STANFORD UNIVERSITY BUDGET PLAN 2006/07

This Budget Plan was approved by the Stanford University Board of Trustees June 15, 2006. Distribution of this document is made in the interest of greater understanding of the University's Budget and the processes through which it is annually determined.

This publication can also be found at: http://www.stanford.edu/dept/pres-provost/budget/plans/plan07.html



SECTION 2

ACADEMIC INITIATIVES AND PLANS

his section focuses on the programmatic elements of the budget plan, describing the principal planning issues in the academic areas of the university.

GRADUATE SCHOOL OF BUSINESS

The Graduate School of Business (GSB) has four important strategic pillars for the 2006/07 academic year. Looking forward, the GSB desires to be a more important part of Stanford, becoming better at the subjects of management and leadership, continuing to innovate in teaching and learning, and designing and constructing new facilities to support this strategic vision. Efforts are under way to achieve all four pillars, and the 2006/07 year will be critical for making meaningful progress.

Stanford Initiatives

This year, the GSB has undertaken specific steps to build greater understanding of the GSB throughout the rest of the university, to participate directly in new Stanford initiatives, to develop courses and pursue research in collaboration with other schools, and to develop courses to support the initiative to improve graduate education.

The GSB has begun offering several new courses as it attempts to work across schools and disciplines and to be more managerial and experiential in some of its offerings. In the Bass Seminars, enrollments are smaller than in other courses, and students take responsibility for much of the learning. Many of these courses emphasize management. In many of them, students from the GSB work with other graduate students on project teams trying to develop real-world solutions to problems that have been previously identified in the world of practice. These courses have typically been co-taught by GSB faculty together with non-GSB faculty and have been very appealing to both students and faculty. The GSB expects to offer more of these courses over time and is currently working with faculty interested in developing them. The GSB hopes that ultimately all of its students will have an opportunity to take at least one of these seminars. Achieving this goal will require hiring additional faculty to staff these smaller classes.

This summer, the GSB will offer its first course specifically for Stanford graduate students interested in learning more about the world of management. The four-week-long Summer Institute for Entrepreneurship will be offered to up to 70 Stanford graduate students as a trial. A similar course has been offered for the past two summers to college juniors and seniors with great success. During the four weeks, students will learn about the fundamentals of business and management, and integrate these concepts as they look at a possible new business venture. The GSB will incorporate feedback from this trial as it looks to expand this kind of learning to more graduate students in future years.

Many of the Bass Seminars will provide GSB students with a more managerial emphasis in their courses. At the same time, the four centers at the GSB will continue to play important roles in facilitating research; developing courses and course materials; supporting student internships, conferences, clubs, and projects; and integrating alumni and other important members of the community into its research and teaching efforts in four key areas: entrepreneurship, social innovation, global business, and leadership. The centers and their faculty facilitate collaboration with other Stanford schools and institutes. The Center for Social Innovation has worked closely with the School of Education on several projects. The Center for Global Business and the Economy has collaborated with the Freeman-Spogli Institute for International Studies (IIS) and plans to do more of this in the future.

The centers also provide important experiential learning to GSB students. The Center for Leadership Development and Research continues to improve and increase the scope of its Leadership Development Platform for MBA students. The Center for Entrepreneurial Studies (CES) will celebrate its tenth year this spring and continues to provide excellent opportunities for its students to learn about being a general manager—how to drive innovation, have a bias to action, and think and act like an owner, whether in a large business or a small one. Many CES courses use teams with students from other schools.

New Campus

The GSB's vision for the future of management education relies heavily on project teams, experiential learning, more participation by non-GSB students, and more collaboration with the rest of Stanford University and the outside world. The current buildings were constructed at a time when all classes had approximately sixty students and used the case study or lecture method, and collaboration with the rest of Stanford was less prevalent. The current facilities are also very inflexible, making them difficult to renovate today and to modify as needs change. To meet future programmatic needs as outlined above, the GSB is investigating the building of a new campus across from the Schwab Residential Center. This campus will have a much wider range of classrooms and other spaces than exist at present, will be more integrated with the rest of the Stanford campus, will enable much stronger collaboration within GSB and between GSB and other schools, and will be built with future flexibility in mind. The timing of its construction is uncertain, but the need for it is clear and compelling.

SCHOOL OF EARTH SCIENCES

The School of Earth Sciences continues to implement its strategic plan, which was developed in 2003/04. Its strategic vision is as follows:

As a world leader in Earth and environmental sciences and engineering, the School of Earth Sciences will create, integrate, and transform fundamental understanding of Earth processes, and use that knowledge to help provide energy, water, and a safe and sustainable planet.

In pursuing the strategic vision for the school, five programmatic directions have been identified for the upcoming year.

Center for Computational Earth and Environmental Sciences (CEES)

Launched in fall 2005, CEES is organized as a partnership between the School of Earth Sciences, other

Stanford schools and departments, government labs, and private industry to take advantage of local excellence in computational and Earth science unequaled elsewhere in the world. Its focus is integrating Earth science with computer science by building new capabilities in computational methods better suited to solve Earth and environmental science problems. Combining scientific applications with state-of-the-art hardware and computational methods, CEES is breaking new ground in computational geoscience by engaging computer scientists and architects to design software and hardware that better address Earth science problems. The school envisions significant growth in CEES during 2006/07 as these partnerships mature. A new faculty hire in the area of computational geosciences is also anticipated in the upcoming year, which will further deepen the center's strength.

Stanford's Environmental Initiative and Institute for the Environment

Earth Sciences is uniquely positioned to play a leadership role in the university's Environmental Initiative and partner with the Woods Institute for the Environment as it establishes roots on campus. In 2005/06 the school and the institute cosponsored a very successful public lecture series, "The End of Oil?" In 2006/07, the school will continue to seek out opportunities to promote and facilitate environmental research, teaching, and outreach activities across campus. Additionally, the school and institute are jointly searching for a climate scientist to enhance Stanford's environmental research and teaching program and hope to welcome that new faculty member early in 2006/07.

Shared Analytical Facilities

The school hopes to fully launch several state-of-the-art analytical facilities for use by all Stanford faculty and students in the upcoming year. These facilities would leverage existing laboratories through renovation, relocation, and enhancement, combining equipment, processes, and staffing with the help of university funds and significant school resources. The initial goal is to establish four centers: two laboratories devoted to environmental measurements, one focused on geochronology, and one providing improved sample preparation and mineral separation. Critical to the success of these facilities will be the addition of basesupported technical staff to oversee their management, help train graduate students, and help develop new research methodologies.

Undergraduate Teaching

In 2006/07 Earth Sciences will aim to reinvigorate its undergraduate programs and increase its number of undergraduates by developing new Earth sciencefocused undergraduate majors that feature faculty expertise and subjects from across the school. It will also develop a series of field courses in a range of Earth and environmental science areas. There has been much discussion amongst the school's faculty as to the form these programs should take: tracks within existing departmental majors, a new interdisciplinary program that cuts across all departments, or something in between. Though no decision has yet been made, the school remains strongly committed to expanding and improving its undergraduate teaching.

Communication and Outreach

Another of the school's strategic goals is to continue to strengthen its communication with, and outreach to, the university, alumni, and the broader world. It has begun a concerted effort to educate the public on energy and environmental issues through public lectures, seminar series, and other activities of general interest which it will continue to develop. Many of these events are hosted jointly by the school and others on campus, strengthening the interdisciplinary ties amongst a broad range of university entities.

Additionally, in 2006/07 the school will continue its very successful educational outreach efforts aimed at K–12 students. One of the many goals of these activities is to bring science—and in particular Earth science—to a more diverse population of young learners. By reaching out to a broad range of public schools locally, Earth Sciences hopes to plant seeds that may, in many years, lead to a broader diversity of individuals (women and minorities) choosing the sciences as a career path.

