

May 13, 2003

EXECUTIVE VICE CHANCELLOR AND PROVOST GRAY
CHAIR ROBERT HOLUB

Dear Paul and Bob:

I am attaching the final report from the New Ideas Internal Review Committee and the appendices to this report in a separate volume. The report is a succinct statement of our recommendations; the appendices include the materials generated during the process. The committee felt that these appendices should be comprehensive so that if the process is repeated, the subsequent committee will have the benefit of all of our experience.

In this report the committee recommends new resources for four of the original ten themes. The year-long process of identifying themes, engaging the faculty and reviewing the proposals was a direct outgrowth of the Strategic Academic Plan. It was a year of intense activity. It engaged a significant portion of the campus' faculty in a "bottoms-up" process that has never really been tried before on this campus. The committee and its co-chairs are proud that the process turned out well and that we were able to bring this to a successful conclusion.

The committee believes that this process has been especially beneficial to the campus and hopes that it will be repeated again in two or three years. In this regard, the committee would like to bring to your attention the suggestions for improvement of the process embodied in Section 5.

If you have any questions, please feel free to contact either of us.

/s/

Catherine Koshland
Chair, Berkeley Division
of the Academic Senate

/s/

William C. Webster
Vice Provost, Academic Planning
and Facilities

**REPORT & RECOMMENDATIONS OF
THE NEW IDEAS INTERNAL REVIEW COMMITTEE
(Edited for web distribution June 10, 2003)**

1. Executive Summary

The Strategic Academic Plan has provided a guide to the renewal of the campus's academic enterprise through this New Ideas Initiative. Through a six-month process, the New Ideas Internal Review Committee, in conjunction with an External Review Committee and external peer reviewers, can now recommend the allocation of 21 faculty FTE in four programmatic areas. A series of public meetings, a two-stage proposal process that included written and oral presentations, two external review steps, and extensive deliberation have created consensus among the Committee members. In addition to these faculty FTE recommendations, the Committee observed and noted that there are important impediments to interdisciplinary research and teaching on the Berkeley campus.

The Committee's analysis of all five of the final proposals found each had very compelling dimensions, and all addressed important initiatives for the campus. The deliberations focused on whether faculty FTE would make a difference, and that was the primary factor in the analysis. As a result of this comprehensive process, the Committee recommends the following faculty FTE allocation:

Computational Biology	7
Nanosciences and Nanoengineering	7
Regional and Metropolitan Studies	5
New Media	2
The Future of the Planet	0

The Computational Biology initiative is strong both in terms of intellectual content and leadership. Substantial new FTEs were recommended because this area represents a campus thrust that could only be partially developed within existing departments and the current FTE allocation system.

In Nanosciences and Nanoengineering, the campus is undertaking an effort to catch up with competitors who have a head start. The campus has numerous disciplinary strengths, and this initiative will only partially fill the void that has been identified by the proposers.

In Regional and Metropolitan Studies, the subject matter is compelling, and the campus leadership is in place to take advantage of already-existing departmental strengths.

The New Media recommendation represents a strong endorsement for this group to continue its interactions and initiate the hiring of at least two faculty and perhaps more if

leveraged with existing departments. The New Media program should be encouraged to return in two or three years with a new request for additional faculty with a clearer vision.

Finally, the Future of the Planet initiative represents a comprehensive approach to solving environmental problems at the scale of the earth. This initiative illustrates the difficulty of effectively mobilizing campus faculty on this topic within the constraints of the current academic structure. While the committee does not endorse the allocation of faculty FTE, the Committee strongly recommends that the campus undertake a comprehensive review of campus environmental strengths and more broadly, what structural changes are necessary for focusing those strengths on long-term challenges for research and teaching. It is important that the campus provide non-FTE resources to help this important theme develop a structure that would leverage the substantial faculty strength in this area.

