modified to allow the three to take any remaining exams, thereby completing the semester's work. In addition, all three students were suspended for one year.

The two students who were to have graduated this spring will be unable to do so until May 1990. The remaining student must first apply for re-admission and cannot be re-admitted until May 1990.

All three have received written warnings, disciplinary probation and permanent expulsion from residence halls which means they can't reside, enter or be in the immediate proximity of residence halls.

Information about the incident compiled by the Department of Public Safety has been turned over to the Suffolk County District Attorney's office for review. The findings could result in criminal charges.

Vicky Penner Katz

Summer Opening for Sunwood



Sunwood, the university's 27-acre estate on Smithtown Bay in Old Field, will be open to members of the Sunwood Beach and Gardens Group from Memorial Day to Labor Day. Membership fee is \$25 for the university community, \$10 for graduate students. For information, call Barbara Scanlon, 632-7002.

Homeless

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transportation back to the home district each day, at the parent's request. That is a dilemma for many parents, according to Ms. Wrase, and one area in which the social welfare students can be of service. They counsel, explain and help the parents work out the inevitable problems that will ensue, regardless of which school district they choose for their children.

Students are also prepared to counsel families experiencing drug and alcohol abuse, and to advise them on appropriate

child care arrangements when the parent must leave and other family problems, Ms. Wrase points out.

The students are not housing experts. That area is left to Suffolk County, which is sending its workers directly to the motels to meet with homeless clients face-to-face for the first time this year. Ms. Wrase believes her students have paved the way and made it easier for the county to send in its people.

Tamar Asedo Sherman

University Community Turns Out to Form Largest Pride Patrol Ever

USB's annual Campus Clean Up was the biggest and best ever, says organizer Ann P. Forkin, who coordinated the day-long April 28 event.

Some 202 members of the staff, faculty and student body teamed up as members of the "Pride Patrol," picking up over 200 bags of litter, rebuilding a bridge between the engineering parking lot and Kelly Quad and repainting the steps for the visually impaired at the Earth and Space Science building and Staller Center for the Arts.

"I can't thank the participants enough," said Ms. Forkin, director of conferences and special events. "Their voluntary efforts reflect a \$6,000 to \$8,000 saving for the university and a very real example what can be accomplished through teamwork."

The Pride Patrol, whose efforts reflect 404 peoplehours, also completed two planting projects, at the Infirmary Building and at the Engineering loop, and removed old and broken benches as well as fallen trees in a wooded area near the Engineering Quad. They also raked many areas throughout the campus and removed litter from the interior of Kelly Quad.

"I'm very proud of the Pride Patrol and their accomplishments and I'm pleased that the effort will be ongoing," said President John Marburger. "I thank all the participants and I'm delighted that Campus Clean Up Day is fast becoming a Stony Brook tradition."

Vicky Penner Katz

Physician Says Natural Foods May Not be Safer

With reports of cyanide on grapes, alar in apples and aflatoxins in corn, some consumers are turning to the natural food store instead of the supermarket to buy their fruits and vegetables.

Don't bother, says Anthony Valadini, clinical associate professor of family medicine. He says "natural" foods are not any safer than other foods and are not worth the premium prices they command. He promotes moderation and variation in one's diet to avoid ingesting enough natural and artificial toxins to be harmful.

"Natural" refers to the processing or lack thereof, but 98 percent of all food additives are considered natural, he notes, with only two percent chemical or synthetic.

Furthermore, pesticide residues are essentially the same in organic foods as in

conventionally grown foods, even though no artificial fertilizers or pesticides are supposedly used on organically grown produce.

Traces appear in fruits and vegetables whether or not the chemicals are added by the grower. Chemicals are in the air and in the soil, Dr. Valadini says. They are put in the packaging and applied to produce in the markets.

"Toxins occur naturally in many foods. If consumed in great quantity or as the sole element in a diet, natural foods, such as potatoes, mushrooms and even alfalfa sprouts, can be harmful."

True organic foods are hard to find, unless you grow them in your own garden, Dr. Valadini says. Only one percent of the nation's produce is grown organically.

Tamar Asedo Sherman

Allied Health

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Another hospital has offered to pay the school \$500 for each graduate who is referred by the school and accepts a position there and an additional \$500 at the end of the person's first year on the job. Many institutions will pay the student's last year's tuition if they will work for them after graduation, Dr. McTernan says.

Meanwhile, graduates in promising areas such as applied mathematics, computer science and engineering must conduct an intense job search in order to locate the right job. The ever-popular liberal arts degree, while not qualifying the graduate for a particular profession, does

help the holder get an entry level job in financial planning, insurance or banking, says Peter Burke, a career counselor at USB. "It's a misconception that a liberal arts degree doesn't qualify you for anything."