Overlaid on top of these five programmatic directions are school-wide efforts to, through research and teaching, create and disseminate knowledge about Earth and its resources; train students and future leaders, and educate the broader public in the Earth and environmental sciences; and apply both scientific and engineering knowledge to help solve societal problems such as sustainable use of energy and water resources, mitigation of risks posed by natural hazards, and the consequences of human activities on the environment.

SCHOOL OF EDUCATION

The School of Education has multiple but integrated missions: to generate new knowledge; to train educational researchers and leaders; to improve educational practice; and to influence policy. Being directly involved in the practical and policy issues of education helps the school contribute to improvements in pre-K–12 education and to the community contexts in which children grow and learn. Because policies and practices are interconnected, the school needs to address issues of practice and research at multiple levels: classrooms; schools and organizations designed to support schools, such as districts and charter school management organization; the community context surrounding schools; and the larger state and federal policy environment.

Classrooms: Teacher Preparation and Professional Development and Research on Instruction

The first class of students was admitted to the Elementary Teacher Education Program for the 2005/06 academic year. This coterminal master's program for Stanford undergraduates attracts students who plan to teach in schools in economically disadvantaged communities. This new program and the Secondary Teacher Education Program have sustained relationships with a small set of professional development schools, where Stanford students do their practice teaching and faculty collaborate in efforts to improve teaching school-wide. The Stanford faculty involved with teacher training and professional development also plan the instructional program at the new charter schools and conduct research on more effective instructional approaches in schools throughout the Bay Area.

The most ambitious initiative going forward at the classroom and school level is the management of two charter schools. Through the Stanford Schools Corporation, formed last year, the School of Education oversees the management of the East Palo Alto High School. A pre-K–8 elementary school is in the planning stages. The goal is for the charter schools to serve as "teaching schools" in the sense of a teaching hospital – a resource for training new teachers and school leaders, a site for developing more effective instructional strategies and links to the community, and a model school with expert mentor teachers that can be used to support professional development for practicing teachers and administrators throughout the Bay Area.

Leadership and Organizational Change for Schools, Districts, and Charter School Management Organizations

The school manages two master's degree programs designed to prepare leaders for both the private and public sectors; one of these is a collaboration with the GSB. Last year the school launched the Center for Educational Leadership, an umbrella for degree and professional development programs with a significant education leadership component. Two professional development programs developed this year target superintendents and school board members.

Community Support for Positive Youth Development

The school addresses the larger community context of youth development primarily through the John Gardner Center for Youth and Their Communities (JGC). Faculty, students, and staff collaborate with community leaders to put research findings and promising practices into local practice. Research is embedded in the practical work being done in the communities, much as research on schools and education policy is embedded in (and informed by) Stanford's practical work with schools and practitioners. Important lessons have been learned in the last five years through JGC youth initiatives, programs, and research. The center must now more fully develop and disseminate its shared lessons, tools and models to individuals or organizations working in the field of youth development. A new initiative, the Youth Data Archive, will compile a comprehensive data set that can be used to guide youth development policies.

Federal and State Educational Policy Research and Analysis

The school's new Center for Educational Policy Research conducts discipline-based research informed by the realities of educational settings. The primary goal of the center is to engage in disciplinary–based research focused on the most pressing problems of school improvement and education. The center involves graduate students and postdoctoral fellows who are being trained to do policy-relevant research or to work in policy settings. Center-affiliated faculty currently conduct research on a wide range of policy issues, including teacher labor market dynamics; early childhood education; English-language learners; technology and schools; school accountability and testing; efficiency and adequacy in educational finance; the transition from high school to college; retention in and graduation from college; curriculum, teacher policies, and school choice from an international perspective; and district reform. The focus is on federal and state policies, but international and comparative research is also conducted to inform and give a broader perspective on U.S. policies. The center will build on links with schools, districts, and policy makers so that the research can genuinely inform the reform efforts of practitioners and policy makers.

The Barnum Family Center for School and Community Partnerships

Construction of the Barnum Family Center is expected to be completed in August 2006. The historic old bookstore will be renovated and a new addition will replace one dating from the 1970s. The building will increase visibility for partnership programs with practitioners and community leaders, and will serve as headquarters for school redesign efforts and the JGC.

New Interdisciplinary Academic Program

A new joint program with the School of Law will lead to a J.D. degree combined with an M.A. degree in Policy, Organization, and Leadership Studies.

Faculty Recruiting

Faculty recruitment continues to be a major activity, with five active searches expected in the coming year. Extensive effort and planning go into designing each faculty position as the school expands into new areas to keep up with current issues of education. The goal is to hire excellent scholars who have genuine interests in education practice.

SCHOOL OF ENGINEERING

The School of Engineering's mission is to nurture the brightest minds, create tomorrow's technologies, and apply them to help shape the future. A multidisciplinary, broad-based approach is central to achieving these goals. The school has launched four strategic and inherently interdisciplinary research initiatives in bioengineering, environment and energy, information technology, and nanoscience and nanotechnology. It continues to house additional interdisciplinary institutes, including the Hasso Plattner Institute of Design and the Institute for Computational and Mathematical Engineering (ICME). Finally, an ambitious capital plan is underway with the goal of providing all departments in the school with twenty-first-century facilities within the next five years.

Bioengineering

The new Bioengineering Department continues to grow rapidly. The department is now in the process of admitting its third class of graduate students, and again the pool is large and very strong. Several training grants have been awarded to faculty in the department, providing several years of financial support for students. There have also been some very significant successes in winning research contracts. Faculty recruitment has yielded exceptional results, with four new appointments in the last two years, and further searches are ongoing. In addition, several existing Stanford faculty have chosen to move half of their billets into Bioengineering.

Energy and the Environment

The Institute for the Environment and new energy technologies remain very high on the school's list of academic initiatives. The Civil and Environmental Engineering (CEE) Department has organized its teaching and research around the theme of sustainability, focusing on five areas: water, urbanization, health, the Earth's life support systems, and buildings. Faculty from CEE and other engineering departments are involved in a broad array of environmental efforts, including those conducted by the Stanford Institute for the Environment and the Freeman-Spogli IIS. Engineering faculty also actively participate in the Energy Modeling Forum, which seeks to improve analysis of energy and environment uses, and the Global Climate and Energy Project (GCEP), a multidisciplinary effort to find energy sources that are nearly or fully greenhouse gas emissions free.

One of the most visible elements of the Environmental Initiative is likely to be the proposed "green dorm" being championed by CEE. This dorm will house roughly 50 undergraduates and be a living demonstration vehicle for sustainable technologies. The basement is envisioned as a teaching laboratory for students interested in sustainable energy technologies and environmental issues. The project is currently in the feasibility stage.

Information Technology

Stanford has a long track record of generating ideas, developing prototypes, and transferring technologies to companies for commercialization. Within the School of Engineering, the field of information technology has been a pillar of excellence. Collaboration and joint appointments between the Electrical Engineering (EE) and Computer Science (CS) departments, and between the school and other areas of the university are widespread, ensuring creative and resourceful approaches to new opportunities.

Engineering faculty and research teams are involved in a wide range of projects. Some are developing the physical components that enable computation and communication, including improved chip architecture, nanowire transistors, photonic crystals, and novel materials for semiconduction and superconduction. Others use these components in complex systems performing advanced tasks to improve computer security, bolster networks, or transfer information seamlessly across wired and wireless networks. Yet other researchers concentrate on theory—game theory, information theory, communication theory—or work in artificial intelligence, cryptography, robotics, computer graphics, human-computer interactions, and computer-aided analysis and design.