This comprehensive exercise has engaged many campus faculty, and many new ideas have been initiated by this process. The Committee recommends that this process continue and that it form the basis for allocating approximately 40 additional faculty FTE. However, the campus needs to review and assess the outcome of this first round in order to refine the process for the next time. For example, the identification of themes and the nature of the proposal review process have disadvantaged faculty in the arts and humanities due to the differences in modes of discourse and interaction in these areas from those in the sciences and professional schools.

2. Strategic Academic Plan

The Strategic Academic Plan developed by the Strategic Planning Committee (SPC) summarized a two-year effort to guide future academic planning on the Berkeley campus. The SPC was comprised of representatives from the administration, the Academic Senate, students and staff. The Strategic Plan proposed to accommodate enrollment growth through three separate paths: relief of impaction, elastic growth, and support of new areas of inquiry. Growth of faculty resulting from relief of impacted programs was dealt with by the Near Term Planning Committee; elastic growth is being handled through a normal academic FTE request process through the separate units. The third means of accommodating growth, the development of new areas of inquiry, is the focus of this report.

In the Fall of 2001 faculty were invited to suggest new areas of inquiry. Over 120 responses were received. Among the submitted ideas, the SPC found many advocating that the university embark on programmatic directions that have such a unique combination of newness, breadth, potential student interest, and clear societal importance that they could appropriately be considered “grand new programmatic thrusts.” Many of these ideas overlapped with one another or involved different aspects of a similar theme. The committee combined these ideas into broader comprehensive themes that had obvious interdisciplinary synergy. The resulting ten themes identified as having exceptional promise were:

1. Computational Biology
2. Nanosciences and Nanoengineering
3. Society and Technology
4. Cultural Evolution, Preservation, and Extinction
5. Metropolitan Studies
6. International Relations and Global 'Security'
7. New Economic Theories
8. Complex Systems, Design, and Human Interfaces
9. New Media
10. Environment

The Executive Vice Chancellor and Provost Paul Gray asked the New Ideas Internal Review Committee to recommend the allocation of up to 20 FTE faculty in support of these new areas of inquiry. It is anticipated that 40 additional FTE will be allocated over the remainder of this decade. Because new fields of study are likely to emerge, future competitions will not necessarily be limited to the above ten themes. However, for this round only the themes listed above were considered.

Prior to the appointment of the New Ideas Internal and External Review Committees, ten faculty gatherings were held to explore interest in these themes. The gatherings were broadly announced and held from 4 to 6 pm to attract the most attendance. The gatherings were professionally facilitated to encourage faculty to share all ideas and scope out possible approaches. Each gathering had introductory comments by Vice Provost William Webster and Senate Chair Catherine Koshland, except for substitutes provided occasionally by Associate Vice Provost James Hunt and Senate Vice Chair Ronald Gronsky. Each meeting followed a set format: an overview of the review process, the requirements for proposals, the deadlines, and then a question and answer period. The majority of the time was spent exploring possible ideas for the themes. Prior to the gatherings, there were informal meetings organized during the summer to identify faculty who would provide some preliminary planning prior to the official gatherings in refining themes and interests. Meeting notes and attendees were distributed following the gatherings to all participants who either attended or expressed an interest in the theme.

3. Review Process

The review process has been divided into multiple steps to encourage creative solutions and not overly burden campus faculty in preparation of lengthy proposals with little probability of success. The complete schedule of activities followed by this process is outlined in **Appendix A** (<http://spc.vcbf.berkeley.edu/document/AppendixA.pdf>).

The Internal Review Committee was appointed by Executive Vice Chancellor and Provost Paul Gray and is composed of six senior administrators and five senior faculty members representing the Academic Senate. The charge given to the committee and its composition are given in **Appendix B** (<http://spc.vcbf.berkeley.edu/document/AppendixB.pdf>).

The External Review Committee was composed of four distinguished academic leaders from outside UC Berkeley (**Appendix C**; <http://spc.vcbf.berkeley.edu/document/ReviewCommittees.doc>). Their participation was solicited by Chancellor Robert Berdahl and EVCP Paul Gray. They were involved in evaluating the written preproposals, and they later gathered at UC Berkeley for a two-day period to hear presentations from each preproposal team.

