

Comprehensive Long-Range Plan, 2001-2011

Division of Graduate Studies

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The Division of Graduate Studies (DGS) is committed to providing infrastructure support to academic departments and other campus units in implementing UC Santa Cruz's long-range graduate enrollment plan, which calls—and has long called—for expanding current graduate programs and launching new ones, on the way to doubling graduate enrollment by 2010-11. In addition, we hope to increase the financial assistance available to our graduate students and significantly enhance the services available to them—and to members of UC Santa Cruz's postdoctoral community—as they pursue their advanced training.

In drawing up this plan, we have been guided first and foremost by the response to our executive summary that we received from the Campus Provost in September and by general instructions for the comprehensive divisional plans issued at the same time as those for the executive summaries. We open with the intertwined issues of increased graduate enrollment and new programs since those two changes will fundamentally affect all aspects of the work of the Division (#1 and #2). We also open with these issues since anticipated growth, in numbers and programs, is the very reason that the Division has seen the appointment within the last eighteen months of its first full-time dean and within the last four to five months of its first associate and assistant deans and its first highly experienced assistant to the dean for information technology. After considering the scope of enrollment growth and the number and variety of new graduate programs, this report considers how student outreach, recruitment, and retention strategies can yield a larger graduate student body that is not only as qualified as the current study body but both more qualified **and more diverse** (#3). To increase our yield of such students, funding requirements and funding strategies for student financial support need to be reexamined (#4). Our campus will be that much more attractive to potential students and will be better able to retain the students it admits if the crisis of graduate student housing is addressed (#5) and services to graduate students (#7) and to postdoctoral scholars (#9) are not only consolidated and increased but rethought in ways appropriate for these two groups of students and scholars and for the career paths that lie before them in the first quarter of the twenty-first century. In many ways our approach to these challenges favors the establishment of a graduate college, at first a virtual college but in time, funds permitting, an actual building that graduate students, postdoctoral scholars, and members of DGS can use if not inhabit (#6).

Once a graduate college exists, something that could be accomplished within months, if there were the will to do so, the Division and its staff would be in a better position to offer its services and augment them in innovative ways. We are poised to effect such changes and capable of implementing them to the extent, *pari passu*, that our personnel is augmented to match further new tasks and increases in workload (#10). With growth, our requirements for technology (#11) and space (#12) will of necessity grow, as will the cost of our operation, a funding challenge we have tried to think of ways to meet (#13). In conclusion, we consider how what we have envisioned meets the planning principles and goals enunciated for the UC Santa Cruz of 2010 and in what ways it would affect or benefit other units (#14). To make these considerations as concrete as possible, we end with suggestions how we might measure our performance (#15) and with a timetable within which our priorities are spelled out together with the critical milestones required in complex processes (#16). The bibliography attached to this plan is arranged by date to show how much serious study of graduate education has been conducted on this campus and within the UC system in just the last eleven months. The websites, articles and books that form the second part of the bibliography point to the same sorts of concern for the role of innovation in the future of the research university and for graduate student development and satisfaction.

1. Increased Graduate Enrollment

As recently as November 13, Dean Talamantes reported to the Provost's Advisory Council about prospects for graduate growth. His report was based on consultation with the Office of Planning and Budget and reports received from many graduate representatives and department chairs in response to an email inquiry from the Division. Doubling the number of graduate students will be a challenge but one that can be successfully met given plans departments now have to expand existing programs and plans that both departments and steering committees independent of departments have to establish new programs. The Executive Summaries submitted in March 2001 by the deans of each of the academic divisions corroborate this conclusion. The latest "Graduate Program Enrollment Growth Model" prepared by Planning and Budget (October 29, 2001) supports these projections. Although called an "aggressive model," the growth it projects is based on academic plans that have been submitted, program proposals, and reasonable estimates. Its projections are also more than borne out by recent sizable increases in graduate student numbers. Between fall 2000 and fall 2001 enrollment grew from 1079 to 1168, a growth

rate of 8.5 percent, which is double the growth rate of the previous year (fall 1999 to fall 2000) and well above the average annual rate of increase of 1.14 percent between 1990 and 1999. It needs to be noted, however, that while the percentage of growth has seen a recent increase, the percentage of graduate students within the total student body has declined given the large number of undergraduates admitted. In 2000-01 that percentage was 9.7 percent; in 2001-02 it is 8.9 percent.

Sad to say, 8.9 percent is the lowest percentage of graduate students in the UC system and represents a clear imbalance for a research university of any standing. The quality of our programs and our ability to fill our ranks with the best faculty would be seriously in jeopardy were this ratio to continue. In fact, one can say that quality has been jeopardized ever since the recent dramatic increase in undergraduate numbers that has lowered the ratio from roughly 10 to 8.9 percent. It would be all too easy to quote from communications from DGS to campus administration or to UCOP dating back to the early 1980s that call for an increase in the number of graduate students. It would be equally easy to find passages calling for this growth in documents such as the soon to be released *Report of the Commission on the Growth and Support of Graduate Education* (the first report on graduate education that has involved the Regents in many years), the *Millennium Committee Advisory Report* (June 1998), the *2005 Report* (1992), the *15K Report* (1992), and the 1989 external review of DGS. As President Atkinson said in his Five-Year Report to the Board of Regents (January 2001), "Graduate enrollments at UC have been virtually level over the last thirty years, while undergraduate enrollment has doubled. The Board has made it clear that righting this imbalance is a priority, essential both to meeting the needs of California's economy and the needs of higher education for more faculty to deal with expanding enrollments."

Doubling the number of graduate students from the current 1168 to 2236 would increase the percentage of graduate students to 15.6 percent when the campus reaches its maximum enrollment of 15,000. (If the maximum enrollment on and off campus is 16,900, it would take 2636 graduate students to achieve the same percentage.) The percentages at the UC campuses we would like to compare ourselves to are roughly 13 percent at UC San Diego and 12 percent at UC Santa Barbara. (For the sake of information, the percentages of graduate to undergraduate at UC Berkeley and UCLA are 16 percent and 23 percent respectively.) The ratio of master's to doctoral students that seems appropriate for our campus would not fall below that of UCSB (20/80) and not exceed that at UCSD (30/70). At campuses with more professional schools than

is the case at either UCSB or UCSD, or will likely be the case at the future UC Santa Cruz, the percentage of master's students is understandably higher (40/60 at UC Berkeley, 46/54 at UCLA—without counting health science students).

A word should be said about the number of doctoral degrees awarded at UCSB compared to the number awarded at Santa Cruz since questions have been asked. Santa Barbara had a 2001-02 enrollment of 2460 graduate students enrolled in 43 doctoral programs. That same year Santa Cruz had approximately 1,210 graduate students enrolled in 21 doctoral programs. In 2001-02 Santa Barbara produced 224 doctorates, Santa Cruz 93. UCSB's graduate population is roughly 2.25 times ours; its production of doctorates is likewise 2.25 times ours. We are thus producing doctoral degrees at roughly the same rate as UCSB. UCSB, moreover, has a slight advantage because it has a higher percentage of doctoral to master's students (80 percent) than UCSC (71.5 percent).