While the job market for new graduates is "as competitive as it has been in recent years," says Mr. Burke, he predicts that most USB graduates will find the type of job they are looking for. "But you have to go out there and look and do a complete job search."

Tamar Asedo Sherman



Seventeen engineering students helped to build this all-terrain vehicle.

ED BRIDGES

Engineering Students Enter Vehicle Into Eastern Mini-Baja Competition

Instead of sitting in class, students from the Department of Technology and Society in the College of Engineering and Applied Sciences spent most of this semester hunched over a car and tinkering with its engine. Their professors not only didn't mind, they encouraged the endeavor.

The final project was an all-terrain vehicle built by 17 undergraduates, which was entered in the May 13 "Mini-Baja East" competition, sponsored by the national Society of Automotive Engineers at the University of West Virginia. It was the first time USB entered the competition.

The team did better than anticipated. Out of 43 schools, USB placed fifth in the

braking category and 11th in acceleration.

The vehicle—intended as a hands-on engineering project for the students—took a year from concept to finished product. The actual assembly time took three months. It was built to specifications given by the Society of Automotive Engineers.

"We accomplished our goals," says Joe Cieno, a student involved in the project. "But we couldn't have done it without the help of our faculty advisors, Jahangir Rastegar, Alexander Hack and Lin-Shu Wang." The students also acknowledged building manager Bob Martin, machinist Henry Honigman, and John Milazzo, director of the computer-aided design lab.

Sue Risoli

Thoughts of Ancient Philosophers Taught With Assistance of High Technology

While others sweated their final exams in the classroom last month, Lisa Sancho of West Babylon took her exam in ancient philosophy at home on her personal computer. When she finished, she called her professor, Peter Byrne Manchester, on the phone and sent her answers by computer line.

This educational experiment was initiated by Ms. Sancho just before she gave birth to her second child. She didn't want to disrupt her education, but she wanted to stay home with her new baby. A computer and modem enabled her to do both.

Plato would have approved, Dr. Manchester says of his interactions with Ms. Sancho. "We had quite individualized conversations, more like an independent study or a personal tutorial of questions and answers."

Ms. Sancho generally asked the questions, based on the assigned readings or the questions Dr. Manchester asked his

students in term papers or exams. "I'm going to miss this," she remarked as she read his final instructions on the computer screen with a baby in her lap and a toddler on her knee. Next semester she'll be back on campus.

Student and teacher rarely met face-to-face, yet they had more personal contact than most professors and their pupils. "I missed the exchange of ideas you get in a classroom, but this was better for me. I had no alternative," Ms. Sancho said.

All it cost, since she already had a computer and a modem, was about \$3 or \$4 a month in telephone calls. For Dr. Manchester, this arrangement meant putting in a lot of extra time, but time he was willing to spend on "a very self-motivated, eager student."

Will he offer this course or another by computer again? "It's a case-by-case situation," he says, since it requires such a high degree of commitment on both sides.

Tamar Asedo Sherman



First Faculty/Staff Dance a Big Success

The first annual Faculty/Staff Spring Dance, held May 12, was a tremendous success and enjoyed by all participants. The event began with a conversation hour, featuring music by Peter Winkler, followed by dinner and dancing. Dr. Iwao Ojima, right, of the Department of Chemistry, dances with his wife, Yoko at the sold out event.

USB Physicians Test Treatment For Angina

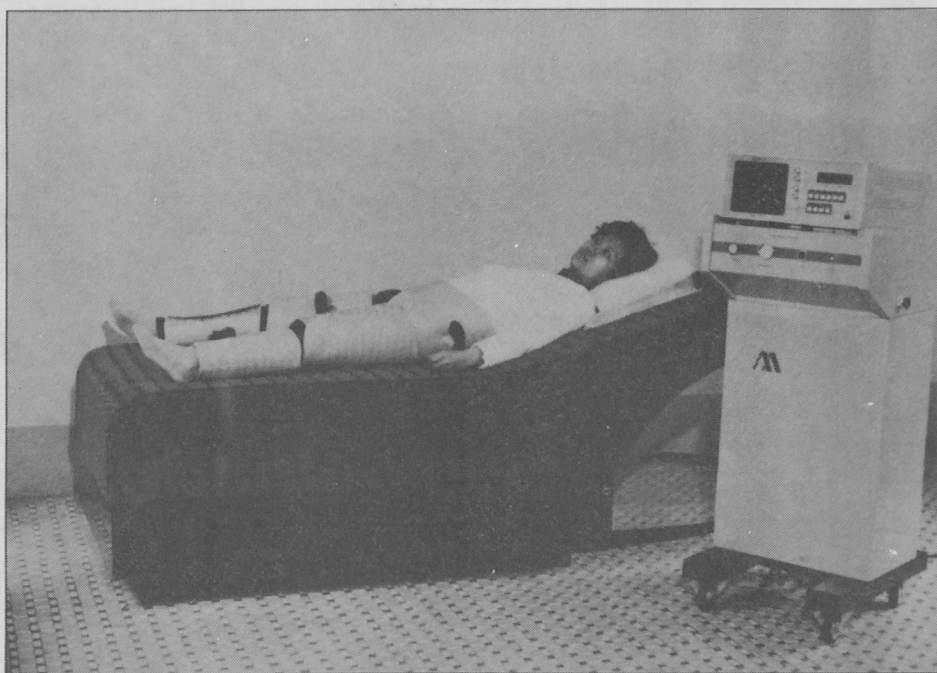
Doctors from China and USB are collaborating on a new medical technique that may relieve the crushing chest pain that often leads to heart attacks.