3.1 Preproposals

Preproposals were solicited that specifically addressed one of the ten themes identified by the Strategic Academic Plan. The Academic Review Criteria described in **Appendix D** (<http://spc.vcbf.berkeley.edu/document/AppendixD.pdf>) sections 4.a. – d were taken from the Strategic Academic Plan. Submittal of the written preproposal was followed in a week by an oral presentation to the External Review Committee.

Eleven preproposals were received for the ten themes and are included in **Appendix E** (**proprietary, unavailable for distribution**). One of the points made repeatedly at the Faculty Gatherings by Vice Provost Webster and Chair Koshland was the strong desire to have a single preproposal from each theme. To prevent spoilers, the process did allow the submission of more than one preproposal, but only two would be presented to the External Review Committee if there were three or more. The Internal Review Committee was prepared on short notice to narrow the number of preproposals down to two, but that proved to be unnecessary.

Most of the External Review Committee arrived on campus Wednesday, November 20, 2002 for a dinner with VP Webster, Chair Koshland and staff. Some of the procedures for the interaction of the External Review Committee with the Internal Review Committee were established at that time along with providing background on the New Ideas Initiative and the Strategic Academic Plan. On Thursday, November 21, all members of the External Review Committee had breakfast with VP Webster and Chancellor Berdahl to review procedures, schedules and objectives. The External Review Committee then reviewed 11 preproposals over the next day and a half. Each theme was allocated 60 minutes with at most 30 minutes for a presentation and the remaining time for interaction with the External Review Committee. The Cultural Evolution theme had two submissions, and the time allotted to each preproposal team was reduced to 30 minutes, half for a presentation and half for discussion. No members of the Internal Review Committee were in attendance at these presentations or discussions with the External Review Committee.

Friday afternoon, November 22, the External Review Committee provided an oral report to Chancellor Berdahl and EVCP Paul Gray with members of the Internal Review Committee invited as observers. No written report from the External Review Committee was provided to the Internal Review Committee.

The Internal Review Committee utilized the recommendations from the External Review Committee and their own analysis to select five themes for submission of final proposals.

A few days after the oral presentations, five themes were invited to prepare final proposals. The requirements for the final proposal included the Academic Review Criteria discussion from the preproposal (revised based on reflection and the comments received from the preproposal) and a new section that addressed in detail how the new program would be implemented at Berkeley.

The following themes were invited to submit final proposals, but were not ranked:

- Computational Biology
- The Future of the Planet: Development of the Berkeley Institute of the Environment
- Humanities, Technology, and Art/Design for the 21st Century (New Media)
- Nanosciences and Nanoengineering
- Regional and Metropolitan Studies

The following preproposals were not invited to submit final proposals:

- Behavioral Approaches in the Social Sciences
- Cultural Evolution I. Human Ecology and Heritage Studies
- Cultural Evolution II. Language Ecology
- Human-Centered Design
- Humanities, Technology, and Art/Design
- International Studies and Global Security
- Society and Technology

Appendix F (**proprietary, unavailable for distribution**) contains the transmittal letters and individual feedback provided to both the successful and unsuccessful preproposals.

3.2 Final Proposals

The final proposals (**Appendix G; proprietary, unavailable for distribution**) were reviewed by the Internal Review Committee and sent out for written peer reviews by knowledgeable experts in the fields. These inputs formed the basis for an additional request to clarify certain questions and a face-to-face meeting between the Internal Review Committee and one representative of each proposal.

Prior to the receipt of the final proposals, external peer reviewers were identified for each theme area. Those themes invited to submit final proposals were encouraged to suggest peer reviewers, and those suggestions formed the basis for an initial contact list from which additional reviewers were identified. The Internal Review Committee was shown the list of peer reviewers prior to sending out the final proposals for review. Either two or three external reviews were obtained for each proposal. The campus was very fortunate in being able to engage active, senior researchers in undertaking this task given that less than one month was permitted for the review. The reviewers were sent the evaluation criteria developed by the Strategic Academic Plan and a brief background on the process. An example letter requesting the external peer review and redacted responses are given in **Appendix H** (**proprietary, unavailable for distribution**).