Admitting more students is only the first stage in increasing enrollment. To maintain these increases, retention needs to become as much of a concern as recruitment. We know that students leave for a variety of reasons: low stipends; lack of affordable housing; a sense of personal and cultural isolation; lack of mentoring in the transition from being a bright undergraduate to an independent researcher; and insufficient services of the sort that would ease the challenges of being a graduate student (for example, too little affordable childcare). Since many of the graduate programs at UC Santa Cruz are not so well known nationally as we might wish, it should be part of retention that we allocate students money to attend professional and scholarly meetings so that they can make themselves and their work known. In the process they will also develop a sense of belonging to a profession and an area of study. To foster greater retention, the Dean, the previous Graduate Council Chair, and the former Ombudsman proposed a Faculty Mentor Program to "assist graduate students to resolve difficulties that they encounter in their graduate student-faculty advisor relationship." It is a proposal that the Chancellor and the CP/EVC have strongly endorsed. Once further faculty have been nominated this program will be launched with the Graduate Dean taking the lead.

2. New Programs

It has long been the goal of the campus to offer graduate-level study in all major disciplines and key interdisciplinary areas. With the recent addition of doctoral programs in Politics, Environmental Toxicology, and Philosophy, we have moved closer to that goal. Some of these new programs will be sponsored by, and housed in, a single department; while others, due to the interdivisional nature of their subject area or approach, will be better sponsored by graduate groups. In the midst of the establishment of new programs, there will also be sizable growth in such existing programs as the masters in Education, the master's and doctoral programs in Engineering, and the master's and doctoral program in Economics.

Department-based programs. By 2010-11, we expect to see graduate programs in all or most of the following areas: Applied Mathematics and Statistics, Art (M.F.A.), Bioinformatics, Community Studies (MA in Social Documentation), Education (Ph.D. and Ed.D.), Electrical Engineering, Engineering Management (MS), Film and Digital Media (M.F.A. and Ph.D.), Latin American and Latino Studies, Materials and Mechanical Engineering, Music (D.M.A.), Software Engineering, Theater Arts (M.F.A.), and Women's Studies. The proposed M.F.A. program in Digital Arts/New Media draws on all departments in the Division of the Arts and has hence been organized as a division-based program; the participation of faculty in the School of Engineering adds an interdivisional element. It will be groundbreaking to see the Arts develop its first doctoral programs as well as programs for other terminal degrees, thereby addressing the complex issues of the place of the arts at the research university. It is the view of DGS that research in the arts is perceived as anomalous when compared to the dominant paradigm of research in the natural or social sciences, a difference that has caused some research universities to hesitate to make a commitment to the sorts of knowledge and ways of knowing specific to the arts.

A number of exciting proposals were also put forward in the Executive Summary of the Division of the Humanities that would add distinction to our campus—proposals for programs in Liberal Arts (MA), Public Humanities (MA), Writing/Rhetoric, Modernism (MA), and Science, Medicine, and Technology. We look forward to the release of the report of the UC Humanities Commission to benefit from the thinking of colleagues at other UC campuses (and outside the system) regarding ways to ensure the continued vitality of humanities programs within the University of California in the twenty-first century. Since the co-chair of this important body is

Professor Emeritus Hayden White of this campus, we believe we can expect that the particular features of what humanities have been or could be on this campus will contribute to the formulation of the final report. The Division of Social Sciences also added to its list of future programs last March with plans for master's degrees in Social Policy and Social Justice.

Graduate groups. Especially promising are prospects for graduate groups that will join faculty from different departments and divisions together to offer interdisciplinary programs that build on strengths the campus already has but has yet to consolidate in an effective manner. In November Dean Talamantes circulated protocols for such groups and a program proposal template, documents that have met with a positive initial response from the Vice Provost for Academic Affairs and the Graduate Council. The formation of graduate groups was also one of the main topics covered at the Fall Development Workshop for Department Chairs. There are faculty currently hard at work on proposals for interdisciplinary graduate programs in both Sexuality and Comparative United States Studies who are eager to use such a model in their planning process. Interdisciplinary programs in Forensics and Visual Studies are also in the early stages of development. It is heartening that the first theme named in the WASC report that is currently being drafted is "Growth and Improvement of Graduate Student Programs" and that new interdisciplinary programs and new forms of programs, such as graduate groups, are seen as major opportunities presented by growth. Graduate groups and the interdisciplinary programs that they sponsor have long played an important role in graduate education at UC Berkeley and especially at UC Davis, where such groups sponsor more than half of the graduate programs on campus. It is worth pointing out that graduate groups also present less of a risk to a university because a "sunset clause" is built into a proposal. If a group for whatever reason proves unsuccessful or if its intellectual viability declines as areas of inquiry are redefined, a group can be disbanded and its faculty simply resettled in their home departments.

Library issues. The viability of graduate programs, new or old, depends on the library. Successful graduate programs across the divisions will require improved and strengthened library resources in the form of significantly increased print collections as well as improved technology. Thirty years ago, UC library budgets were established according to the number of campus doctoral programs—these formulas have not been adjusted as UC Santa Cruz's graduate programs have multiplied. The library depends on the support of campus administrators for the redistribution of supplementary funding given by the state or UCOP to individual campuses. Additionally, as new programs are proposed, the library should be consulted about the level of

funding needed for monographs, serials and non-print materials to support these programs. The library at UC Santa Cruz is the only library in the UC system that does not have American Research Library (ARL) status, an attainment that is linked to achieving Research I status as a university. One of the criteria for ARL status is 2 million volumes. At the current rate that books are being added to the collection (35,000 a year), it will take 21.5 years to reach that number. At the same time 35,000 books are being added, 43,000 are being sent to storage. This is a dire situation, California Digital Library or not, for undergraduates as well as graduate students and faculty.

Professional schools. With the establishment of the Jack Baskin School of Engineering, UC Santa Cruz acquired its first professional school, one that possesses tremendous potential to develop new degree programs and to enroll many more graduate students. In June the Chancellor and the CP/EVC asked Dr. Robert Rosenzweig to provide his thoughts on whether UC Santa Cruz should consider developing any new professional schools. Dr. Rosenzweig is a past president of the American Association of Universities and is quite familiar with our campus due to the role he played in the development of the Millennium Report. Under the heading “medicine,” Dr. Rosenzweig recommends some variation of the eight-year B.A./M.D. program at Brown University if satisfactory arrangements for clinical training could be made with UCSF. At the November 29 meeting of the Graduate Council, Chancellor Greenwood mentioned the coming need for tertiary medical care in the large area south of Santa Clara County and north of UCSB as population increases and with it the concomitant need to train those who give this care, something UCSC could reasonably consider. UC Santa Cruz also seems particularly well placed for a school of optometry given the Center for Adaptive Optics, with its headquarters on our campus, and a large unserved clientele of poor people in the southern half of the county. The faculty would be basic scientists, not clinicians; any clinical work required could be provided by local optometrists and ophthalmologists.

Although there is no public university law school between Palo Alto and Los Angeles and Dr. Rosenzweig believes UCSC could operate a successful law school, the question remains whether the school could be excellent given the costs and challenges of running of successful law school. Rather than recommending a full-fledged business school, Dr. Rosenzweig suggests a part-time MBA program, conveniently located to employees in Silicon Valley, and non-degree management programs. “Clearly, there is the possibility of combining classes at UC Santa Cruz’s off-campus location with distance education and a period of study on-campus.” Of all Dr.