Known as external counterpulsation, the low-risk, non-invasive treatment may offer improvement to those who suffer from angina, a common cardiovascular symptom that results in inadequate blood flow to the heart, found mostly in adults over 60.

External counterpulsation uses a device that applies pressure to the lower extremities and synchronizes with the patient's heart. It does not involve inserting needles, tubes or other devices.

In China, the technique has proved to be free of the risks associated with surgical methods of treatment.

External counterpulsation was first developed in the U.S. by a group of surgeons and engineers working at Tufts University as a treatment to assist the heart. The method was improved by Chinese cardiologist Dr. Zhen Sheng Zheng, who further developed it at the Sun Yat-Sen University of Medical Sciences in China. More than 10,000 patients have



Jian-hua Duan, a patient from China, undergoes treatment with external counterpulsation.

been treated with external counterpulsation in China.

Peter Cohn and Harry Soroff of the School of Medicine are collaborating with Dr. Zheng and his team at USB in an effort to establish the treatment's ability to provide long-term relief to angina patients.

Patients are examined by a member of the Department of Cardiology to determine eligibility. Once in the program, patients receive one hour of treatment a day over a five-week period, for a total of

25 hours of treatment. At the end of the treatment course, the performance of each patient's heart is evaluated. All diagnostic tests and treatments with external counterpulsation are free of charge to patients enrolled in the program.

Individuals suffering from angina who are interested in participating in the evaluation program, either independently or through their physicians, can call Dr. Soroff at 444-2018.

Wendy Greenfield

Chapin Renovations

continued from page 3

In the last 12 months, 32 apartments were painted, flooring was replaced in 30 bathrooms and ceramic tile was replaced in 30 apartment showers. Laundry rooms were repaired and repainted. In some instances, lighting fixtures in individual apartment dining rooms and living rooms were replaced and all lighting fixtures were repaired or replaced in apartment entrances and stairwells. Numerous roof leaks were also repaired.

On the outside, storm drains were cleaned, the area behind Building L was backfilled and graded, dead trees were removed and new parking spaces were created. Close to \$50,000 was spent on sodium vapor street lights and the new apartment entrance and stairwell lights.

From August to April, the Chapin complex also had a nightshift on duty to respond to emergency situations. A plumber has also been assigned to Chapin.

"In the face of continuing improvements to the complex, the conditions that last year influenced a decision to roll back some of the rental increase are no longer justified," noted Fred Preston, vice president of Student Affairs, of decision to stand firm on a revised rental schedule for Chapin. "The result of not assessing Chapin residents their fair share of rental costs could result in the burden being shifted to other campus residents in order to make up the difference."

Vicky Penner Katz

BRIEFINGS

continued from page 2

1988-89 Meeting of the Association for Symbolic Logic, Los Angeles.

Lawrence Martin, Department of Anthropology, to 58th Annual Meeting of the American Association of Physical Anthropologists, San Diego.

Rosalyn McKeown, Center for Science, Mathematics and Technology Education, to Annual Meeting of the National Council for Geography Education, Hershey, Pa.

Scott McLennan, Department of Earth and Space Sciences, to 28th International Geological Congress, Washington, D.C.

Stefan Mittnik, Department of Economics, to Sixth IFAC Symposium, Edinburgh, Scotland; 14th IFIP Conference, Leipzig, E. Germany; and International Symposium on Mathematical Theory, Amsterdam.

Leslie Morgan, Department of French and Italian, 1989 Medieval Institute, Kalamazoo, Mich.

Timothy Mount, Department of Music, Preparation of Tomorrow's Conductors, SUNY at Buffalo.

Victor Ottati, Department of Political Science, to Midwestern Political Science Association Meeting, Chicago.

Michael Quinn, Department of Theatre Arts, Mid-America Theatre Conference—Theatre History Symposium, Omaha, Neb.

Virginia Rasbold, Frank Melville, Jr. Memorial Library, to Association of College and Research Libraries Fifth National Conference, Cincinnati, Ohio.

Jadranka Skorin-Kapov, W. Averell Harriman School for Management and Policy, to CORS/TIMS/ORSA Joint National Meeting, Vancouver, British Columbia, Canada.