Nanoscience and Nanotechnology

The ability to manipulate matter at the level of individual atoms and molecules provides exciting new opportunities in many fields of science and engineering. The school's strategic response has been to create a number of shared experimental facilities open to all Stanford faculty and students (and in some cases to external university and industry users as well). These labs provide experimental "sandboxes" in which new ideas can be explored. The first two of these facilities are the Stanford Nanofabrication Facility in the Center for Integrated Systems building and the Stanford Nanocharacterization Laboratory in the McCullough building.

Hasso Plattner Institute of Design

The new Hasso Plattner Institute of Design focuses on educational programs that advance user-centered design methodologies and design engineering teaching, blending engineering innovation, human values, business, and manufacturing concerns into a single curriculum. Design methodology, rapid prototyping to prove feasibility, and design through understanding of user needs are expected to quickly be incorporated into all discipline-based engineering curricula as a result of the institute's experience. The founding faculty come from CS, Mechanical Engineering (ME), Management Science and Engineering, and the GSB. The institute engages faculty across many disciplines as well as participants from industry. While it is housed in Engineering, it is having a campus-wide impact and may serve as a model for other interdisciplinary initiatives.

Institute for Computational and Mathematical Engineering

ICME is a new interdisciplinary program in computational mathematics. Its central research mission is the development of sophisticated algorithmic and mathematical tools which are relevant to many different applied disciplines in engineering, earth sciences, medicine, and applied science.

The institute offers a comprehensive suite of undergraduate and graduate service courses in numerical methods and applied mathematics. It also offers a strong core set of advanced courses for students enrolled in its master's and doctoral programs. These core courses have attracted many undergraduate and graduate students in the past two years, with a significant number coming from outside of engineering. A new director has been appointed, and an executive committee has been constituted with representation from the schools that currently have students involved with the institute. Over the next year, ICME will develop a comprehensive strategic plan for teaching and research.

Capital Plan—SEQ 2 and Panama Corridor

The school has the ambitious goal of placing all of its nine academic departments in twenty-first-century facilities within the next five years. State-of-the-art facilities will not only permit the school to remain at the forefront of engineering research, but will also significantly enhance its competitive position with respect to peer institutions.

The first part of this plan was realized ten years ago with Science and Engineering Quad (SEQ) 1. This set of capital projects built new homes for two departments (EE and CS). SEQ 2 will provide new facilities for four others: CEE in the Environment and Energy (E&E) building, Bioengineering and Chemical Engineering in their own new building, and Management Science and Engineering in the new School of Engineering Center. The fourth building in this new quad (the Ginzton replacement) will house EE faculty along with faculty from other departments in the school and in Humanities and Sciences. Ground breaking is expected to commence this summer on the E&E building.

The remaining three engineering departments will continue to be housed in the buildings along the Panama corridor. The overall plan for this corridor is now complete and moving to implementation. To vacate the Peterson building for renovation for the Institute of Design, Materials Science and Engineering (MSE) will move to a combination of Durand, McCullough, and Moore. This provides an opportunity to create a new department home, collocate all MSE faculty in adjacent buildings, and provide some growth potential for the department.

As part of the Panama Mall renovation plan, the ME groups currently housed in Durand will move to a new building on the site of Building 630, beside the new ME research building and more directly adjacent to their ME colleagues. Finally, the parts of Durand that house Aero/Astronautical Engineering will be renovated. This renovation will also create space for the new Stanford Center for Position, Time, and Navigation, a research center aimed at taking GPS technology to striking new levels of capability.

SCHOOL OF HUMANITIES AND SCIENCES

The School of Humanities and Sciences (H&S) welcomed sixteen new junior and senior faculty across a variety of disciplines in fall 2005, bringing the total to 500 active researchers and educators across 28 core academic departments. Faculty growth was paused in 2004/05 and 2005/06 to allow the school to stabilize its planning in alignment with near-term and future budget projections. During 2005/06, H&S altered its funding support model for allocation of graduate aid, moving from a guaranteed target cohort number for each department to fixed funding allocations to the departments. In the new model, incentives are re-established for increasing funding from external sources, grants and contracts, and fund-raising.

The focus of H&S departmental and school-level planning during this period has been twofold: to enhance evolving core strengths throughout the school and to foster multidisciplinary work, especially that relevant to the university's major initiatives on human health, the environment, international initiative, and the arts. H&S will contribute to the success of each of Stanford's multidisciplinary initiatives, providing essential foundational strength. Related to the human health initiative, H&S provides fundamental science to stretch the interdisciplinary envelope. In alignment with the environmental initiative, the school deepens the biological and chemical side of environmental study and amplifies policy and outreach through social sciences, history, philosophy, and literature. Related to the international initiative, history, language, cultural studies, and social science studies provide the subtending scholarship to provide understanding of global and local issues that is essential and complementary to policy-oriented studies.

The Arts Initiative

H&S has a special relationship to the Arts Initiative because the core arts departments and programs reside within the school: Art and Art History (which includes the recently launched Film and Media Studies program), Music, the Center for Computer Research in Music and Acoustics, Drama, Dance, and Creative Writing. The Arts Initiative aspires to strengthen the presence of the arts throughout the campus, to provide an enriched arts curriculum and experience to undergraduates, to integrate more visiting artists into student life and events, and to establish interdisciplinary arts master's and doctoral programs. An undergraduate major in Film and Media Studies was introduced in fall 2005, and by the end of its second quarter there were already thirty-one declared majors.

In fall 2006, the Art Department will offer eleven new studio art class sections, helping significantly to address the long-standing unmet demand for undergraduate access to studio art courses. Similarly, the Music Department will be able to provide more access to individual and group music lessons next fall.

Under H&S leadership, an Arts Facilities Master Planning Committee, comprising senior arts faculty and campus planners and arts administrators, is working on both a fifteen-to-twenty-year master plan for all campus arts facilities and more focused planning for two major arts buildings on the near-term horizon. A new Art, Art History, and Film Studies Building will be located adjacent to the Cantor Art Center, and a new Performing Arts Center will feature an 800–900 seat acoustically superb concert hall and a 400–500 seat theater for drama, dance, and other smaller performances. Fund-raising is under way for both of these facilities.

Some 2005/06 Program and Research Highlights

Stanford's Mathematics Research Center organizes a steady stream of conferences, workshops, and research programs that bring together leading mathematicians from around the world to explore unsolved mathematical mysteries. Some of these programs are conducted in partnership with the American Institute of Mathematics. The center also hosts an annual Distinguished Lecture Series, workshops for graduate students and postdoctoral fellows, and a summer camp for mathematically talented high school students. In parallel, the number of undergraduate mathematics majors is increasing.

A team of marine scientists from Stanford and the Monterey Bay Aquarium have concluded that tighter fishing restrictions are needed to protect the feeding and breeding grounds of Atlantic bluefin tuna, one of the most commercially valuable fish in the sea. Their study, published in *Nature*, offers substantial evidence of the need for significant changes in how these fisheries are managed internationally and in the United States.

The young Institute for Research in the Social Sciences has already achieved some noteworthy goals. In October 2007, the National Science Foundation awarded it a \$7.6 million collaborative grant to fund the American National Election Studies, a joint venture with the University of Michigan. The study will examine why Americans do or do not vote and how they will select candidates in the 2008 presidential election.