The final proposals were also sent to the Vice Chancellor for Budget and Finance and the University Librarian for evaluation of space needs, financial obligations, and library resource requirements. These responses are included in **Appendices I and J** (both are proprietary, unavailable for distribution).

The Internal Review Committee devoted two meetings to the discussion of the final proposals following the receipt of the written external peer reviews. In the course of these meetings, the Committee decided that it was essential to have the proposers address certain questions that arose in the internal and peer review process. The Committee developed a list of questions specific to each proposal that were sent to the lead faculty with written responses requested on April 14, one week prior to the meeting on April 21, 2003. The feedback to the proposers and specific questions are included in **Appendix K** (proprietary, unavailable for distribution) and the responses are in **Appendix L** (proprietary, unavailable for distribution).

The final meeting of the Internal Review Committee was held on April 21 from 4 to 9:30 pm. This meeting was attended by all but two of the committee members and consisted of five 30 minute meetings with a single representative of each proposal and 15 minutes of committee discussion after the representative left the room. An extensive discussion followed, and the committee came to consensus on faculty FTE allocation.

The recommendations in the following section are a culmination of a year-long effort by this committee and others to implement the component of the Strategic Academic Plan for New Initiatives.

4. Analysis and Recommendations

The Committee recommends the following allocation of faculty FTE:

Computational Biology	7
Nanosciences and Nanoengineering	7
Regional and Metropolitan Studies	5
New Media	2
The Future of the Planet	0

Each theme will be individually discussed in the above order.

Computational Biology

The revolution in the biological sciences continues, and the campus has a unique opportunity to seed the expansion of that growth through this New Ideas Initiative. Existing departments on campus have recognized the importance of managing, manipulating, and analyzing the enormous amount of data that are becoming available from the analysis of genetic sequences, protein expression, metabolic regulation, and predictive modeling of biological systems. The proponents of this theme have made a convincing argument that individual departments are unwilling to make a significant

change in faculty hiring to develop the critical mass necessary for a graduate program and to change the focus of undergraduate education in the biological sciences. The Committee heard that Mathematics has hired an excellent researcher who works in this area, but will not be looking for additional faculty. Bioengineering, because it is a new department, has hired two faculty in this area and wants another one. Other departments, if offered an FTE, would more likely direct the position towards an experimentalist. There are approximately 12 faculty on campus that identify partially with computational biology, but they have additional research interests as well. The seven additional faculty will provide the critical mass that can transform the designed emphasis for graduate students into a Ph.D. granting graduate group. The existence of such a group and the commitment of the campus for its growth over the next few years will permit the already active faculty to significantly expand the research base, obtain substantial graduate student funding, and produce the next generation of leaders in the fundamental and applied biological sciences.

The resources required for this program will be relatively modest for hires in the sciences. The intent is to hire faculty who are not experimentalists, but who need to be in intimate contact with research groups that are collecting the experimental data. Faculty start up costs are budgeted at \$250,000 each. Space needs will be accommodated partially within the New Stanley Hall that was designed knowing that computational biologists needed to be in close association with the molecular biologists, chemists, physicists, mathematicians, statisticians, and engineers.

The Committee was particularly impressed with the structure proposed by this group for the recruitment, promotion and retention of faculty within the Berkeley system. The lead faculty have had considerable experience with the campus and have designed a system whereby faculty FTE are completely held within an institute, but their teaching duties are partially assigned to departments. The intent is to have computational biology faculty participate within the regular teaching program of existing departments and transform those departments by introducing the methods, tools, and approaches of computational biology into biology, mathematics, bioengineering, and public health. These faculty would not be dependent upon those departments for promotion and tenure decisions because that will be handled within the institute. Issues of joint appointments for junior faculty will be avoided and departments are provided with teaching resources and potential colleagues, but this arrangement does not diminish resources from traditional interests.