Patricia Steenland, Department of English, to Rocky Mountain Medieval and Renaissance Annual Conference, Grand Canyon, Ariz.

Lauren Taafe, Department of Comparative Studies, to American Philological Association, Baltimore, Md.

Paul Teske, Department of Political Science, to Midwestern Political Science Association Meeting, Chicago.

Lourdes Torres, Department of Hispanic Language and Literature, to American Association of Teachers of Spanish and Portuguese, San Antonio, Texas.

Wen-xiang Wang, Department of Mathematics, to 1989 Summer Research Institute, University of California, Santa Cruz.

PRESENTATIONS

Tobias Owen, professor of earth and space sciences, "Origins: From Matter to Mind," Boston University, March 14 - 15.

Howardina Pindell, professor of art, "Howardina Pindell/Matrix 105," Wadsworth Atheneum, Hartford, Ct. through June 18.

Alan Tucker, professor and chairman of the Department of Applied Mathematics and Statistics, Mathematical Association of America sectional meeting, Central State University, Edmond, Ok., March 31 - April 1.

PUBLICATIONS

Angelica Forti-Lewis, assistant professor of French and Italian, "Il mito di Don Giovanni?" in *Critica Letteraria*, September 1988.

Peter F. Cohn, professor of cardiology, "Total Ischemic Burden: Implications for Prognosis and Therapy," in the *American Journal of Medicine*, January 16, 1989.

Herbert Herman, professor of materials science and engineering and Hougong G. Wang, graduate student, "Structure and Properties of Plasma-Sprayed Spinel," in the *American Ceramic Society Bulletin*, January 1989.

A. Yeganeh-Haeri, visiting professor, and Donald J. Weidner, professor, both in the Department of Earth and Space Sciences, "Elasticity of MgSiO₃ in the Perovskite Structure," in *Science*, February 10, 1989.

Aaron Godfrey, lecturer in the Department of Comparative Literature, book review: *Pillars of Flame: Power, Priesthood and Spiritual Maturity*, Harper & Row, in *National Catholic Reporter*, February 17, 1989.

Janet E. Fischel, clinical assistant professor of pediatrics, and Grover J. Whitehurst, professor of psychology, "Language Growth in

Children With Expressive Language Delay," in *Pediatrics*, February 1989.

Bruce Patsner, assistant professor of obstetrics and gynecology, editorial: "Who Killed Libby Zion?" in *Vanity Fair*, February 1989.

Jeffrey S. Trilling, assistant professor of medicine, "Let Us Stay Generalists and Be Patients' Advocates," in the *Family Practice News*, March 15, 1989.

Faroque A. Khan, professor of medicine, "Branhamella Infections," in *Postgraduate Medicine*, March 1989.

Wallace B. Mendelson, professor of psychiatry, "Sleep Apnea Syndrome in Chronic Renal Disease," in *The American Journal of Medicine*, March 1989.

Michael S. Kimmel, assistant professor of sociology, "The 1960's Without Metaphor," in *Society*, March/April 1989.

Angelica Forti-Lewis, assistant professor of French and Italian, "Teaching a Business Course in Italian," in *Italica*, Spring 1989.

STONY BROOK IN THE NEWS

John H. Gagnon, professor of sociology, was cited in an article titled: "Asking America About its Sex Life," which appeared in the January, 1989 issue of *Science*. Dr. Gagnon is one of three principle investigators designing a study of the sexual histories of American citizens, a study commissioned by the National Institute on Child Health and Human Development.

Alexandra Woods Logue, associate professor of psychology and associate dean for Social and Behavioral Sciences, was cited in Detroit's *Free Press*, in an article titled "Why Johnny Won't Eat: Biology and Psychology Trigger Food Preferences," February 5, 1989. One reason, explains Dr. Logue, is that Johnny might be a "super taster"—an individual who tastes flavors differently or more intensely than most people.

Arnold M. Illman, associate professor of orthopaedic surgery, was the subject of the article: "Local Doctor Devotes Work to Paralympics," in the *Massapequa Post* February 8, 1989. The article notes Dr. Illman's commitment to the Paralympics, and his membership in the International Sports Organization for the Disabled.

Peter M. Koch, associate professor of physics, was cited in an article titled "Quantum Chaos: Enigma Wrapped in a Mystery," which appeared in *Science* February 17, 1989. Dr. Koch was cited for his recent experiments regarding the "quantum suppression of chaos," which occurs when comparisons are drawn between classical and quantum models of the hydrogen atom.