Stanford in Washington Expansion

The rigorous Stanford in Washington program offers students an opportunity to study and learn in the nation's capital. In addition to attending seminars and tutorials taught by Stanford faculty and national policy experts, the students are placed in substantive internships enabling them to work closely with individuals in Washington's wide range of governmental and nongovernmental organizations. Students also have ample opportunities to interact with local alumni and to enjoy Washington's vast cultural resources. A building adjacent to Stanford's Washington Center has been acquired and is being renovated and expanded for use in fall 2006. It will add 11,244 square feet of space on four levels and will incorporate the kitchen, additional administrative offices, an expanded library, a seminar room, a computer center, a distance learning center, room to accommodate eight additional students each quarter, and a public gallery space.

SCHOOL OF LAW

The Law School is in the first stages of a major growth spurt as it rebuilds its faculty, builds its clinical program, and integrates its operations into the greater university. The school expects this to be a significant year in faculty hiring and plans to launch a number of new centers and programs.

Salaries

Faculty salaries remain a paramount concern. Salaries still lag as much as 8%–15% behind those paid at schools like Harvard, Chicago, and Yale, the latter two being key rivals due to similarities in size and program. This gap is most pronounced among early-and mid-career faculty, who are the greatest retention risks. It is of particular concern that both Harvard and Yale have embarked on aggressive faculty growth plans, with Harvard intending to hire up to thirty new faculty members and Yale fifteen. The Law School will need to continue an aggressive campaign to increase faculty salaries.

Clinical Education

This past year was a transformative one for the school's clinical program. The school added two new clinics: the Capital Defense Clinic and the International Community Lawyering Clinic (in which students work with indigent populations in Ghana). It now offers a total of nine clinics, serving 124 students in 2005/06. There is no doubt about their positive effects both inside and outside the Law School. Only a few years ago, clinics were a major deficiency that put Stanford at a disadvantage in recruiting top-notch students.

The school intends to expand its flagship Supreme Court Litigation Clinic. In its first year, lawyers in this clinic argued four cases before the Supreme Court of the United States. This year, the clinic already has five cases before the Court—making it arguably the most active Supreme Court practice in the nation, save the Office of the Solicitor General of the United States.

The majority of Law School graduates, however, will not be litigators, and it is imperative that the clinical program address their career tracks as well. Many peer schools now have transactional clinics, and the Law School will launch one during the coming year. Ultimately, this clinic will do many things, including providing counsel to fledgling entrepreneurs in lowincome communities. At first, though, it can best serve its students by acting as general counsel for small nonprofit organizations that lack the resources to hire their own. The Nonprofit General Counsel Clinic will enable students to work on a wide range of issues relating to negotiations, contracts, real estate, corporate governance, employment, intellectual property, and general regulatory processes.

Academic Centers and Programs

The school intends to launch a Public Service Center and initiate a set of courses and a fellowship program consistent with the public service agenda. The center will develop courses in public interest law and generate research opportunities (some linked to the many other public interest programs around the university).

The school will expand the recently launched Criminal Justice Center by creating a postdoctoral fellowship program, hosting an additional symposium, and creating an interdisciplinary faculty colloquium to discuss criminal justice issues and propose policy changes.

The school has added sections to its negotiation classes due to high demand. It has also created a new interdisciplinary course with students from the GSB, Earth Sciences, and Engineering. This course emphasizes and teaches cross-disciplinary teamwork.

Law, Economics & Business, the Law School's largest and most successful program, engages in many related activities. In 2006/07, a generous endowment gift of \$10 million will enable it to launch a Corporate Governance Center designed to draw in faculty from the GSB and the Department of Management Science and Engineering. The center's activities will include a colloquium; course development; conferences; publications; and educational outreach to the press, to judges, and to corporate general counsels.

This program will also increase its focus on empirical research. Most legal scholarship is abstract and theoretical, requiring little in the way of resources beyond what is available in any good law library. In recent years, however, empirical legal studies—particularly analysis of complex databases using sophisticated statistical and econometric models—has emerged as a growth field. Stanford Law School has quite a few faculty with strengths in the area, and the university has even more. Accordingly, this is a field that Stanford can and should dominate. As a result, the Law School, for the first time, will need to employ statisticians and database experts to assist faculty with their work.

Law, Science & Technology encompasses centers for Law and the Biosciences, E-commerce, and Internet and Society, as well as the Cyberlaw Clinic. All of these sponsor a myriad of conferences, workshops, and other programs. New in 2006/07 will be an Intellectual Property (IP) Clearinghouse addressing the critical need for a comprehensive online resource for scholars, policy makers, industry, and lawyers. It will be modeled on the hugely successful Stanford Securities Class Action Clearinghouse, a powerful research tool that provides a detailed look into the workings of federal fraud class action litigation and has transformed the way investors, policy makers, scholars, judges, lawyers, and the media access information about securities class actions. The goal for the IP Clearinghouse is to collect detailed information about every intellectual property case filed in the federal courts. The clearinghouse will then track the lawsuits and add information about court opinions, judgments, and settlements where available.

SCHOOL OF MEDICINE

Translating Discoveries

Over the past several years, the school has organized and focused its fundamental missions in education, research, and patient care under the umbrella of "Translating Discoveries." The foundation for Translating Discoveries is the school's continued commitment to basic science research and innovation which recognizes that the lag time between basic discovery and an application to human health is often measured in years. One unique feature of basic research at Stanford is Bio-X, the initiative that creates innovative intersections among the physical, engineering, computational, and life sciences. These interdisciplinary interactions, facilitated by the close proximity of the schools, foster faculty and student interactions and willingness to engage in innovative thinking. One outcome is the development of new lines of inquiry, as already evidenced by the new Department of Bioengineering.

To enhance these interdisciplinary efforts, the Medical School has created the Stanford Institutes of Medicine (SIMs) in Stem Cell Biology and Regenerative Medicine; Cancer; Neuroscience; Cardiovascular; and Immunity, Transplantation, and Infection. Each draws faculty from throughout the university and also connects to clinical centers at both Stanford Hospital & Clinics and the Lucile Packard Children's Hospital. These connections create a bidirectional continuum between scientific discovery and improving health. They also link innovations throughout the university with opportunities for translation in the Medical Center and ultimately the nation and the world.

The California Institute for Regenerative Medicine (CIRM) was founded thanks to the vote in November 2004 of nearly 60% of Californians for Proposition 71,

which will provide \$3 billion of bond funding over ten years for stem cell research. Although litigation has prevented CIRM from accessing any of these funds yet, there has been considerable progress in CIRM and it is anticipated that the path will be cleared for funding at the end of 2006 or early 2007. Working groups have been formed to review grants and develop standards. Policies have been developed on grants management, intellectual property, and conflict of interest, as well as ethical standards for egg procurement. Last summer applications for training grants were reviewed and presented to the Independent Citizens' Oversight Committee for approval. While these awards have been unfunded, on April 10th it was announced that a mechanism using bond anticipation notes would provide interim financial support, and Stanford is one of the recipients. Hopefully, further progress will occur over the next year.

Following three years of planning, on February 1, 2006, the Medical School submitted its 1,200-page proposal to become a National Cancer Institute (NCI)–designated Comprehensive Cancer Center to the National Institutes of Health (NIH). This represents the first time that a proposal to become a Comprehensive Cancer Center has actually left Stanford, and it is a milestone in the evolution of the school's institutional planning in cancer research, treatment, and prevention. It is hoped that Stanford will be designated a Comprehensive Cancer Center later in 2006.

Educating and training future leaders is an essential and defining aspect of the school's capacity to translate discovery and foster innovation, and thus to improve health through research and its application to patient care. The various changes made in the school's education and training programs also contribute to the disciplinary alignments and workforce supply that will be needed to assure the future success of the school and the biomedical research enterprise. These changes have included a new curriculum, the first phase of which was introduced in fall 2003, to educate future leaders in innovation, discovery, and scholarship. These programs take advantage of the broad opportunities available at Stanford for interdisciplinary education and offer an enhancement of joint degree programs including an expansion of MD/Ph.D. programs in science as well as other disciplines.