Rosenzweig's suggestions the one that he makes with the most force favors the establishment of a school of public policy since it "fits with several areas in which the university is already strong," chief among them environmental policy, science policy, and educational policy. The "interdisciplinary program themes" compiled by Planning and Budget from the executive summaries submitted by the academic divisions bear witness to the viability of a school of public policy that would involve many areas of study and build on existing program, research initiatives, and institutes. Dean Talamantes has speculated whether UCSC might not be particularly well placed, geographically and academically, to develop a program (or school) in marine fisheries on the model of programs in Oregon and Washington

Silicon Valley Center. In charts titled "Instructional Programs Identified in Division March 15, 2001, Executive Summaries," which were compiled by Planning and Budget, one can easily see under the column "Silicon Valley Center" just how many departments see themselves involved with the proposed Silicon Valley Center (SVC): three departments in the Arts, five or six in Engineering, five in the Humanities, seven in the Natural Sciences, and three in the Social Sciences. The most recent report on the SVC, "UC at NASA Research Park: Silicon Valley Center for Technology and Social Transformation" (August 2001), Michael Tanner, the Interim Director, points out that

The core of the UCSC presence [in Silicon Valley] derives from UC's primary responsibility, under the State Master Plan, for graduate education and research. Research agendas that can flourish in the Silicon Valley setting will be carefully selected to allow interdisciplinary pursuit of emerging fields. The SVC will be a substantially self-sufficient satellite "mini-campus," and instruction at the SVC will be concentrated at the upper-division and graduate levels. In principle, students studying there will be able to take almost all their courses at the SVC, in academic programs that are connected to both UC Santa Cruz and UC Berkeley. At full development of the presently designated site, there will be approximately 3,000 FTE students.

The SVC thus offers not only extraordinary opportunities for academic research and professional training but also gives UCSC the chance to increase enrollment capacity and to do so away from the constraints on student numbers that are part of the Long-Range Development Plan (LRDP) drawn up in 1988.

Summer quarter. In the charts titled "Instructional Programs Identified in Division March 15, 2001, Executive Summaries," one can easily see under the column "summer" just how many departments have to date expressed an interest in being involved in summer quarter.

Although much of the involvement would focus on undergraduate instruction, there are considerable opportunities for graduate students to be part of the picture as students and as instructors. Departments would conceivably offer graduate courses in the summer since the same faculty might offer an undergraduate course during the same quarter. The program for the MA in Education comprises two summers and one academic year so that its students can graduate in fifteen months, something that is very attractive to many of them. Given the resources of Shakespeare Santa Cruz, the MFA in Theater Arts would make active use of that summer opportunity.

During summer quarter, graduate students could also have the chance, while being mentored, to be instructors of record for courses that they themselves taught. Obviously, there would be the usual opportunities for graduate students to work as TAs for undergraduate courses. Salary as an “Associate In” or a TA would tide graduate students over the summer, a period when those who are not GSR are financially strapped. A summer quarter also presents an opportunity for graduate students to take certificate courses in such areas as instructional technology, the pedagogy of writing, intellectual property rights, or basic principles of business for those whose research intersects, or someday will intersect, with corporate America. These courses might be offered by the Graduate College and could possibly be taught by faculty who now work for UC Extension or by professionals employed by DGS or other units on campus. As has long been the case, summer is the quarter that graduate students can devote to the study of foreign languages.

3. Student Outreach, Recruitment, and Retention

In order for the campus to double its graduate enrollment by 2010-11, a more aggressive approach to graduate student outreach, recruitment, and retention will be necessary. **One of our main objectives is to recruit students of high caliber, a group that includes students of high caliber from diverse backgrounds.** DGS will need to coordinate strategies that will include increased participation in national recruitment events; better and more responsive recruitment tools (including improved web materials); increased campus recruitment visits by selected faculty, staff, and current graduate students; and thorough follow-up to these visits, including engaging department faculty in careful review of the individual graduate applications resulting from these efforts. Recruitment efforts will begin to move towards a more efficient, higher-yield 80/20 model—with 20 percent of our efforts spent on direct recruitment and 80 percent of our

efforts spent on coordination between DGS and department chairs, faculty, staff, and students to facilitate and support specific programmatic goals. By reorganizing recruitment, DGS will have the ability to provide high-quality, direct, one-to-one support to a larger prospective pool of graduate students, an approach that has proven to yield high quality applicants and subsequent enrollments.

The decentralization of admissions will deliver applications to the departments sooner than is now the case and thus give faculty who choose to benefit from this headstart the chance to make contact with the most desirable applicants. This kind of early and enthusiastic communication is known to make students think very favorably of the university that calls. In addition, campus publications will need to be carefully monitored to ensure accuracy of information and effectiveness of presentation. Aside from our recruitment efforts steps are being taken to develop a program that addresses retention of existing graduate students. Hence reaching our goal of doubling graduate student numbers is a multifaceted approach of increasing our pool of qualified applicants and decreasing attrition rates. To accomplish all these objectives, DGS will need one and, more likely, two talented individuals to coordinate and participate in all facets of outreach, recruitment, and retention.

One of those persons is now in place. With the appointment of Dr. Sandra Pacheco as the first Assistant Dean since the 1960s, student outreach, recruitment, and retention have been underscored as areas of vital importance. Dr. Pacheco participates in a wide range of meetings for diversity coordinators within the UC system. Given her computing skills and experience working at CSU-Monterey Bay, Dr. Pacheco is well able to take the lead in developing outreach and recruitment strategies that maximize technology, a tracking system for accountability and funding, a clear web presence, and partnerships with the California State University system. The Division is well aware that its web presence needs to be developed in partnership with departments and academic divisions since its website is only as good as its links. The Division is equally aware that all efforts to increase diversity need to be done in collaboration with departments and with quality as the principal aim. It is the quality of programs that attracts students, underrepresented no less than traditional, and quality students in turn make for quality programs.

The Division's enrollment plan is based on constant consultation among DGS staff and with graduate representatives and department chairs as well as with other faculty and graduate students

who could further outreach and recruitment. Ours is not so much a fixed plan as a commitment to respond to individuals and to opportunities as they present themselves. But since opportunities do not simply present themselves, Dr. Pacheco expends a great deal of effort developing partnerships on campus, within the UC system, in the larger world of California higher education, and at a select group of national meetings and forums. She is currently serving as the UC representative on the Recruiter Committee for the Twelfth Annual California Forum for Diversity to be held at UC Santa Cruz in April. The gathering is being planned by a consortium of forty-six public and private colleges and universities from throughout California and is expected to bring together over a 1000 pre-selected, high-achieving undergraduate and master's students from northern California institutions who belong to groups that have historically been or currently are underrepresented in doctoral-level programs.

Dr. Pacheco is also responsible for this campus's participation in UC LEADS (Leadership and Excellence through Academic Degrees), a task that is the only duty of some staff members at other UC graduate divisions; AGEP (Alliance for Graduate Education in the Professorate), a NSF program that brings \$69,000 in direct cost to our campus, a sum Dr. Pacheco is seeking to double); and a very new program that has established a partnership between UC and CONACYT, the Mexican government's Council on Science and Technology, which, among other things, will facilitate the exchange of graduate students and postdoctoral scholars between Mexico and UC. DGS is also plans to collaborate with programs that foster the greater inclusion of underrepresented students in the academy on ways to make money go further through cost-sharing or other forms of enrichment. We also intend to try persuading those programs that give stipends to raise the sums they award.

To further recruitment efforts, the Dean and Associate Dean have begun systematically to encourage faculty to contact colleagues who teach undergraduates in order to make them more aware than they might be of opportunities for graduate study at UC Santa Cruz. A few departments already exchange the email addresses of their undergraduate majors for the email addresses of undergraduate majors at sister institutions for purposes of recruitment. More departments will be urged to adopt this practice. The Associate Dean has targeted individual departments at some twenty-five small liberal arts colleges whose graduates go on to seek advanced degrees at higher than the national average.