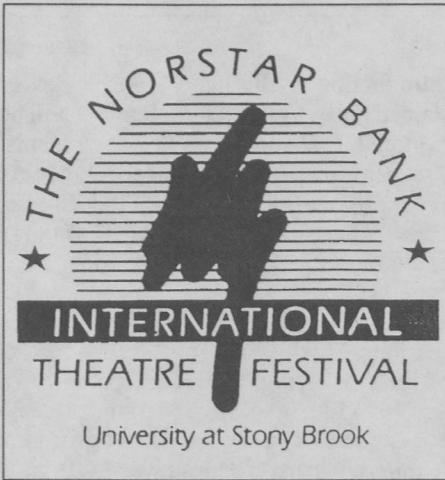
Raymond J. Dattwyler, assistant professor of medicine, was cited in an article titled "Woman Fears She is Victim of Lyme Disease," which appeared in the *Buffalo News* February 22, 1989. In the article, Dr. Dattwyler explains why people sometimes test negative for Lyme Disease when they actually have the disease.

Peter F. Cohn, professor of cardiology, was cited in an article titled "Silent Ischemia: Screen Asymptomatic High-Risk Patients," which appeared in the March, 1989 edition of *Modern Medicine*. In the article, Dr. Cohn advocates screening patients at high risk for coronary artery disease, for silent ischemia, even though they may not show symptoms.

Howardina Pindell, professor of art, was the subject of an article titled "A Search for Memories Marks Pindell's Work," which appeared in *The Hartford Courant*, March 24, 1989. The article highlights Ms. Pindell's autobiographical collages, and collages depicting a world under nuclear siege.

USB's School of Medicine was cited in an article titled "Medical Education Now Includes Humanities," which appeared in the February, 1989 edition of *Pennsylvania Medicine*. The school was cited as one of three "new generation" medical schools which emerged in the early 1970s to provide students with professional skills through courses such as ethics, literature and history.

Norstar Bank Theatre Festival Brings International Flare to USB



Theatre companies from around the world will perform five North American premieres at USB during the Norstar Bank International Theatre Festival.

The festival, in its fourth year, will feature theatre companies from France, Great Britain, the Soviet Union, the Netherlands and the United States. All performances will be held at the Staller Center for the Arts, and begin in early June and run through the end of July.

"This year's festival is the most exciting we've put together," said Alan Inkles, director of the festival. "These are companies offering truly memorable performances."

Norstar Bank Chairman and CEO Thomas Doherty said "Norstar is pleased to bring some of the world's best performers to Long Island. The festival will be a highlight of the summer and Norstar is happy to lend its support."

Compagnie de Barbarie will open the festival June 6 - 10 with its presentation of "Circus Women." The all-woman French company features comediennes, acrobats, jugglers, clowns, tight-rope walkers and a band. Audiences of all ages will be delighted by this energizing performance.

From June 13 - 17, one of England's leading theatre companies, Hull Truck Theatre, will present "Salt of the Earth." A first-place winner at the Edinburgh Festival, this show tells of the affectionate celebration of life in England's Yorkshire coalfields.

One of the Soviet Union's most celebrated theatre companies, *Theatre Tchlovek*, will present their highly acclaimed dramatic comedy "Cinzano" June 27 - July 1. The story centers on three men who live, laugh, drink and share their souls with each other. Performed in Russian, headsets for English translation will be provided to the audience.

The fourth show, "Waited Long Enough," will be presented by Jozef Van Den Berg of the Netherlands, July 11 - 15. The star of the 1987 festival, Van Den Berg's comic genius is channeled into his most mind-stretching dramatic work. The Stony Brook performance will be the North American preview of this highly acclaimed production.

The festival will close with the Pickle Family Circus, a San Francisco-based circus/theatre troupe, July 18 - 22. The fast paced, circus/comedy routine features breathtaking feats and vaudeville acts. The company of 30 performers will delight audiences of all ages.

As a special event, an Indian dance company will perform a dance native to India, Kutiyattam Dance, June 22 - 24 in the Theatre II, the Staller Center for the Arts.

Tickets may be purchased for all five shows or individual performances. For more information call the Staller Center for the Arts box office at (516) 632-7230. For group rate information call 632-7233. Mark Owczarski