To further foster the future of translational medicine, the school is introducing a Master's in Medicine that will enable Ph.D. students to learn more about clinical medicine and opportunities for translating discoveries. This program will also be supported by the Howard Hughes Medical Institute.

Bridging education with innovation and application is the novel Biodesign Program, which resides in the Medical School, Bio-X, and Bioengineering. Originally designed to provide the knowledge and skills essential for the early development of new biomedical technologies, the Biodesign Innovation Program has evolved as a model of innovation and collaboration. The program enhances participants' abilities to identify opportunities for innovation, assess clinical needs and market potential, and take the critical first steps in the invention, patenting, early prototyping, and development of new concepts. Since the program began in 2001, more than a dozen new technologies have been developed, and its now nineteen alumni have gone on to careers in academia as well as in both large and small biotechnology companies. The program includes a fellowship program and an elective course. The past year has seen a number of important accomplishments and additions. The fellowship program now includes two teams, Surgical Innovation and Cardiovascular Innovation.

Facilities Planning

To more fully achieve the missions of the school, the Medical Center, and the university, significant changes in facilities will be needed in the next decade. Since 1959, when the school first moved to the Stanford campus, its facilities have grown up somewhat opportunistically, without clear attention to developing an integrated medical campus. Over the past several years, the school has laid out a ten-to-fifteen-year facilities master plan to develop its campus in a manner that continues the close proximity and integration between the basic and the clinical sciences, between the school and the university, and between the school and the affiliated hospitals. There are many challenges to maintaining and enhancing this continuity. The master facilities plan, in tandem with the innovations in program development, will help transform Stanford medicine for the twenty-first century.

In addressing the education and library facilities, the school has configured a digital library plan that culminated in the proposal for the Learning and Knowledge Center (LKC). The LKC comprises a new 120,000-gasf (gross available square feet) building on the site of the Fairchild Auditorium along with extensive renovations in the Lane and Alway buildings. In addition to housing a new conference facility, classrooms, a library of the future, and a Center for Immersive and Simulation Learning, the LKC will serve as an anchor and new front door to the Medical School. It will be a comprehensive, integrated, state-of-the-art, leading-edge education and knowledge facility. LKC received "site and concept" approval from the university's Board of Trustees in October 2005, an architect firm was selected in January 2006, the design phase is commencing in 2006, and ground breaking is anticipated for 2007. The opening of the LKC in 2009 is planned to coincide with the celebration of the fiftieth anniversary of the school's move from San Francisco to the Stanford campus.

In addition to the LKC, another onsite facilities construction project is Stanford Institutes of Medicine #1 (SIM1), a 200,000-gasf research building on the parking lot south of the Center for Clinical Sciences Research, is also slated for completion in 2009/10. In addition to providing research space for faculty associated with the Stanford Institute for Stem Cell Biology and Regenerative Medicine, the Comprehensive Cancer Center, and the Neuroscience Institute, SIM1 will house a muchneeded expansion of the Research Animal Facility.

In tandem with new facility planning, the school will actively explore much-needed infrastructure renovations of the facilities built in 1959 that will allow updates of wet and dry laboratories and related administrative space. These renovations are also expected to occur during the next several years. Further, the school will soon begin planning for SIM2, which it hopes to bring on line between 2010 and 2015.

A very important benefit of this planning is the opportunity to develop a far more integrated School of Medicine campus that will better align the school to both the affiliated hospitals and the university. Highly relevant to these goals are the plans for the Science and Engineering Quad 2 (SEQ 2) that are currently under development. SEQ 2 will include a new Energy and Environment Building along with engineering facilities, including a new Bioengineering Building, which relates to Bioengineering, a joint department of the schools of Engineering and Medicine. It will connect to the School of Medicine by a walking mall along what is now Via Ortega. Both Stanford Hospital & Clinics and the Lucile Packard Children's Hospital are planning revitalization and renovation projects that will offer additional opportunities to develop a more integrated Medical Center campus.

VICE PROVOST FOR UNDERGRADUATE EDUCATION (VPUE)

Since 1995, Stanford has witnessed a renaissance in undergraduate education as programs such as Undergraduate Research and Introductory Seminars bring students and faculty together in shared intellectual enterprises. The VPUE has focused its resources primarily on the faculty side of this effort through the broad support of teaching, research, and mentoring. The recent integration of the Freshman Dean's Office into the VPUE and the reorganization of academic advising have led to a more nuanced understanding of students' academic needs throughout their undergraduate years. The 2006/07 VPUE budget reflects a commitment to both maximize attention to these needs and sustain progress in undergraduate research and curricular development.

Since the inception of the Office of Undergraduate Research Programs in 2000, student demand for major grant funding has grown substantially. In addition, the number of students engaging in research through departmental and faculty grant programs has steadily increased. In total, support for undergraduate research has increased fivefold to date, transforming Stanford's undergraduate culture from the perspective of both faculty and students. Even though one-time funding sources have diminished, the VPUE looks forward to maintaining current levels of support for a program that has come to define the Stanford undergraduate experience. At the same time, it is committed to ongoing and careful analysis of funding requests in order to sustain the highest quality of proposals and to ensure access by the broadest possible constituency of students.

Bing Honors College, a three-week residential experience just prior to the start of the academic year, provides enhanced opportunities for seniors to form mentoring relationships with faculty and graduate students in their field, and to participate in an intellectual community of their peers both within and across academic disciplines. With over 100 students and twenty academic departments and programs represented, the college continues to expand as faculty recognize its role in preparing students for their capstone research projects and, for some, graduate study in their chosen disciplines.

With its role in supporting and enhancing undergraduate learning opportunities firmly established, the VPUE seeks to sustain the progress made and to respond to additional requests from faculty committed to innovation in teaching and learning. For instance, the VPUE currently funds projects to improve the learning environment in large, introductory service courses, and it expects to provide incremental support to more departments after a thorough needs assessment. The VPUE also will be positioned to fund interdisciplinary course development for undergraduates. Further, it will be in a position to provide incremental funding to those resident fellows who have indicated a desire to implement more creative, intellectually stimulating programming in their dorms, funding that has diminished substantially over the past dozen years.

In the past, Stanford's campus culture has reflected the belief that undergraduates should be responsible for their own education. But with a curriculum that has been expanding, interdisciplinary programs and centers emerging, and extracurricular opportunities proliferating, the VPUE strongly believes that its role is to assist students, to the greatest extent possible, in making sense of the infinite pathways to intellectual enrichment and success that are available to them.

To this end, in fall 2005 an academic director (AD) was appointed in Florence Moore Hall to follow the first residential AD in Wilbur Hall in an ongoing effort to improve academic advising by providing on-site, coordinated, and informed advice to residents. Based on the positive feedback received about the AD role, both from students and parents, a third AD position will be created in fall 2006. What is particularly unique and timely about the creation of these positions is its relationship to the Master Plan for Undergraduate Housing. As Stanford moves to create improved living and learning communities for all undergraduates, it anticipates including academic resources in dormitory clusters, particularly those designed primarily for freshmen.

Because undergraduate advising and research programs share the purpose of guiding students in their academic choices across their four years, the VPUE has moved to integrate these two offices into a single unit. This new organizational structure will enable advisors to integrate research and curricular considerations into advising conversations, so that a student's course of study can be contemplated in a unified way. The VPUE also welcomes the inclusion of the Bing Overseas Studies Program under its umbrella, effective September 2006. The move can only strengthen the collaboration between the academic advising and curricular programming units. A major objective for Overseas Studies in 2006/07 is the preparation of a new program in Spain that will mirror existing centers as a gateway into the intellectual resources and cultural opportunities of the host nation.