4. Student Financial Support

For academic year 1999-2000, when 1079 students were enrolled by the third week of fall quarter, graduate student support at UCSC totaled \$15,615,798 or about \$15,540 per student on average. (Since numbers for the academic year in progress are not firm, last year's numbers will be used.) TAs and associated fee-offset grants represented about 43 percent of total support, while GSRships represented 29 percent, and the remaining 28 percent was provided in the form of fellowships and grants. (Graduate students as a group borrowed at least \$3 million more in educational and other loans to make ends meet.)

If we assume that the students we are planning to add will need financial support at the same level as students in 1999-2000, then expanding graduate enrollment to 2236 students (twice the number enrolled in fall quarter 2001) will require the campus to provide an additional \$17 million per year (1999 dollars) in student support by 2010-11. However, it is important to distinguish the financial support needs of academic doctoral students (whose average time-to-degree is about 6.5 years) from those of master's and certificate students, whose programs are shorter and who can be expected to finance a larger portion of their total need with educational loans.

In 1999-2000, academic doctoral students comprised 73.4 percent of our graduate enrollment, and their average support level was \$17,379. Master's and certificate students made up the remaining 26.6 percent, and their per-capita support averaged \$10,449. If we assume that the additional students will divide 30-70 between master's and doctoral students, then the target per-capita support would remain close to \$15,540. If the divide becomes 40-60 or 50-50, the per-capita support level falls to \$14,608 or \$13,914 respectively. Assuming a three-quarter-average enrollment of 2336 in 2010-11, the total student support bill will be \$35,742,890 million at a 30-70 split, \$34,124,724 at a 40-60 split, and \$ 32,503,104 at a 50-50 split (1999 dollars).

There is an additional complication, however. In 2010-11, TAs will not provide 43 percent of support for 2236 graduate students. At the current ratio of one TA FTE for every 44 FTE undergraduates, an undergraduate population of 14,665 in 2010 will generate 333 TA FTE, or sufficient half-time TAs to support 666 graduate students—which is only 28.5 percent of projected graduate enrollment. Clearly, many more GSRships and fellowships will be required to help support the other 1670 graduate students. More teaching opportunities would be created if plans to train graduate students to teach writing and foreign languages, as they do at other UC

campuses, were implemented. There also needs to be a shift in campus culture causing faculty and students to be more active in seeking extramural funding. Plain and simply, the success of our graduate programs will depend on our success in garnering extramural funding, as has been done by Psychology, Physics, and Molecular, Cell and Developmental Biology—all recent recipients of graduate student training grants.

The *Report of the Commission on Graduate Growth and Support* addresses the question of funding squarely and proposes a number of strategies in addition to the creation of fellowships or grants funded by the increased fee revenue that will come with enrollment growth. In addition to a dozen recommendations, six key strategies have been defined. The importance of the recommendations and strategies has been underscored by President Atkinson's letter of November 28 to the chancellors regarding the need to pursue them and report back to him by September 1, 2002, so that he can make a progress report to The Regents.

- Actively advocate with the federal government for an increase in the annual level of fellowship stipends and for an additional 1500 stipends nationwide for graduate students.
- Urge the state to create a program of repayable fellowships for doctoral students in California universities who, upon graduation, agree to teach in California higher education institutions.
- Ask the state to fund 1000 “incentive grants” for students awarded prestigious national fellowships to make the University of California more competitive in enrolling them.
- Develop a program of Collaborative Industry-University Internships for graduate students, particularly at the master's level, integrated with their academic programs.
- Create a University of California Graduate Fellowships Endowment to raise the funds necessary to provide \$5,000,000 annually for the first-year and dissertation-year fellowships especially in underfunded disciplines.
- Develop a solid case for more funding for nonresident graduate students, and then embark on a campaign to inform state and federal decision makers and private donors about the importance of educating graduate domestic nonresident and graduate international students in our state, proposing to them the funding necessary to accomplish it.

The Division of Graduate Studies recommends the following measures to increase graduate student support. If federal work-study funds were made available to graduate students, and there is no reason in law why they cannot, this would offer not only a new source of financial support but also new opportunities to gain work experience. UC Santa Cruz is a UC campus where graduate students do not receive work-study funds. DGS plans to introduce innovative

employment for graduate students in its own office. Graduate students will not only have the chance to earn money carrying out tasks for our staff, not in itself a very novel experience, but will also be trained in administration and issues important to higher education. If recipients of doctorates are needed to fill the ranks of the professorate and swell the coffers of industry, they are also needed to direct the graduate divisions of tomorrow!

If registration fees were distributed more equitably between undergraduates and graduate students, this too would release funds that could benefit graduate students in many ways even if it did not put money directly into their pockets. However, if graduate students voted to apply their registration fees to pay the salary of a development officer, the money that was raised could be awarded as fellowships. (Currently, the Registration Fee Committee has many more undergraduate than graduate members and the former easily outvote the latter. We think that two Registration Fee Committees might be the solution, one for undergraduates and one for graduate students. As difficult as it would be to calculate which proportion of which activity funded by registration fees benefits graduate students, a certain basic agreement about what sum that is theirs to spend is not in fact spent by them could be reached.)

DGS will retain a certain percentage of the block grants so that it can leverage departments into matching funds and seeking external grants for the support of their graduate students.

In his comments on the DGS executive summary, CP/EVC Simpson said, “The level of graduate student support has doubled in the last five years, yet the enrollments have remained the same.” It needs to be borne in mind that Superfellowships, Regents’ Fellowships, and Cota-Robles Fellowships attract a stronger and more diverse student body, who in turn attract other strong students to our campus. Graduate students of higher quality are worth extra funding since a sheer increase in student numbers without an increase in quality will only earn our programs a sorry reputation. The allocation from UCOP simply does not keep pace with the increased awards that we need to make. The allocation is further eroded by increases in non-resident tuition and, for the coming year, the increase in in-state registration fees. For instance, the Cota-Robles Fellowship stipend from UCOP has remained \$12,500, even though we cannot compete unless we set it at \$18,000. Also UCOP provides no funds for fees or tuition for the Cota-Robles; we have to cover that from other UCOP funds or campus funds. We also use funds from the CP/EVC for TA Sabbatical Fellowships—a top priority for our students and departments. Although this does not

add any new students, it does lower time-to-degree and completion statistics. In short, quality students cost money.

At a moment when UC faces budget cuts due to the condition of the state economy, the graduate deans, acting as a group, will soon send a letter to the chancellors asking that cuts not be implemented across the board. It is imperative that funds for graduate education be maintained if not increased. We could not agree more. Here at Santa Cruz the changes that have recently been introduced in DGS should not be left to wither on the vine before they can mature and repay the investment that has already been made. The situation of graduate study at Santa Cruz, apart from DGS, also requires a constant if not increased level of funding given the low percentage of graduate students that we have compared to sister campuses and the continuing growth in undergraduate numbers that causes this percentage to drop lower on almost an annual basis.