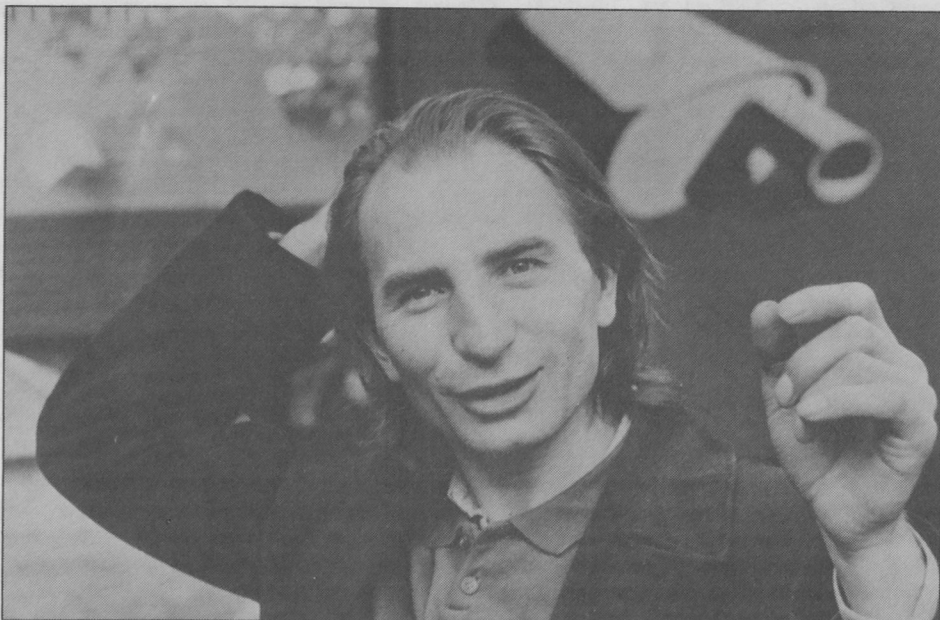
Great Britain's Hull Truck Theatre presents "Salt of the Earth" June 13 - 17: With humor and affection, the touching story of the Parker family unfolds against a backdrop of the Yorkshire coal fields. The play, which won first place at the Edinburgh Festival, is a rich and moving celebration of the human spirit.



The United States' own "Pickle Family Circus" performs July 18 - 22: Vaudeville, comedy and breath-taking feats highlight this amazing theatrical production performed by San Francisco's leading circus troupe. A cast of 30 bring this extravaganza to the Festival in its exclusive New York debut. A Saturday matinee has been added July 22 at 2 p.m.



France's *Compagnie de Barbarie* presents "Circus Women" June 6 - 10: Direct from Paris, this all-woman troupe of acrobats, aerialists, comediennes and musicians appear for the first time in North America. Prepare yourself for an evening of circus excitement!



The Netherlands' Jozef Van Den Berg presents "Waited Long Enough" July 11 - 15: The star of the 1987 festival returns in a new, provocative work that takes Beckett's "Waiting for Godot" to a realm few dare to explore. An internationally acclaimed comic genius, Van Den Berg performs his most mind-stretching work for the first time in the United States.



The Soviet Union's *Theatre Tchlovek* presents "Cinzano" June 27 - July 1: Three men live, laugh, drink Cinzano and bare their souls in this highly acclaimed dramatic comedy from Moscow. The show is performed in Russian with live simultaneous English translation via headsets.

THIS MONTH

JUNE EVENT HIGHLIGHTS

THEATRE

June 6 - June 10: Norstar International Theatre Festival, "Circus Women," performed by *Compagnie de Barbarie* of France. A family show that will delight audiences of all ages. Tickets \$13, \$6.50 for children, Tuesday/Thursday, \$15, \$7.50 Friday/Saturday. Main Stage, Staller Center for the Arts. For information call 632-7230.

June 13 - June 17: Norstar International Theatre Festival, "Salt of the Earth," performed by Great Britain's Hull Truck Theatre. A first place winner at the Edinburgh Festival. Tickets \$13, \$6.50 for children, Tuesday/Thursday, \$15, \$7.50 Friday/Saturday. Main Stage, Staller Center for the Arts. For information call 632-7230.

June 22 - June 24: "Kutiyattam Dance Special," Lyrical presentation of a traditional Indian dance form. Tickets \$5. Theatre II, Staller Center for the Arts. For information call 632-7230.

June 27 - July 1: Norstar International Theatre Festival, "Cinzano," performed by Theatre *Tchelovek* of the Soviet Union. Performed in Russian with simultaneous translation to English via headsets. Tickets \$13, \$6.50 for children, Tuesday/Thursday, \$15, \$7.50 Friday/Saturday. Main Stage, Staller Center for the Arts. For information call 632-7230.