The Graduate Council has already approved a Designated Emphasis program in this area and a Graduate Group will evolve as the program matures. The faculty have also submitted a training-grant proposal for graduate student funding.

Nanosciences and Nanoengineering

Both the External and Internal Review Committees were convinced that all major research universities must have a presence in nanosciences and nanoengineering and very soon. Unfortunately, Berkeley is in the position of having to play catch up in this

multidisciplinary field. New advances at the nano scale (100 nanometers and smaller) require the integration of chemistry, physics, materials science, biology, electrical engineering and mechanical engineering. The individual departments cannot do this separately, and only a combined effort as envisioned by this team will initiate advancing the field on the Berkeley campus. Considerable effort has been devoted by campus faculty thus far in nanosciences and nanoengineering through the submission of a proposal for a designated emphasis for Ph.D. students, along with requests for federally funded graduate student fellowships. The field is developing at this time, and the logical emphasis of the educational effort is at the graduate level. The faculty have carefully considered the necessary background for their students and have concluded that students must come into the field with a solid disciplinary background. The faculty involved in this effort have a strong track record of producing Ph.D.s, and these graduates will continue developing the fields of study at other research universities and laboratories. While the faculty have given some consideration to an undergraduate curriculum, there is a reluctance to have a significant presence at the undergraduate level at this time in order that students become well grounded in the core disciplines. As this program evolves, the campus should expect that faculty will participate in undergraduate instruction at a level appropriate for the Berkeley campus.

The financial and space resources required for success in this field are high, but there are some resources locally available that can assist in this growth. There have been major multi-agency research initiatives at the federal in this field that can be tapped for research funds. The current involvement of campus faculty in constructing and operating the LBNL Molecular Foundry will provide access for new faculty hires. The presence of excellent disciplinary departments and the surrounding information and biotechnology industries will create the synergism necessary to see the development and application of this field. In spite of this, the anticipated costs of new faculty hires and the provision of physical facilities for this research are high. The estimates of start up packages are on the order of one million dollars each and the proposal assumes that significant research space will be available in the new Stanley, new Campbell, and the CITRIS buildings as well as in the renovated space in Hearst, and Upper Hildebrand.

If the nanosciences and nanoengineering initiative is implemented, the lead faculty will need to reconsider the administrative structure they have proposed. The relatively informal arrangements depend too much upon good will among departments. That might work well in the beginning, but such an arrangement has the potential to not protect new hires and assistant professors during the critical start-up years. The Committee suggests that this group seriously consider the model proposed by Computational Biology for the formation of an institute that holds the FTEs and the faculty are then “lent” to departments to assist with their teaching and graduate student advising duties. The Committee was impressed that while there is a nanosciences and nanoengineering research institute at UCLA/UCSB, the effort at Berkeley can be distinctive and continue to push the boundaries of the disciplines as is determined by the science and not the traditional academic structures.

Regional and Metropolitan Studies

The growth of human populations in regions has expanded beyond the political boundaries that have defined metropolitan regions. Southern California and the Bay Area are prominent examples of this process. There is an opportunity and need to rethink the disciplinary approach to urban systems that reflects the reality of population growth in the United States as well as in the world. This initiative focuses initially on professional training at the masters level, but will quickly attract a large number of undergraduates interested in studying the growth, health, maintenance, and stability of human population centers. The recommended faculty FTE allocation to this initiative is less than the eight requested because there was less of an emphasis on Ph.D. level research than some of the other initiatives and a number of the requested faculty positions could be leveraged with the departments. The FTEs are required to establish a cohesive academic program.

The financial resources necessary for this initiative are modest and reasonable. The faculty start-up packages are in the range of \$40,000 each, and there is a modest request for initial staff support of a research facility that will provide database integration. There is little new hardware needed and space commitments are available from chairs and deans.