5. Graduate Student Housing

There is no exaggeration in saying that there is a crisis in affordable graduate student housing that affects the ability of the university to recruit and retain students. At present there are only eighty beds on campus specifically set aside for (single) graduate students (four to an apartment) and sadly the rent for those apartments is higher than what is asked for a comparable living situation in town. Unless more housing for graduate students can be found, on or off campus, and at a price closer to market values, the crisis will only deepen. If, as the Chancellor has recently suggested, the Village were set aside for graduate students, that would be a help. Maximizing infill is also a promising course. A graduate college would, of course, also go a long way towards solving the housing problem. So acute is the problem that it would be acceptable for the graduate college, at least in an early incarnation, to be basically a housing unit with space set aside for the provision of services such as day care, computer facilities, and offices for some if not all members of DGS.

Our current LRDP calls for 50 percent of graduate students to be housed on campus, and that proportion is increasingly the norm at our sister campuses. UC Irvine now houses 50 percent of graduate students on campus (in single- and family-student units combined); UC San Diego houses 46 percent; and UC Santa Barbara has recently broken ground for an 800-bed facility for graduate students, which, when completed in 2004, will enable them to provide on-campus

housing for about 45 percent of their graduate population. Housing 50 percent on campus while doubling the enrollment will necessitate adding some 1000 beds for graduate students.

6. Graduate College

The current membership of the Graduate Council has recently approved in principle the idea of a graduate college constituted in line with the recommendations of the *Report of the Task Force for a Graduate College and Graduate Life* (June 1999). This report was written under the direction of a previous Graduate Council Chair, Professor David Belanger. The Committee on Planning and Budget will soon be approached to determine if a joint letter of support might be issued. The very first recommendation in the *Report* is that “A Graduate College should be established as soon as possible, with some non-residential aspects implemented within one year.” DGS concurs with this recommendation and the prominence it is given. The “non-residential aspects” could be encompassed in a virtual Graduate College that could run out of the current office space of DGS, aspects such as professional development of graduate students and the authority to sponsor courses to that end. The report identifies the sites for Colleges 11 and 12 as ideal for the 400+ apartments that would comprise the residential portion of the Graduate College and house 600 single students plus 400 married student and their families. Both the report and the recent endorsement from the Graduate Council stress the need for graduate housing to be economical if it is to be much of a solution to the current crisis. There is some hope that foundations and private donors could be interested in supporting such a project, which in fact is a vision of intellectual life and work.

In addition to housing graduate students, the Graduate College will play many other roles. It could provide a much wider range of services to graduate students than is possible with the current DGS structure; it could address graduate student isolation by creating a graduate community; postdoctoral scholars and visiting scholars could be part of the mix thus insuring many different paths of communication; and it could be a center for both formal and informal interdisciplinary exchange, a major focus of many existing and proposed graduate programs. It almost goes without saying that graduate students are very enthusiastic about the opportunities offered by a graduate college. During summer 2001 the president of the GSA was contracted by DGS to aid us in doing research on graduate colleges in this country and the United Kingdom. The information she gathered is an invaluable addition to the recommendations of the *Report of*

the Task Force. It also should almost go without saying that a graduate college need not be modeled on an undergraduate college. The existence of the residential colleges at UCSC does, however, mean that there is much experience available from faculty and staff regarding the steps to be followed in proposing, budgeting, maintaining such an institution.

7. Student Services

If a Graduate College provided increased student services, and a virtual graduate college could do this, what services would they be? We are in a good position to answer that question in detail because of two recent surveys sponsored by DGS and the Chancellor's Office. These surveys were conducted over the summer by three graduate students. One, *Graduate Student Resources*, is an exhaustive inventory of some sixty services available to graduate students at many points on campus. The point of this survey, which will be made available to graduate students on the DGS website, was not only to make the services known but also to begin the effort, in so far as desirable and advantageous, to consolidate services through the auspices of DGS, to improve them, and to reduce redundancy. The second survey, *The Top 11 Graduate Student Issues*, addresses major areas of concern and then considers what has been done or could be done to improve matters. The top issues are, in alphabetical order: child care, computing facilities, the financial assistance package, a graduate college, the Graduate Commons, DGS, Health Services, office space, on-campus housing, off-campus housing, and research opportunities and assistance. This list alone indicates areas in which DGS could intervene either to offer services or to advocate on behalf of graduate students.

Currently, Graduate Division staffing levels do not allow us to provide the desired and necessary services for our graduate students. However, with increased graduate enrollment comes the responsibility to provide such services. Many of these services are at this time provided in tangential ways by campus units. But the reality is that graduate students are often overlooked in light of the considerably larger and more traditional undergraduate needs. For instance, graduate students currently visit Cowell Health Center for psychological services. However, the Center is understaffed with counselors who can deal with the sorts of issues that graduate students and postdoctoral scholars present. Career Services would be another example of services that should be expanded for graduate students. This would include placement services, resume preparation, interviewing techniques, and career fairs. Dean Talamantes and Vice Chancellor of Student

Affairs Hernandez worked out an arrangement whereby a career advisor for graduate students and postdoctoral scholars was added to the staff of the Career Center. Despite the current hiring freeze, this search fortunately continues.

When the Graduate College exists, virtually or in actual fact, it would be good to move this academic/career advisor to our shop so that she or he could participate in our operations as a full-fledged member. The needs of graduate students and postdoctoral scholars being different from those of undergraduates, it would be better for such a person to work with others involved in meeting the needs of graduate students and postdoctoral scholars rather than with those involved in advising undergraduates. We can only applaud (and envy) our colleagues in the Graduate Division at UC Santa Barbara who have recently hired a full-time staff person just to help graduate students find non-academic positions. The recognition that those with advanced degrees might not be also-rans if they seek jobs outside the academy needs to become part of the culture of graduate study. Perhaps a graduate division is in a better position to foster this kind of thinking than are academic departments that are understandably invested in training the future professorate.

New initiatives in student services could include writing workshops for students in the dissertation stage of their careers, grant writing and fellowship workshops, speaker series on graduate education and related areas, improved student orientation, particularly as it relates to international students, and increased use and development of the world wide web for the delivery of graduate student services.

8. CTE and Graduate Student Development

Since July 1, 1998, the Center for Teaching Excellence (CTE) has made its services and programs available to graduate students as well as to faculty. This was in response to a proposal submitted to Chancellor Greenwood by Graduate Dean Henderson and Undergraduate Associate Vice Chancellor Laporte in October 1997. The Chancellor authorized CTE to offer an “expanded and coordinated program for preparing UCSC graduate students to teach,” and to support those efforts CTE received a budget augmentation of \$20,000 for three years, which recently expired without renewal. Although the allocation of funds was not renewed, DGS believes that the assistance that CTE has offered to graduate students is very valuable and should continue to be available and

enhanced. To increase graduate student awareness of CTE, plans are underway to create a website featuring TA development programs that would be linked to the other sites maintained by the Center.

TA development. During academic year 2000-01, CTE and DGS undertook a long-term project to examine and ultimately enhance graduate students' preparation for teaching. The students themselves were polled to learn what they consider the most critical needs in the area of preparation for teaching and to gather feedback on existing programs. Copies of the results of this poll, the *UCSC Graduate Student Survey Report*, are now being circulated campuswide. The survey and what will follow from it are but one project that CTE and the Division have worked on together.