COURSES

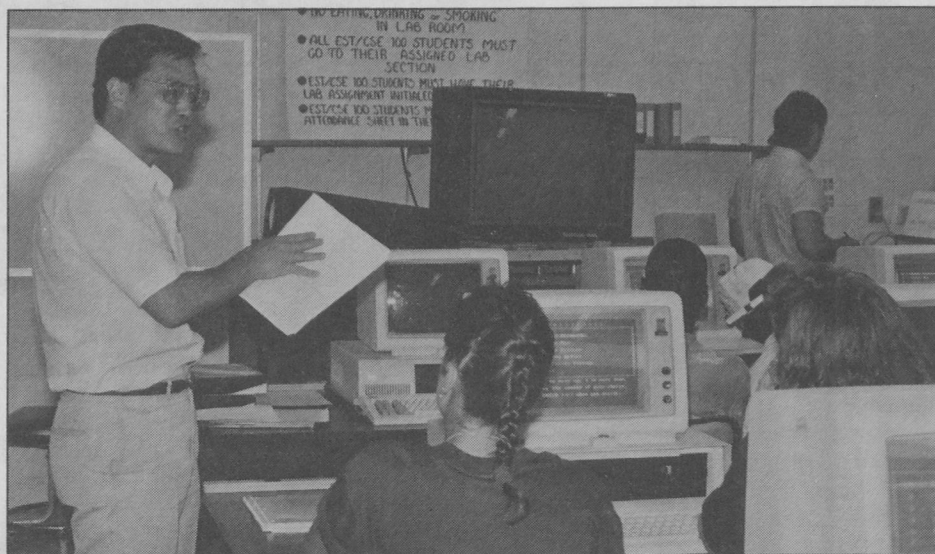
Thursday, June 1: First session, "Scuba Diving." Classes consist of two parts: classroom sessions and pool training. Successful completion of the pool and lecture requirements will enable participants to attempt open water training at a later date. \$140 course fee includes cylinder, regulator, compensator, weights, textbook and workbook. Other equipment may be rented. Pool sessions meet Sundays for eight weeks, beginning June 4, 6 - 9 p.m., USB Gymnasium pool. For information call 632-6822.

Monday, June 5: First of six sessions, "Word Processing: Using WordPerfect 5.0." This course is an introduction to the concepts of word processing; the hardware, the software, and the operation of the system as a whole. \$195 course fee. Meets 5:30 - 7:30 p.m., June 5, 7, 12, 14, 19, 21. For information call the School of Continuing Education, 632-7071.

Monday, June 5: Classical Shotokan Karate: A Summer Introductory Course." A beginning course designed to enable entry into the full practice of the most disciplined and systematic of the schools of karate. Practice held Mondays and Wednesdays, 6 - 7 p.m., Dance Studio, USB Gymnasium. For information call 632-7314.

Monday, June 5: First of 13 sessions, "Life/Accident and Health," Insurance Licensing Program. \$250 course fee. For information call the School of Continuing Education, 632-7071.

Tuesday, June 13: First of six sessions, "Advanced Topics in the Use of Lotus 1-2-3." This program is designed for people who have an elementary knowledge of spreadsheet software and want to learn more about its practical application to their work. \$195 course fee. Meets 5:30 - 7:30



The School of Continuing Education offers several computer classes throughout the summer. For specific course information, call 632-7071.

p.m., June 13, 15, 20, 22, 27, 29. For information call the School of Continuing Education, 632-7071.

Friday, June 16: Non-instructional Figure Drawing Workshop. Practice from a live model. No pre-registration necessary, \$3 fee at the door. Sponsored by the USB Union Crafts Center. For information call 632-6822.

Tuesday, June 20: First of six sessions, "Watercolor Painting." This course will focus on design element and methods of watercolor painting. \$48 students/\$62 non-students course fee. Pre-registration required. Meets Tuesdays, 7 - 9:30 p.m., Room 4232, Staller Center for the Arts. For information call 632-6822.

Tuesday, June 20: First of six sessions, "Floor Loom Weaving I." Learn to warp and dress a four-harness floor loom. \$55 students/\$65 non-students course fee. Pre-registration required. Meets Tuesdays, 7 - 9:30 p.m., Fiber Studio, USB Union Crafts Center. For information call 632-6822.

Tuesday, June 20: First of six sessions, "Pottery Making II." For those who have mastered the basic technique of centering; individual goals, special techniques and glazing will be explored. \$58 students/\$75 non-students course fee includes clay and membership. Pre-registration required. Meets Tuesdays, 7 - 9 p.m., USB Union Crafts Center. For information call 632-6822.

Tuesday, June 20: First of six sessions, "Bartending, Section A." A complete introduction to mixed drinks and liquors as well as bar management. Certificate available. \$55 students/\$70 non-students course fee. Pre-registration required. Meets Tuesdays, 7 - 9 p.m., USB Union Crafts Center. For information call 632-6822.

Wednesday, June 21: First of six sessions, "Bartending, Section B." A complete introduction to mixed drinks and liquors as well as bar management. Certificate available. \$55 students/\$70 non-students course fee. Pre-registration required. Meets Wednesdays, 7 - 9 p.m., USB Union Crafts Center. For information call 632-6822.

Wednesday, June 21: First of five sessions, "Basic Photography, Section B." Covers camera and darkroom fundamentals, printing and developing techniques. \$55 students/\$65 non-students course fee includes membership, tools,

equipment and chemicals. Pre-registration required. Meets Wednesdays, 7 - 9 p.m., USB Union Darkroom. For information call 632-6822.