In terms of the administrative structure to nurture this new initiative, there is a need to rethink the way the new faculty will be housed and protected from strong departmental interests within each discipline. The institute structure proposed by Computational Biology ought to be considered as a means to recruit, promote, and protect new faculty so that they can be supported in their research and teaching efforts that cross over strong departmental boundaries.

New Media

This is an imaginative proposal to integrate humanities with arts and design using new technologies for representation. The energy of the faculty involved and their enthusiasm are definite strengths, and this theme has the potential to move the campus in directions that would not occur otherwise. The Committee strongly recommends that this group continue their interactions and better define what the Berkeley program will become. The recommendation of two faculty FTE represents a strong encouragement to initiate this enterprise. This group should reapply for additional faculty FTE during the second phase of this New Ideas initiative and at that time have a better articulation of intellectual agendas and directions. These initial FTE ought to be used as leverage for obtaining 50:50 appointments with existing departments to partially achieve initial objectives with a net increase of four new faculty. Programmatically, a minor for undergraduates will be very attractive for students in Mass Communications that is currently lacking a rigorous program. Opportunities at the graduate level are also considerable and can be nurtured by an investment of faculty resources in this enterprise. The use of the Designated Emphasis for Ph.D. students is a reasonable approach to the initial effort. Given the support expressed by the external peer review letters, this program can achieve national prominence after some additional planning.

The New Media faculty have provided an excellent description of the infrastructure required for the success of the program and coordinating its availability within the campus. The interaction of this initiative with the University Library demonstrated an ability to achieve joint objectives and additional space resources are identified within Wurster, Hearst, and South Hall.

As with the other initiatives, there needs to be careful consideration of how new faculty are integrated into the campus and still retain their allegiance to the New Media Initiative. The Committee is concerned that New Media faculty appointments might be redirected by home departments unless there are active mechanisms that provide support and encouragement to New Media.

The Future of the Planet

Both the Internal and External Review Committees recognized the importance of research and teaching at all levels of the university in the area of the environment. Environmental resources are finite, and continued population growth and development pressures require advancements in sciences, new methods of synthesis for the design of solutions, and new approaches for incorporating human behavior into the analysis. It is obvious that the need to understand human-induced environmental stresses requires input from many disciplines.

The Berkeley campus has approximately 300 faculty members with an interest in environmental issues and on the order of 100 faculty who participated extensively in the development of this proposal. The effort is commendable but did not attempt to solve the fundamental structural weakness of the campus in being able to respond to opportunities in the environmental arena. The addition of eight additional faculty was viewed by the proposers as essential glue to bind or coordinate the existing faculty together within an existing structure that was found wanting ten years ago by the Dwyer committee. The Committee was impressed with the joint letter of support issued by ten deans, but felt that substantial structural change was needed rather than continuing to add faculty in the traditional manner. The proposal did not make a persuasive case for the recruitment of a director from outside the campus.

The Berkeley campus is missing cohesive intellectual and fund raising opportunities by not having a structure that can support and promote campus-wide environmental initiatives. The environmental problems that need solutions are complex and span many disciplines. The nature of these problems and opportunities for interdisciplinary research require a new academic approach that is not yet either articulated or agreed upon. One model is that faculty at Berkeley ought to be able to collect themselves into informal associations that can participate in problem identification and solution on a temporary basis. Another approach is that a new organizational structure must be invented with the breadth of disciplines necessary for a comprehensive teaching and research program. The approach presented in this proposal followed neither approach and did not propose the transformational change necessary to catalyze the disparate academic bases. There are external funding opportunities that could support a change in the way the campus

approaches the environment, both in terms of federal grants for interdisciplinary training and extensive private fund raising opportunities.