Finally, one of the VPUE's great challenges is to map the opportunities deriving from Stanford's renaissance in undergraduate education onto all of the student body. The demographics and secondary school preparation of entering students vary over a vast spectrum, and there has been an ever-expanding demand for academic support outside of the classroom. The VPUE's role in the solution to these issues lies in its efforts to provide not only individual advising about courses of study, but also support through tutoring and learning skills. As the next year approaches, the VPUE looks forward to building an improved campus-wide academic support program based on a thorough assessment of current resources and the needs of undergraduates.

VICE PROVOST AND DEAN OF RESEARCH AND GRADUATE POLICY

The Office of the Vice Provost and Dean of Research and Graduate Policy is responsible for developing and overseeing research policy; overseeing the independent laboratories, institutes, and centers; developing policy for Stanford's graduate education; and managing the Offices of Technology Licensing, Science Outreach, Environmental Health and Safety, Research Compliance, and Sexual Harassment Policy.

The fifteen independent laboratories, centers and institutes reporting to the Dean of Research encourage and support Stanford's interdisciplinary research and scholarship. These units provide strong programs that both complement and supplement Stanford's departmentally based research and scholarship, in addition to attracting excellent students and external scholars.

The Dean of Research is responsible for the facilities operations of the independent laboratories plus six additional administrative groups. This responsibility is expected to increase substantially with the construction of four new buildings within SEQ 2 over the next several years. In addition, the Stanford Institute for Economic Policy Research is actively raising funds for a new building to house its expanding program.

With the growth in the number of faculty and staff on campus and in laboratory space, Environmental Health and Safety must ensure Stanford fully meets its compliance and safety needs. A major responsibility for the Office of the Dean of Research is to ensure the necessary compliance and safety infrastructure is in place.

The federally mandated Research Compliance Office is a vital component of Stanford's medical and nonmedical human and animal subjects research programs. It staffs and manages the institutional review boards that review protocols for human and animal subjects and ensures that those protocols are actually followed. It also deals with research misconduct. Over the past five years, the number of protocols has grown as a consequence of increased NIH funding, the Medical School's increasing emphasis on translational medicine, and increases in undergraduate nonmedical human subjects research. The Research Compliance Office recently achieved full human subjects accreditation by the Association for the Accreditation of Human Research Protection Programs.

The Sexual Harassment Policy Office has ramped up to implement state-mandated supervisor training, which will be ongoing. Newly hired supervisors must meet the training requirements within six months of their hire date, and current supervisors and faculty must comply every two years.

The intellectual excitement associated with Dean of Research laboratories and programs continues to increase and to influence life on campus. For example, the Global Climate and Energy Project (GCEP) has announced several new research programs and two one-year exploratory research efforts totaling close to \$8 million at Stanford and outside the university. The research will focus on solar energy, biohydrogen generation, advanced combustion, and geologic storage of carbon dioxide. This fundamental research in energy technologies is aimed at significantly reducing global greenhouse gas emissions. For the first time, GCEP announced one-year exploratory research efforts, intended to allow investigators the opportunity to evaluate the potential of their research concepts.

Two new independent laboratories are taking form, and two existing centers are merging into a new institute:

The Center on Longevity will be an interdisciplinary research and educational enterprise. Its first main objective will be to stimulate interdisciplinary research aimed at avoiding physical and social problems associated with extended life expectancy and harnessing, for the benefit of society, the potential gains presented by that life expectancy. Its second main objective will be to initiate and sustain public dialogues nationwide about cultural transformations required to optimize added years of life, such that quality of life is improved at all ages.

- The Stanford Ultrafast Science Center will be a research center within the Photon Sciences Directorate at SLAC. It will become the home for frontier research in areas of ultrafast physics, chemistry, biology, and material science. The center will catalyze the development of new research utilizing the SLAC Linac Coherent Light Source (LCLS), the world's first x-ray free electron laser. LCLS is scheduled to begin operations in 2009, well ahead of a similar European-led effort in Germany.
- The Center for the Study of Language and Information and the Stanford Center for Innovation in Learning are merging to form the Human Sciences and Technologies Advanced Research Institute. The centers and programs will retain their identities but more formally recognize a common intellectual focus at the intersection of people and technology.

Several of the independent institutes are playing major roles in the university's research initiatives on human health, the environment and energy, international affairs, nanoscience and nanotechnology, and the arts.

- The Human Health Initiative is about translational research, bringing engineering, medicine, and life sciences together to look for ways to advance human health. Bio-X will have an important role in the initiative, serving as an incubator for pioneering interdisciplinary research activities.
- The Woods Institute for the Environment at Stanford is leading the environmental and energy initiative, a cross-campus effort designed to bring the broad resources of the faculty to bear on the environment and raise the university's visibility as a world leader in environmental research and education.
- The Freeman-Spogli IIS is leading the international initiative, which will focus on pursuing peace and security in an insecure world; reforming and improving governance at all levels of society; and advancing human health and well-being.
- Planning is under way for a nanoscience and nanotechnology initiative centered around the current Ginzton Laboratory, with the participation of the Geballe Laboratory for Advanced Materials and the Stanford Nanofabrication Laboratory.

HOOVER INSTITUTION

The Hoover Institution is a center for scholarship, public policy research, and archival activities committed to examining, generating, and disseminating ideas that define a free society. Hoover fellows address how society approaches collective concerns while balancing freedom and order—economically, politically, and socially. The Hoover Institution Library and Archives seek to collect and make accessible the historical record of man's endeavors to find this balance.

The institution's research program centers around the following seven initiatives, which embrace the pursuits contained in its mission: improving the human condition; securing and safeguarding the peace; and seeking representative, yet limited, government.

- 1. Economic Prosperity and Fiscal Responsibility
- 2. American Educational Institutions and Academic Performance
- 3. Individual Freedom and the Rule of Law
- 4. The Growth of Government and Accountability to Society
- 5. American Individualism and Societal Values
- 6. Diminishing Collectivism and Evolving Democratic Capitalism
- 7. National Priorities, International Rivalries, and Global Cooperation

Within these initiatives, fellows seek to analyze the effects of government actions relating to public policy; to generate, publish, and disseminate ideas that encourage positive policy formation; to convey to the public, the media, lawmakers, and others an understanding of important policy issues; and to promote vigorous dialogue. Multiyear efforts to examine issues requiring focused and extensive inquiry involve collaboration among the disciplines of economics, history, law, and political science.

Particular emphasis continues on the American Educational Institutions and Academic Performance initiative led by Hoover's Koret Task Force, now entering its eighth year studying K–12 education in the United States. As an outgrowth of this effort, in 2006/07 the task force will continue its efforts in preparing analyses of educational systems at a state level, to positively influence local policy decisions. The Hoover Library and Archives has returned to its original mission as envisioned by Herbert Hoover: to gather archival and special collections, to preserve these rare documents on modern history, and to serve as a repository for rare and unique materials. While the collecting efforts encompass all aspects of political, economic, and social change, emphasis is being placed on three collecting priorities: the history of communism, transition to democracy and economic freedom, and cultural conflict. Currently there is a nexus of collecting and preservation activities on modern Chinese history, including the personal diaries of Generalissimo and Madame Chiang Kai-Shek and the personal papers of T.V. Soong, as well as a multiyear effort to microfilm and preserve the archives of the Kuomingtang party in Taiwan.