Thursday, June 22: First of five sessions, "Basic Photography, Section C." Covers camera and darkroom fundamentals, printing and developing techniques. \$55 students/\$65 non-students course fee includes membership, tools, equipment and chemicals. Pre-registration required. Meets Thursdays, 7 - 9 p.m., USB Union Darkroom. For information call 632-6822.

Friday, June 23: Non-instructional Figure Drawing Workshop. Practice from a live model. No pre-registration necessary, \$3 fee at the door. Sponsored by the USB Union Crafts Center. For information call 632-6822.

Monday, June 26: First of six sessions, "Desktop Publishing: Using PageMaker." This course will introduce students to the new and rapidly expanding field of producing publication quality documents with software on a personal computer. \$195 course fee. Meets 5:30 - 7:30 p.m., June 26, 28, July 10, 12, 17, 19. For information call the School of Continuing Education, 632-7071.

Monday, June 26: First of six sessions, "Pottery Making I, Section A." Participants can make a variety of projects using the potters' wheel. \$58 students/\$75 non-students course fee includes 25 lbs. of clay, tools, firing and membership. Pre-registration required. Meets Mondays, 7 - 9 p.m., USB Union Crafts Center. For information call 632-6822.

Tuesday, June 27: First of five sessions, "Basic Photography, Section A." Covers camera and darkroom fundamentals, printing and developing techniques. \$55 students/\$65 non-students course fee includes membership, tools, equipment and chemicals. Pre-registration required. Meets Mondays, 7 - 9 p.m., USB Union Darkroom. For information call 632-6822.

Wednesday, June 28: First of six sessions, "Pottery Making I, Section B." Participants can make a variety of projects using the potters' wheel. \$58 students/\$75 non-students course fee includes 25 lbs. of clay, tools, firing and membership. Pre-registration required. Meets Wednesdays, 7 - 9 p.m., USB Union Crafts Center. For information call 632-6822.

Wednesday, June 28: First of six sessions, "Stained Glass Workshop."

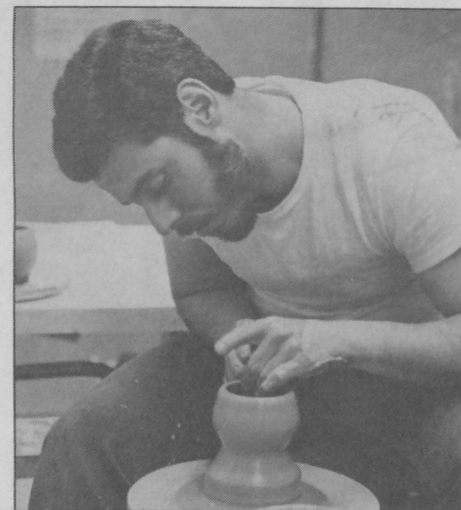
Introduction to the history and styles of stained glass, techniques of leading will be explored. \$60 students/\$70 non-students. Pre-registration required. Meets Wednesdays, 7 - 9:30 p.m., Fiber Studio, USB Union Crafts Center. For information call 632-6822.

Wednesday, June 28: First of three sessions, "Inkle Weaving." Learn the art of belt weaving, different patterns of designs will be explored. \$30 students/\$38 non-students course fee. Pre-registration required. Meets Wednesdays, 7 - 9 p.m., Fiber Studio, USB Union Crafts Center. For information call 632-6822.

Thursday, June 29: First of six sessions, "Clay Sculpture I." An introduction to the variety of techniques of making clay sculpture. \$62 students/\$78 non-students course fee includes clay, glazes and membership. Pre-registration required. Meets Thursdays, 7 - 9:30 p.m., USB Union Crafts Center. For information call 632-8822.

Thursday, June 29: First of six sessions, "Silk-screen Print Making: Create Your Own T-Shirt." A workshop to learn and practice basic silk-screen methods. \$50 students/\$65 non-students. Pre-registration required. Meets Thursdays, 7 - 9:30 p.m., Fiber Studio, USB Union Crafts Center. For information call 632-6822.

Friday, June 30: Non-instructional Figure Drawing Workshop. Practice from a live model. No pre-registration necessary, \$3 fee at the door. Sponsored by the USB Union Crafts Center. For information call 632-6822.



The Union Crafts Center offers several workshops over the summer, including courses in pottery. For additional information, call 632-6822.

USB EVENTS

Every Tuesday afternoon through August, the Faculty Student Association sponsors "The Farmers Market." Displays of fresh flowers and produce. North P lot across from the train station. For information call 632-6510.

Saturday, June 3: Stony Brook Foundation Donor Recognition Dinner will recognize leadership gifts to the university.

Saturday, June 3: Marine Sciences Research Center Alumni Association Spring Picnic. Hotdogs, hamburgers, salad, soft drink and beer; volleyball will be featured activity. Non-MSRC alumni members \$5, children free. Noon - 8 p.m., rain or shine. For information call 632-8701.