To aid in TA training and to promote the long-term development of TAs as future faculty, CTE has offered the following services for some time: observation of TAs while teaching, mid-quarter section interviews, videotaping of teaching, consultations, and workshops. For several years CTE has organized the Fall Conference for all new graduate students. Some thought has been given as well to developing a program in which more experienced TAs, working under the supervision of CTE staff, would aid novice TAs by serving as their mentors. In responding to the survey mentioned above, students indicated that the most beneficial source of preparation for teaching they had experienced was individual mentoring by their fellow TAs. At present CTE and DGS are planning a gathering, or series of gatherings, that will offer new approaches to TA development in light of what we have learned from the graduate student survey. (Before making changes to TA training, DGS will consult with universities whose TAs have unionized to learn what considerations vis-à-vis the union need to be borne in mind.)

CTE has also been instrumental in introducing a new type of Course Development Fellowship within the range of those offered through the Instructional Improvement Program (IIP) and in serving as liaison between DGS and the Committee on Teaching in this regard as well as others. The new grant is for faculty who wish to develop pedagogy courses for TAs. Given these many services, CTE needs to add a staff person who could concentrate on implementation of graduate student development programs.

ITA Program. Since June 2001 CTE has taken the lead in overseeing the International TA (ITA) Program that has been run rather informally out of the Division of Natural Sciences for many

years. The program assesses the ability of ITAs to speak English and offers a remedial course to those who do not get a passing score. The service is not only very useful for ITAs but is also required by state law. CTE coordinates communication among the instructor who does the assessing and teaching, the graduate assistants, DGS, the Graduate Council, and, until there is a change in funding source, the Division of Natural Sciences. The Graduate Council has been very much involved in sorting out the many issues around ITAs in the course of developing a UCSC policy for international TAs that will address matters of language testing, certification of English proficiency, language development courses, department responsibilities, and policy compliance. DGS has benefited from taking issues to the Chair of the Graduate Council and to the Graduate Council as a whole for discussion and advice and hopes that their attention to the cause of graduate study and graduate students is sustained if not deepened in the months and years ahead.

Systemwide counterparts. CTE is a founding member of the UC Graduate Student Development Consortium that was established in spring 2001 when those across the system who share ideas and advice about graduate student development realized that there was business enough to bring them together on a regular basis. The next meeting of the group will probably take place at UC Santa Cruz. High on the agenda is the articulation of best practices in the area of TA development. One thing that CTE and DGS have learned through this growing network is that centers for teaching excellence or their equivalent are often located in the division of graduate studies not only within the UC system but nationwide. For example, at UC San Diego the Center for Teaching Development (CTD) resides in the Office of Graduate Studies and Research. Like CTE, CTD also serves faculty, especially junior faculty. The Center has three full-time positions—a director, an ITA program coordinator, and a program representative—and also employs TAs as mentors to other TAs and a couple of student clerks on a part-time basis. It is very interesting to note that one-third of the Center's annual budget is provided from Instructional Improvement Funds, a source of funding not used until this year for graduate student development on this campus.

Transfer of CTE to DGS. Due to the many facets of engagement between DGS and CTE over many years, we would like to propose that CTE report directly to DGS. If CTE were transferred to DGS, it would continue to offer its services to faculty but would be better situated to develop the range of services and even courses that both CTE and DGS would like to offer to graduate students. Many of those services would be equally appropriate for new faculty. With the development of programs such as Preparing Future Faculty, which is sponsored by the Council of

Graduate Schools and the Association of American College and Universities and funded by grants from The Pew Charitable Trusts and NSF, the moment appears ripe for such a shift. Since Dean Talamantes stepped into office, he and the director of CTE have regularly conferred because adding value to graduate programs through development programs of various sorts is high on his list of priorities. The director of CTE has attended DGS staff meetings, participated in long-range planning and budget development, advised on the concept of a graduate college, conducted research on TA development in a unionized context as well as units comparable to CTE, and begun to collaborate with the Assistant Dean on professional development for TAs and postdoctoral scholars. For all these reasons, the transfer of CTE to DGS seems a wise and advantageous course to follow.

9. Postdoctoral Services

In 2000-01 UC Santa Cruz hosted over 200 postdoctoral scholars. Their numbers are expected to rise as the campus adds more ladder faculty to sponsor them and junior faculty establish and expand their research programs. The UC Council of Graduate Deans has assumed the task of systematizing postdoctoral scholar appointments and services. At its fall meeting the Council received a report on the numbers and types of postdoctoral titles in use on the UC campuses and reviewed a preliminary proposal for the consistent treatment of postdoctoral scholars. After the proposal is vetted further, it will be circulated to NIH, the Academic Senate, the campuses, UCOP, and postdoctoral scholars. As a point of information, UC is seeking to institute policies and practices similar to those at the University of Washington.

To develop an effective postdoctoral program, we shall need at a minimum to do the following: (1) articulate and develop centralized services for postdoctoral scholars; (2) articulate policies pertaining to the appointment of postdoctoral scholars; (3) develop a tracking system; (4) coordinate outreach and recruitment efforts with departments that have postdoctoral positions; (5) coordinate with divisional deans; and (6) implement and administer an equitable health insurance program. Assistant Dean Pacheco is currently working on the implementation of various phases of these program components in collaboration and consultation with her UC counterparts. Additional services will include career placement assistance for both academic and non-academic positions; development of a teaching portfolio; access to housing; sponsorship of groups meetings and conferences; and such other services as can be identified as important for the recruitment,

training, and eventual placement of postdoctoral scholars. Our commitment to providing these services comes at a moment when UCOP has instructed all graduate deans to coordinate services to postdoctoral scholars—in a word to provide them with a home at the university.

10. Graduate Division Staffing

The Division of Graduate Studies is currently budgeted for 11 staff—7 FTE in clerical positions and 4 in analyst-level positions. It will require at least 10 additional staff FTE (6 clerical and 4 in analyst) to serve an additional 1168 enrolled students, while simultaneously expanding student services; providing a range of new services for UC Santa Cruz's postdoctoral community; administering several graduate groups; administering a graduate college; and directing independent external reviews of graduate programs. If one studies the organizational charts for other UC campuses, bearing in mind differences in numbers of graduate students and of programs, such a projection is not unreasonable. For example, at UC Riverside, which had 1321 graduate students in 2000-01, there is a Dean (.75 FTE), the equivalent of an Associate Dean (three part-time appointments), and an Assistant Dean, but the principal staff and clerical staff number 14 not our 8. That 14 is augmented by 6 mentor TAs who assist in the TA development program, a temporary assistant, and two casual clerk typists. The level of staffing at Riverside, prorated according to size of the graduate student population and number of graduate programs, is the norm within the graduate divisions of the UC system.

The first new positions that need to be filled, in the order they should be filled, are:

- *Assistant to Computing Director (1 FTE)*

This person would handle such things as the production of reports, data collection and presentations, web pages, maintenance of divisional computing equipment, troubleshooting, etc. By doing these things he or she would release the Computing Director to carry out sophisticated tasks that make better use of his skills.

- *Full-time Fundraiser(1 FTE)*

The creation of this position is essential to the financial support of graduate students and hence to growth itself. We would prefer that the fundraiser be located in DGS and report directly to the Graduate Dean. In addition to raising money, the fundraiser would also be responsible for graduate alumni/ae relations.

- *Graduate Program Analyst/Graduate Council Assistant (1 FTE)*

This analyst/assistant would be responsible for institutional research, analysis, and Graduate Council support. (The last-named duty is included since the Administrative Specialist who assists the Council does not have the time to follow up on the questions that arise in the course of that body's business.) The Graduate Program Analyst would provide research and analysis of graduate programs, their development, bylaws and curriculum, performing complex detailed analysis of policy, procedure, and past practice. She or he would produce an annual report as well as separate reports on the effectiveness of individual graduate programs, a practice at UCLA that we think would prove very useful at UC Santa Cruz.