It is unfortunate that the campus goes through this analysis of the environment every decade or so but cannot structure the substantial change necessary to create an internationally renowned institute or college. Berkeley has incredibly strong components but lacks leadership. This group made an able attempt within the constraints of the New Ideas process, but it is clear that the campus must address this issue through another means. The Administration should convene a panel similar to what was convened over 20 years ago when it reorganized the biological sciences. This panel should propose a solution appropriate for Berkeley and outline a means of implementing that solution. A critical mass of faculty does exist, they have been effectively mobilized for this New Ideas Initiative, and the campus should reward that effort through a commitment to addressing the root cause of our ineffective response to environmental research and teaching.

5. Commentary on Process

This process was the first of three steps proposed in the Strategic Academic Plan for the allocation of approximately 60 faculty FTE over the period of 2003 to 2010. The goals and review criteria were suggested by the Strategic Academic Plan, but the actual details of the process were developed over the course of approximately a 12 month period. The general outline of the process was jointly developed by Vice Provost Webster, Senate Chair David Dowall, and Senate Vice Chair Catherine Koshland along with consultation with several other top administrative colleagues during the summer of 2002. The need for an External Review Committee was quickly recognized to provide a consensus opinion of senior and nationally prominent academic administrators on potential future areas of inquiry and the campus's ability to respond. An Internal Review Committee composed of five academic senate nominations and five senior campus administrators (with a sixth added later) was large but essential in broadly identifying themes that could build and maintain nationally successful academic programs at Berkeley. Overall the selection process consisted of the following steps:

1. Identification of the ten themes
2. Faculty gatherings
3. Appointment of Internal and External Review Committees
4. Receipt of written preproposals
5. Oral presentations by faculty teams from each preproposal to External Review Committee
6. Reporting from External Review Committee to Internal Review Committee
7. Feedback to successful and unsuccessful preproposals from Internal Review Committee
8. Receipt of final proposals
9. Selection and acquisition of external peer reviews
10. Receipt of internal assessments of library, space, and financial impacts

11. Feedback to proposers from Internal Review Committee and peer reviewers
12. Meeting with proposers
13. Reaching a recommendation for forwarding to EVCP Paul Gray and the Budget and Interdepartmental Relations Committee
14. Commenting on the overall process

While this process has been successful in identifying New Ideas that will advance the campus's teaching and research efforts, the question arises as to whether this process should be repeated in the form it evolved into. The committee makes the following observations and recommendations about the process.

The New Ideas Initiative as part of the Strategic Academic Planning process has had numerous benefits to the campus already. The activity generated considerable faculty participation at its numerous steps in what was viewed as a fair and open process. The wide solicitation of new ideas from the campus generated over 120 descriptions of programs where the campus could direct additional faculty resources unconstrained by the traditional departments. During this Committee's deliberations it was clear that this process did catalyze new collaborative efforts among faculty. The faculty gatherings were a general delight to observe as campus strengths and opportunities were explored in open forums. The campus administration supported the process particularly at the level of the department chairs and deans. Instead of viewing this process as a threat, many were actively engaged in supporting the participation of faculty, the provision of resources, the sharing of faculty FTE positions, and the ultimate commitment of space. Lastly, the Committee is encouraged by the quality of the recommended programs and feels the campus will greatly benefit from this effort.

The Committee has articulated several concerns as it has deliberated over the past six months. One of the greatest is the lack of significant engagement by faculty in the arts and humanities with this process. The concept of interdisciplinarity, the types of collaborative efforts, and the process of proposing research agendas are distinctly different in the arts and humanities than in the sciences and professional fields. The process that has been adopted in this effort is similar to that found at the National Science Foundation and the National Institutes for Health. The campus needs to engage the arts and humanities faculty more actively in any future process, and that involvement will most likely require some rethinking of theme identification and program size.

Another concern raised within the Committee and during all faculty gatherings was the need for proposers to address the space needs for their effort. The requirement that themes have access to programmatic space provided an advantage to those themes that could connect with building renovation or expansion programs. There was a concern expressed that this process has been used to support programs that might have happened anyway, and this process may only be providing additional resources at a faster rate than what would have occurred. Because the recipients of this report are EVCP Paul Gray and the Budget and Interdepartmental Relations Committee, they will be able to determine if there is overlap between the recommended themes and those faculty FTE requests that would arise through the normal process. Finally, this process has required approximately

quarter time by a staff person over a nine-month period along with considerable time spent by senior faculty and senior administrators. For this first time, that investment of resources was necessary.