Of special importance is the expanded effort to preserve unique materials collected during the twentieth century to insure against loss through damage, material deterioration, and normal wear and tear. The institution is currently constructing and equipping a leading-edge 6,000-square-foot preservation facility equipped to restore and preserve audio/visual media as well as more traditional collections. For example, state-of-the-art digitization equipment is being acquired to preserve archives such as those acquired from the Commonwealth Club of California and William Buckley's *Firing Line*. In 2006/07, the fruits of these efforts will be realized as collections are made safer and more readily accessible to users on site and over the Internet.

Hoover fellows and other scholars are also being encouraged and supported in their research and publication efforts based on material found in the archives. A series of books published in both English and Russian continues to be developed based primarily on original documents found in Hoover's Russian/CIS. Extraordinary interest in the Radio Free Europe/Radio Liberty archives has resulted in a developing international scholarly effort to understand effective means of cross-cultural cross-boundary communication. And the growing archive of materials from post–World War II China and Taiwan is the basis for the formative Modern China research project.

The 24-hour news cycle, new media alternatives, and heightened focus on key public policy issues continue to intensify the competition for audiences seeking relevant data. Within this landscape, the objective of the institution's communications and outreach functions is to promote the ideas and scholarship of Hoover fellows, publicize the holdings of the library and archives, and promote accessible dialogue on policy issues.

The institution's communications activities focus on the Internet, periodical publications, radio, and engagements with print and broadcast journalists. It includes:

- Hoover Studies in Politics, Economics, and Society, a short book series copublished with Rowman and Littlefield
- Books, essays, and articles by Hoover scholars appearing in the popular press, newspapers, and scholarly journals, and on the Hoover website
- Opinion articles by Hoover fellows appearing on the op-ed pages of major newspapers, magazines, and periodicals, and on the Internet
- Television and radio appearances by fellows on national and local news, public information forums, and call-in radio programs
- Periodical publications: China Leadership Monitor; Hoover Digest: Research and Opinion on Public Policy; Education Next: A Journal of Opinion and Research; and Policy Review
- The Media Fellows program, which enables working members of the media to interact with resident Hoover fellows on site at the institution
- News releases and daily reports detailing the intellectual product of the institution via a quarterly newsletter and the Hoover website

In 2006/07, the institution will continue to utilize the recently constructed "conference room in the round" for live, two-way video and audio teleconferencing and state-of-the-art multimedia presentations. This capability continues to support efforts to build a vital scholarly community of leading intellectuals from different disciplines, vocations, and geographic areas.

SLAC

As a National User Facility of the Department of Energy (DOE), SLAC continues to provide world-class experimental facilities to about 3,000 scientists annually, from all over the world in the two main research programs of photon science and particle astrophysics. The accelerator facilities deliver electron and positron beam characteristics unmatched anywhere in the world. The ultra-high-intensity x-ray synchrotron radiation at SPEAR3 of the Stanford Synchrotron Radiation Laboratory serves many areas of science, including materials sciences, structural biology, and chemistry. The \$315 million construction of Linac Coherent Light Source (LCLS), funded by the DOE, will add another unique facility: the world's first x-ray free electron laser, delivering x-ray beams of unprecedented brightness in femtosecond pulses with full transverse coherence. These extraordinary beams will explore previously inaccessible realms of structural dynamics in the chemical, biological, and materials sciences as well as find new applications in nanoscale phenomenology, and atomic and plasma physics. In 2006/07, SLAC will be in the midst of constructing the conventional facilities and technical components associated with LCLS, which is scheduled to become operational in 2009.

Photon science will see growth in interdisciplinary research areas driven by the capabilities of SPEAR3 and LCLS. In addition to the recently established Photon Ultrafast Laser Science and Engineering Center, growth will also involve the X-ray Laboratory for Advanced Materials, the Structural Biology Initiative, and the environmental molecular sciences program. New beam lines and instruments are being built to support the research efforts. In 2007, a new macromolecular crystallography beam line, funded by Cal Tech with a gift from the Moore Foundation, will begin commissioning; another new beam line for nanoscale research, funded by DOE, will be completed in the summer; and a third beam line is expected to be initiated. The LCLS Ultrafast Science Instruments project will develop and fabricate a suite of instruments specifically designed for studies at LCLS.

SLAC's main experimental particle physics program is the PEP-II/BaBar B Factory, which examines a cosmological mystery: the crucial matter-antimatter asymmetry that led to the existence of the visible universe. The BaBar collaboration involves 600 physicists from eleven countries. A nine-month experimental operation is planned in 2006/07 after installation of major upgrades, the last of a series of upgrades to maximize the data sample before experimental operations conclude in 2008. The primary focus of the future acceleratorbased particle physics program is the International Linear Collider. In 2006/07, R&D and preconceptual design will continue as an international collaboration seeks to identify the elements necessary to build a linear collider at minimum cost.

The Kavli Institute for Particle Astrophysics and Cosmology is involved with the Large Area Telescope for the GLAST mission and with R&D for two proposed dark energy experiments, LSST and SNAP. GLAST is a space-based gamma-ray telescope, built at SLAC by an international collaboration led by the Stanford team (SLAC, Physics, and HEPL), to be launched in 2007. Its research program will explore how cosmic accelerators work, including active galactic nuclei and gamma ray bursters, and search for dark matter in our galaxy.

SLAC has initiated a \$15.6 million infrastructure project, funded by the DOE, to replace a significant portion of the aging underground mechanical utilities and to improve the seismic safety of several important research, experimental, and computing facilities by 2009. The construction is phased to coordinate with accelerator operations.

STANFORD UNIVERSITY LIBRARIES & ACADEMIC INFORMATION RESOURCES (SULAIR)

Stanford students and faculty are well served by the staff, services, and collections presented in the twenty different campus libraries. The combinations of general and subject libraries, as well as physical and virtual collections with SULAIR's interlibrary loan and document delivery services, provide access to the global organized information set. Google, Yahoo, and similar Internet indexing services provide access to the global information chaos, and its librarians are expert in helping members of the Stanford community navigate that array.

In 2006/07, SULAIR will continue to struggle to make effective choices for additions to the collections, whether physical ones like books, newspapers, printed music, and maps, or virtual ones like e-journals, image databases, news and reporting services, and economic reports. Stanford continues its strategy of maintaining a lean collection of journal subscriptions, matching those commitments very closely to central academic needs with the active cooperation of faculty. Analysis for this year's budget proposals indicates that Stanford has been acquiring too few printed books in the past several years. SULAIR will examine this suspicion very closely for next year's budget.

Absorption of the Hoover Library has nearly been completed, but allocation of the combined collections across the various central campus and remote storage sites will continue to demand substantial time and attention. The growth of the collection at Stanford Auxiliary Library 3 (SAL3) in Livermore to more than 1.1 million volumes in its first three years of operation indicates the speed with which SULAIR is working, albeit against a collection of rather considerable size. It is anticipated that SAL3 will reach capacity in 2009 or 2010 and SULAIR recommends adding another module to account for continued growth of the physical collections.

During 2006/07, SULAIR, working closely with and for the Faculty Senate's Committee on Libraries, will conduct a daylong symposium for Stanford faculty on managing the intellectual property they create to better benefit themselves, their colleagues, and the university at large. This symposium follows up on Senate legislation passed a year ago.

In cooperation with H&S and Korean Studies, SULAIR has made great progress in expanding collecting programs in the East Asia Library. SULAIR's new Korean Studies librarian will be joined by a Korean cataloger and by a new librarian to collect in Chinese and Western European languages as well as to provide reference services. This growth reflects the increase in the East Asian Studies programs of the university.