- *Administrative Analyst for postdoctoral issues and training grants (1FTE)*

Given the growing number of postdoctoral scholars and the importance attached to regularizing their situation at the UC campuses, a full-time employee will be needed to handle both issues relating to them and issues arising from what we hope will be a greater number of training grants. The Assistant Dean already has too many duties to be able to give postdoctoral scholars and students on training grant the attention they need.

In addition to the above four positions, an additional six positions, **all full-time**, will need to be filled as graduate student numbers and graduate student services increase.

- *Administrative Analyst for new program proposals; graduate groups; program reviews*
- *An additional Graduate Assistant for outreach and recruitment*
- *Graduate Assistant for fellowship and assistantship accounting and liaison with Financial Aid*
- *Graduate Assistant for registration, enrollment, and degree progress*
- *Graduate Assistant for fundraising and alumni/ae relations*
- *Graduate Assistant for such student services as counseling, placement, professional development*

Assuming that a residential college is built, with the Graduate Dean serving as Provost, an additional 8-10 staff FTE will be required for operations. 12-14 staff is the normal complement for a residential college at UC Santa Cruz, but DGS staff already perform some of the functions and deliver some of the services that the colleges provide for undergraduates.

DGS has instituted regular staff meetings. The Dean has put communication, cooperation, multi-tasking, and serving clientele at the top of the agenda. DGS is also interacting more with the Graduate Council as that body plays a larger role and its chairs welcome consultation with various members of the DGS staff. Interaction has also been instituted or increased with the Office of Institutional Research, the Graduate Assistants Group, BOARS, the Center for Teaching Excellence, faculty who wish to develop proposals for graduate programs, and a number of regional and national organizations promoting graduate education (Council of Graduate Schools,

subcommittees of CGS, Society for Advancement of Chicanos and Native Americans, Western Association of Graduate Schools). The division would like to centralize the disbursement of certain funds that are now allocated to the divisions (see below, *13: Funding Requirements/ Funding Strategies*). If the Computing Director had an assistant, we would like to extend that person's services to those departments whose webpages need improvement. There are, however, also graduate assistants in the departments who have already done this and have expressed a willingness to share their experience with other graduate assistants.

We are moving to decentralize graduate admissions and have arranged for a site visit from the admissions team at UCLA in January in order to get expert advice on state-of-the-art procedures. Once decentralized, the admissions unit will not need to hire the five or six temporary clerks that it has regularly hired during the height of the admissions season (late November through March). This will represent a significant saving. One or more of the three assistants could also take on duties related to gathering data about current and prospective students as well as graduate alumnae/i, data that is more and more in demand from a variety of sources. DGS would also like to decentralize the inspection of dissertations and theses for conformity to the guidelines for their production. At most UC campuses as well as at universities nationwide, it is a unit within either the main library or special collections that handles this time-consuming task. The time freed up by the transfer of this task could be much better spent in providing administrative support to the Dean and Associate Dean and in receiving the visitors who come to DGS, something that is now done hit or miss since staff are often otherwise occupied.

11. Technology Requirements

In August 2001, DGS appointed its first full-time Computing Director to coordinate the current and long-range computing support for the delivery of DGS services to academic divisions, departments, graduate students, applicants and other prospective students, and student affairs. Computing in DGS is divided along technical lines by data processes and student-response services, those groups being admissions, current students, deans, outreach, and technical. The Power Macintoshes 7xxx series computers were new in 1997 and, although they are at the end of their product life cycle, have had RAM and OS upgrades to enable them to last a few more years. This would hold true unless there is a change in user applications beyond the current set that force the move to MacOS X, which cannot run on any machine less than the later Power Macintosh

G3s. With the exception of one server, all the remaining servers are scalable to the number of users. This too would hold true unless there is a change in technology (peripherals), campus networking, or a forced move to a new operating system that would cause a series of replacement purchases. The one server that will go out of service at the end of this admissions cycle (April/May 2002) will be decommissioned because of instabilities caused by a botched upgrade/repair carried out by a member of the previous technical support staff. The Computing Director has been very helpful to the admissions unit as more and more applications are submitted electronically and has solved the problem of credit card payment that had impeded submitting a truly on-line application.

The one-user workstation theory should hold true for any growth of DGS. Exceptions to this are the addition of mobile machines for outreach staff and the costs associated with the hardware related to connecting to campus. Budget concerns center around two major issues specific to this campus and related to technical support: (1) software licensing and upgrades; and (2) computer repairs and upgrades. Estimates for a per capita calculation range from \$100 to \$1000 with the larger figure including staged replacement of all CPUs with a previously determined deadline based on a constantly changing technology. Shared peripherals, mainly networked printers, can be added on the basis of convenient distance or printer usage (i.e., page counts) and not the number of users. One crying need that we have is for a second IT support person. This assessment of our technology needs will be shown to the campus IT Consultant for his comment.

Estimated costs (per staff member at 2001 prices)

New workstations (CPU and monitor)	\$3000
New laptops	4000
New printers	2000
Software licenses	<u>195</u>
TOTAL	\$9195

12. Space Requirements

DGS currently occupies 2179 asf in Social Sciences 2, consisting of a suite of offices (1445 asf) plus two unconnected rooms (734 asf); and we are using every square foot. The office space in Kerr Hall originally proposed for the Graduate Division comes to 1480 asf, plus the shared use

(with Sponsored Projects and the Office of Research) of a conference room (an additional 217 asf). Attractive as the Kerr Hall location is, 1480 asf is clearly inadequate for today's DGS, let alone the DGS of 2010-11. If the proposed graduate college cannot be built and occupied before fall 2005, the campus will need to identify accessible, contiguous space totaling at least 2800 asf to house DGS for the interim. Space will be needed for new staff members, a conference room (we currently can hold full staff meetings only when a classroom in Social Sciences is free), and graduate students on certain training grants who are more attached to DGS than to a home department.

13. Funding Requirements/Funding Strategies

The funding needs of DGS for its operations differ greatly from its student-support needs, and the two require rather different strategies if our goals are to be met.

In terms of our operational needs, we are entirely dependent upon the allocations of State general funds that we receive from the Campus Provost and EVC. Unfortunately, it seems unlikely that even the maximum amounts presented in the "Preliminary Allocation Ranges for Planning and Instruction and Research" tables will be adequate to support DGS's expanded responsibilities in the decade ahead. Annual increases of about \$20,000 in our operations budget will not suffice to support the increased staffing required to serve more students, implement new services and administrative procedures for postdoctoral appointees, sponsor and oversee various graduate groups, and operate a residential college. Instead, if our responsibilities will more than double in size and complexity over the next decade, one might expect that our operations budget will more than double as well. If this level of funding is not available from enrollment growth resources, our only recourse may be to establish DGS as a recharge unit and bill other units for some of the services that we provide.

With regard to the financial support needs of a graduate population increasing at an average annual rate of 7.2 percent, the news is both better and worse. While an additional \$14.3 million per year will be required by 2010-11, the amount required by 2005-06 is significantly less—only about \$5.9 million (in 1999 dollars) for a three-quarter average headcount population of 1452 students. The additional 2,617 undergraduates expected by then will generate an additional 119 half-time TAs, each worth about \$19,500, for a total of \$2.3 million in graduate student

support. This will leave \$3.6 million per year to be supplied through additional Graduate Student Researchships, fellowships, and grants. We will probably need to mount a major fellowship endowment campaign along the lines of those recently completed at Stanford University and the University of Wisconsin, each of which succeeded in raising \$100 million from donor contributions after the president or provost pledged a like amount from overhead or discretionary funds. The good news is that this funding source has been barely tapped; the matching-fund appeal to faculty and graduate alumni/ae launched by Interim Dean Bridges in 1999 with the help of the Development Office has already produced donations and pledges totaling over \$60,000 for our fellowship endowment, and we are hopeful that a more intensive effort will generate many times that amount.