The campus will need to address some issues as the initiatives are implemented and before a new call for themes is announced:

- The process could be improved by an earlier appointment of both the Internal and External Review Committees in mid September. The Internal Review Committee should have an opportunity to meet representatives from selected preproposals after screening by the External Review Committee.
- The Academic Senate should be invited to comment on this process.
- The campus should appoint a small oversight/steering committee for all initiatives to ensure that they remain on track, and that there is a mechanism for providing support and addressing unforeseen questions that will arise during implementation. On a longer term, such a committee could explicitly document the impact these new programs are having on undergraduate teaching. The committee could meet twice a semester and report directly to EVCP Paul Gray. This committee's insights in the implementation phase would be invaluable during the planning and execution of the next competition.
- A challenge remains on the campus in recognizing faculty working in interdisciplinary groups where "superior intellectual attainment" must be evidenced. The Academic Personnel Manual provides for flexibility, and the Senate and Administration note that the success of this new initiative process requires a broader adoption of this flexible criterion in the campus review process.
- The overall process requires evaluation from the perspective of the faculty in the non-science sectors. The Townsend Center is one such source for an analysis of this process.
- This process could be repeated after either two or three years. The advantage of a two-year cycle is utilizing the momentum developed during this effort to continue activities by groups that required additional time. This cycle would require an almost immediate effort at identifying the appropriate themes. A three-year cycle would permit some time for reflection on the current process, develop approaches for better including more campus units, and allow additional time for themes to develop. The Committee recognizes that budgetary constraints will be an important consideration as well.
- The administration should consider some form of support to be provided to units in coordinating their responses.

Transformational Change

The Strategic Planning Committee recognized that the enrollment growth represented a unique opportunity to initiate new areas of inquiry within the campus in anticipation of the future challenges of academia in the contexts of Berkeley, California, the United

States, and the world. While this process did generate substantial faculty interest in an otherwise pessimistic time, each of the final proposals struggled to devise a structure that would accomplish the goals of the initiative within the constraints imposed by established procedures for the campus. As noted above, the most serious concern observed by the Committee was developing an organizational structure that would permit recruiting, promoting, and retaining younger faculty members to address challenges that are inherently interdisciplinary. The ability to request faculty appointments and the procedures for promotion are based largely on input from existing departments, schools and colleges which continually strive to improve their disciplinary strengths. During this process the Committee has heard from numerous groups indicating that existing departments were unwilling to invest faculty resources in programs that were just a little outside their areas of historical strength. This has hindered the encouragement of new fields of study and resulted in some units failing to move as rapidly as they should as areas of emphasis evolve. The campus has explored various models for supporting interdisciplinary activity, with examples of approaches given by the Energy and Resources Group, the Wills Neurosciences Institute, and the Center for Atmospheric Sciences. There will most likely not be a single model that is appropriate for the whole campus, but faculty and administrators should recognize the need for such flexibility and make widely known the various options that are available.

This New Ideas Initiative has generated considerable interest on campus and at our peer institutions as higher education undertakes the continual transformation that is essential for excellence. The Strategic Academic Plan has provided an outline for this transformation and the Committee's experience has confirmed the wisdom of that approach.

Appendices

- A. Schedule
- B. Committee Charge Letter (amended)
- C. External Review Committee (with short bio)
- D. Proposal Requirements and Review Criteria
- E. Preproposals
- F. Preproposal Feedback
- G. Final Proposals
- H. External Peer Review Request and Responses (redacted letters)
- I. Input from Budget and Finance
- J. University Library Impact request and response
- K. Request for Response to External Peer Review and Committee Questions
- L. Response to Peer Reviews and Committee Questions