Numerous and important special collections have been acquired in the past year, consistent with the strategy of providing materials that make Stanford a distinctive place for research. Those collections include:

- The Eliasaf Robinson Collection on Tel Aviv, the most important private collection documenting the early history of that Israeli city
- The archive for 1982–2005 of Cine Accion, a San Francisco-based organization showcasing independent films by and about Latinos in the United States
- Numerous additions to the Archive of Recorded Sound, including the James Quilter Collection of Irish and classical music and the Grover Sales Collection of jazz, popular, and classical music
- The archive and library of the Women's Philharmonic of San Francisco
- The Huang-Bernhardt Collection of Chinese legal documents
- The Archive of Andrei Andreevich Voznesensky
- The William Brinner Library of Arabic Literature
- The French Feminism Research Collection of Patrick Kay Bidelman
- The Paris Commune Collection

The Google Book Search Project continues at increasing rates of conversion. Presently SULAIR is focusing entirely upon works in the public domain under U.S. copyright law. In 2006/07 it will build the virtual bookshelves that will both make possible the preservation of these books in digital form and give Stanford the basis for providing an array of indexing and retrieval services beyond those offered by Google. Other digitization projects are also under consideration and under way, so that the stock of digital versions of Stanford's books will be quite large in a few years.

A new version of CourseWork will support the majority of Stanford's courses in 2006/07, guided by the Faculty Advisory Board on Course Management Systems. The prototyping done in the previous year will guide the implementation schedule and the development of Stanford-centric modules beyond the Sakai modules created by the Academic Computing staff in collaboration with those of Michigan and Indiana. Among other attributes, the next generation CourseWork includes a feature that requires assessment of copyright status for e-reserves.

In parallel with the development of digital collections and services from the several divisions of SULAIR, the Stanford Digital Repository (SDR) will come into operation in 2006/07. The development of the working version of the SDR, operated in prototype form for the National Digital Information Infrastructure and Preservation Program grants, is the product of the Digital Library Systems and Services group of Academic Computing. A new faculty advisory board will oversee the policies of the SDR. SULAIR expects rapid growth of its collection of digital objects in 2006/07 and beyond.

Planning continues on the new Engineering Library. SULAIR expects that ultimately it will be a bookless library with concomitantly fewer paraprofessional staff, but maybe more subject specialists to assist in the teaching, research, and study missions of the school. Planning for a new Art Library and a new combined biology and chemistry library is in the early stages, and the creation of other libraries is being considered.

All SULAIR units are stretched by the demands and expectations of their primary and community-wide clientele, which illustrates the vitality of its programs as well as its contributions to Stanford's goals and missions. Student Affairs strives to cultivate a living and learning community that is rich in opportunities for students to discover and fulfill their academic, personal, and professional growth and development, and that empowers them to do so. It also serves to prepare them to contribute to a dynamic global community. To accomplish this, Student Affairs staff collaborate with colleagues and partners to develop quality services and programs.

In addition to cultivating this living and learning community, Student Affairs is charged with managing risk by establishing and ensuring compliance with policies and standards. It also advises and assists students with regard to their well-being and safety.

Student Affairs has adapted to changes in the student population over the relatively recent past. The Stanford undergraduate and graduate communities have grown over 4% in the last five years. The number of students living in university housing has increased nearly 10% in total and 25% for graduate students. Both the undergraduate and graduate communities are more diverse on a variety of dimensions. In addition, students now bring more complex needs to campus, and students and parents have higher expectations for prompt, individualized response.

In response to these trends, Student Affairs' highest priority for 2006/07 is improving the "safety net" of compliance and risk mitigation with enhanced programs and systems and additional staff in disability resources and graduate life. New resources will also fund redesign of the counseling fellows program, so that students from the highest-caliber counseling programs across the nation can be recruited to counsel students.

Additional priorities for 2006/07 include reorganization and restructuring of the division under the recently appointed vice provost and ongoing assessment of the services and support provided. An assessment of educational life in the residences is also in process, in collaboration with Undergraduate Education and Residential & Dining Enterprises.

The budget for 2006/07 also includes significant additional support for Vaden Health Center to catch up with cost increases insufficiently funded in recent years and to support anticipated systems and compensation costs. Renovation of the Old Union complex, including the Clubhouse and the Nitery, will begin in mid-2006 and be completed by the end of 2006/07. The complex will be the home for student organizations, three community centers, student government, several student publications, Religious Life, the Nitery theater, and a new "living room" for student life. Together with Tresidder Memorial Union and the future renovation of White Plaza, it will help reinvigorate the center of campus as a lively, attractive focus for student life.

OFFICE OF UNDERGRADUATE ADMISSION

The number of applications received by the Office of Undergraduate Admission continues to rise, and the new Single-Choice Early Action plan, now in its third year, has been extremely popular. Because of this increasing pool of applicants, Stanford's admit rate continues to be one of the two or three lowest in the country. However, competition with peer institutions to attract the very best students remains very high. The Office of Undergraduate Admission must increase its national outreach efforts to these students to effectively compete in this environment and proactively shape the quality of the pool of future applicants for Stanford.

During the 2006/07 year, emphasis will be placed on the following programmatic priorities: 1) to improve outreach through enhancement of existing recruitment tools and investment in new infrastructure support; 2) to increase Stanford's national presence through a significant increase in national recruitment travel and strategically implement a short and long-term international travel plan; 3) to develop a new diversity outreach agenda for undergraduate admission and financial aid, including the hiring of an Assistant Dean for Multicultural Outreach and Recruitment; and 4) to refine current yield activities to maximize impact.

Top priority activities in each of these areas includes:

1) Enhance existing recruitment tools:

- Deploy the College Board's Recruitment Plus software designed to assist admission officers in prospect management and recruitment travel planning;
- Increase the scope and breadth of College Search recruitment mailings to expand the size of the prospect pool;
- Redesign all undergraduate publications, electronic communications, and recruitment

videos to enhance the impact and relevance of Stanford's messages on its target audience and key stakeholders; and

- Expand the number of "trained cities" where Stanford alumni could represent Stanford at college fairs and regional recruitment programs.
- 2) Increase Stanfords national presence:
 - Expand national recruitment travel by tenfold by joining with the "Exploring College Options" consortium (Georgetown, Penn, Harvard, Duke) to do over 300 programs across the country in the fall and spring; each program consists of an evening presentation for prospective students and families and a morning breakfast with high school counselors;
 - Develop long-term international recruitment strategy that will begin with recruitment travel planned for fall 2006 to Europe, Latin America, Asia, and Canada; and
 - Researching the possible creation of a national alumni volunteer corps for undergraduate admission that would conduct alumni interviews as part of the application process and participate in "adopt-a-school" programs on behalf of the admission office.
- 3) Develop new diversity outreach agenda:
 - Hiring a Director for Multicultural Outreach and Recruitment to develop new strategic plan and lead the admission office's diversity outreach activities nationally; and

- Working with several not-for-profit organizations (College Summit, College Horizons), host several summer workshops on the Stanford campus for under-represented and multicultural students to help expose them to the possibilities of higher education and the processes of admission and financial aid.
- 4) Refine current yield activities to maximize impact:
 - Energizing publications, video, and websites with new content and design;
 - Initiating a "Likely" admit program for top academic and multicultural superstars in the Regular Review pool;
 - Creating a new and inviting welcome center for campus visitors that will serve as a central point of contact for all visitor services (campus tours, admission information sessions, campus information, etc.);
 - Conducting program evaluations of Admit Weekend and Admit Reception activities to assess effectiveness and opportunities for improvement.

These activities and priorities are just the first steps in a long-term commitment to expanding Stanford's presence and building a first-class national and international outreach program for the university. Future years will involve incorporating and strengthening the participation of key stakeholders in this outreach effort, including alumni, faculty, secondary schools, and not-for-profit educational organizations.