DGS thinks it would be fair to augment its funds through the reallocation of certain monies now distributed to the divisions. We have already mentioned our plans to modify the block grant allocations. We would also like to have the monies that are allocated to the divisions for TA and ITA training (\$53,000) allocated to DGS unless it can be shown that the divisions are truly using the sums for TA training, and for TA training of a sort that compares well with what DGS and CTE together might offer. We would also like to learn if the funds labeled “Instructional improvement program” (\$140,000 in 1999-2000) that the divisions receive are from the Instructional Improvement Program (IIP). If they are, we would like to confer with the deans or the CP/EVC to determine if there are ways that some of these monies might be used for TA training and TA development. We would also like to determine if DGS is not entitled to receive IIP funds in its own right. (**N.B.** The allocation of IIP funds directly to the divisions is not to be confused with the \$120,000 in IIP funds that is awarded in the form of Instructional Improvement Grants by the Committee on Teaching and under the auspices of CTE.)

We also plan to augment funds for graduate study, and for graduate students in particular, through means we have already mentioned as well as means that will be mentioned here for the first time.

To be explicit, we shall do this through:

- the efforts of a full-time fundraiser;
- encouragement to faculty and graduate students to apply for more extramural funding, training grants included;
- efforts to have graduate student registration fees distributed more equitably;
- applications to foundations for funds to underwrite the further provision of daycare;
- application to the Preparing Future Faculty Program for a training grant; and

- whatever we can do to help implement the six funding strategies named in the *Report of the Commission on Graduate Growth and Support* cited above.

14. Planning Principles and Goals Met by This Plan

This comprehensive plan will serve to enhance overall institutional excellence by increasing the graduate student presence on campus, and by supporting a broader range of advanced degree programs and services for current and prospective students and postdoctoral scholars. It will help to provide the administrative and (assuming that a graduate college is built) physical infrastructure needed to achieve our academic goals. It is designed to accommodate rapid growth in graduate enrollment and to increase efficiency and effectiveness in providing support services for graduate students by locating these services in a residential college. In addition this plan enhances campus diversity both by increasing the proportion of graduate students in the student population and by expanding current programs designed to attract promising underrepresented students to Santa Cruz for advanced study. . Finally, it outlines realistic accountability measures and indicates how these can be applied.

It cannot be said enough, by DGS and by UC Santa Cruz at large, that diversity is a measure of quality. It, in fact, measures several sorts of quality simultaneously and must therefore be one of our main planning principles and goals. In the DGS office we have set the goal, and met the goal, of being a diverse group of people united in a common task. We are diverse in about every sense of the word, which only strengthens our operation and better prepares us to be able to work with students, prospective or matriculated, from many different backgrounds and from every part of the United States as well as from all over the world. Although we risk singing our own praises, we would rather be seen as “walking the walk, rather than just talking the talk..”

15. Evaluation and Accountability

The effectiveness of an academic support unit like DGS is best measured by the level of satisfaction with its services expressed by its customers and clients. To this end, we propose that the UC Santa Cruz Office of Institutional Research undertake periodic surveys of our customers and clients, to include graduate students and postdoctoral scholars, the academic departments and

divisions sponsoring graduate programs, and key officials from the central administration and the Academic Senate. If an initial survey could be completed in the near future, it would provide a useful baseline from which to measure our performance as we pursue the campus goal of doubling graduate enrollment by 2010-11. DGS already has a wealth of information going back well over a decade gathered from a *Survey of Ph.D. Recipients* that students must fill out when they file their dissertations. Conversations with the Office of Institutional Research during fall 2001 have been the preliminary stages in a proposed joint project in which the Office and DGS will gather and format data about current students and graduate alumnae/i. Another means of evaluating DGS and holding it accountable is an external review of the unit. It appears that there has not been such a review since 1988-89.

With regard to accountability for proposed increases in graduate student support, one obvious measure is whether we meet our enrollment targets. Since the bulk of new fellowship and grant funding always goes into graduate student recruitment, and since admittees who do not enroll cannot claim their fellowship stipends, any surplus funds are always available to be returned to the Campus Provost—or reallocated to continuing students, if it is determined that this would likely increase retention/enrollment rates. It is instructive to note that roughly 10 percent of our graduate population is on leave of absence at any given time, mainly for financial reasons.

In addition, the Graduate Dean, along with the divisional deans and the Graduate Council, has responsibility for maintaining and enhancing the academic quality of existing graduate programs. Although UC Santa Cruz departments currently receive an external review every six years, these reviews typically focus on the undergraduate program. Recognizing this fact, Academic Senate regulations require the Graduate Council to conduct a detailed review of all graduate programs at least every five years. Such reviews could be conducted for a relatively modest cost if two of the reviewers were internal and only one was from an outside institution, as is done at many reputable institutions. Another thought we have had is to lengthen the visit of an external review team so that one full day can be devoted to the review of the graduate program alone. To facilitate such reviews, DGS will routinely maintain and provide the Council and the divisional deans data on various indices of program quality such as the following.

- Applicant selectivity
- Applicant GRE scores and GPAs
- Degree completion rate
- Time-to-degree performance

- Extramural support per enrolled student
- Student satisfaction (as measure by periodic surveys)
- Professional placement rate
- National ranking and/or reputation (from NRC data, etc.)

16. Timetable by Way of Conclusion

The timetable for what has been covered in this comprehensive plan makes a good conclusion because it looks to the future and makes our priorities clear. The more important an initiative, the sooner we would like to act on it. We would hope, however, that the higher administration leaves us some leeway regarding this schedule since we may have to shift our priorities as circumstances change. Some of the important initiatives are complex undertakings that need to be broken into stages, something we have attempted below in dividing our priorities into four phases: (1) those we plan to accomplish before the start of next academic year; (2) those we would like to see concluded by June 2003, the end of next academic year; (3) those that should be accomplished by the midpoint in the ten-year planning process; and (4) those that would mark the successful conclusion of the same process.

Current Year (2001-02)

- authorization sought for establishment of virtual college
- block grants modified to create discretionary funds for student support
- first quarterly newsletter published
- research for annual report begun in collaboration with Office of Institutional Research
- DGS webpage improved
- renewed effort to have a mental health counselor appointed

Year 1 (2002-03)

- virtual college instituted; Dean of DGS named college provost
- CTE's involvement with DGS increased; transfer of CTE to DGS effected
- ITA program refined
- IT assistant appointed
- fundraiser appointed to raise money specifically for student support and graduate college

- webpages of DGS and departments improved
- further decentralization of Admissions accomplished (with cooperation of departments)
- TA development activities introduced after being reconceptualized
- professional development workshops offered to graduate students

2005-06

- construction of graduate college begun
- four further staff appointments made
- for-credit professional development courses offered through virtual graduate college
- seminar series (pl.) offered by virtual graduate college to develop its intellectual profile

2010-11

- graduate college functioning with its own operations staff
- four further staff appointments made

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