

REFLECTIONS ON THE CALL TO ENGAGEMENT

Jeffrey S. Lehman

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PREFACE

During my first year as Cornell's president, I devoted a great deal of time to listening and to hearing what people think about our university. I listened to faculty, students, staff, alumni, and our trustees. I listened in settings that included large public groups, smaller private conversations, and one-on-one meetings. I listened on our Ithaca campus and at Weill Medical College. I listened to people within our campus community and beyond. And I listened to the responses that people offered following the "Call to Engagement" that I issued a year ago.

The listening was fascinating in all regards – but I took special joy in listening to the responses to the Call to Engagement. The purpose of this report is to share with you a sense of that process as well as a sense of the responses.

I encourage you to read first the Introduction to the report, which will help provide context and explain a bit about what you can expect (and not expect!) from my *Reflections on the Call to Engagement*. I hope that you will then dig in and enjoy the sections on each of the questions that were posed to all Cornellians. I am confident that you will find the "listening" as interesting and thought provoking as I did.

My deepest thanks to all who participated in the Call to Engagement. The comments you shared with me and, just as importantly, the discussions that you had among yourselves, have contributed to a most stimulating conversation about the future of Cornell University.

Jeffrey S. Lehman
President
October 2004

INTRODUCTION

The Call to Engagement

Last year, during my inaugural address to the Cornell community in Ithaca and during my state of the university address the following day, I summoned Cornellians everywhere to engage a set of fundamental questions about our future. I asked us to “renew an institution where any person can find instruction in any study, where any person can engage, criticize, and improve on the instruction that is offered, where any person can be challenged and enabled to make an enduring contribution to the betterment of our world, where intellectual values are respected and cherished, and where people around the world can find inspiration and hope for the future of humanity.”

In the weeks following the inauguration, I elaborated upon the kind of questions I wanted us to consider. A formal “Call to Engagement” set forth eight different categories of questions, with each category illuminating a different aspect of what we do and how we do it. The questions were clustered around the following topics:

1. What should we be teaching our students?
2. How should we be teaching?
3. Whom should we be teaching?
4. Where should we be present?
5. What does our land grant mission mean today?
6. How should we collaborate?
7. Should we be identifying special domains of research emphasis?
8. How should the University be organized?

The Nature of the Response

The Call to Engagement elicited a remarkable response from the Cornell community. Thousands of students, faculty, staff members, alumni, and trustees participated in one manner or another. They wrote letters and emails. They held group discussions – in Ithaca, at Weill Medical College, and wherever Cornellians are to be found – and sent me summaries of those discussions.

Some reactions were comprehensive and some were focused. Some were extensively argued and some were concise. Some were witty and some were serious. All told, I received more than seven hundred written sets of reactions on behalf of individuals and groups. Compiled, the responses created a three-megabyte pdf file with 1261 electronic pages; stated differently, the compilation filled more than one thousand small-font pages of a looseleaf notebook.

Not all questions elicited the same volume of response. That result was neither unexpected nor undesirable. Indeed, I had encouraged people to provide thoughtful responses to fewer questions rather than more shallow responses to all questions. And there was some overlap among certain sets of questions – for example, between Category

4 (where should we be present) and Category 6 (with whom should we collaborate), which also overlapped to some extent with Category 8 (how should we be organized). How respondents chose to submit their comments (i.e., in response to which category) was far less important than hearing the voices as a whole.

The Report: What It Is, and What It Is Not

After a year of “listening,” I submit this report to the Cornell community to share with you what I heard and took away from the Call to Engagement. This document – *Reflections on the Call to Engagement* – is intended to give readers a sense of the process and of the breadth and depth of the responses. This document is *not* intended to suggest a direction for Cornell over the coming decade – that will come in my second state of the university address, which I will deliver in the coming weeks. But the Call to Engagement exercise has been enormously gratifying and intensely interesting, and it is a pleasure to share some of that with you.

A few words about the structure of this document may be helpful. I have organized it in the same order as the categories of questions were posed. For each set, I begin with a summary of certain recurring themes that I detected among the responses and some observations about those themes. I then follow with quotations from responses that struck me as either generally representative or individually noteworthy.

I have included some quotations that support my sense of what course Cornell might take and some that support a contrary view. While I have indicated the respondent's affiliation, the document does not strive for mathematical precision in reflecting either a sampling of remarks by constituency or by substantive themes.

Between my comments and the set of quotations in the supporting pages for each set of questions, I have attempted in this report to share an overall sense of the responses, including some of the “outlying” comments. And whether those of you who participated find your words embedded in this text or not, please be assured that your comments have contributed to my thinking about our future.

Some have asked if the responses will be made available in full, as originally submitted. While I recognize that there would be some value in doing so, many of the responses suggest that the authors believed they were communicating a personal response to the president. In order to respect the privacy of respondents, therefore, I have chosen not to make public the complete database of responses.

I recognize that this is a rather lengthy report. Readers with limited time may be tempted to read only the summary for each set of questions and to skim (or not read at all) the sets of quotations that constitute the second half of each category. To the extent possible, I encourage you to read the quotations. For within them one can best hear the collective voice of our community – insightful, witty, internally contradictory – that made the Call to Engagement such a satisfying, illuminating experience.

Category 1: What should we be teaching?

What should we be teaching our students? What intellectual dispositions, character traits, and essential knowledge should we be nurturing? How can we inspire our undergraduate, graduate, and professional students to become intellectual and moral leaders of their communities? How can we prepare them for well-rounded lives that incorporate artistic, athletic, cultural, humanitarian, political, and social dimensions?

“I would found an institution where any person can find instruction in any study.”

Ezra Cornell

“[I] hope that Cornell in the future ... may hold fast to its ancient tradition of freedom and responsibility – freedom for the scholar to perform his proper function, restrained and guided by the only thing that makes such freedom worth while, the scholar’s intellectual integrity, the scholar’s devotion to the truth of things as they are and to good will and humane dealing among men.”

Carl Becker

Cornell University was not founded as an institution where students’ curricula would be chosen for them.

Ezra Cornell did not aspire to found a university that would require every student to master every study, or even any study. As Carl Becker observed, an essential element of the founders’ vision was to offer students the freedom and correlative responsibility to choose their own domains of study. The university, in turn, would furnish the resources for instruction in whatever domains they might choose.

Why, then, did I pose the questions that make up this category? First, many sophisticated students, while accepting both their freedom and their responsibility, turn to us for advice. “With your experience of the world, what would you counsel me to study?” It is certainly a reasonable question. Our commitment to student autonomy should not deter us from thinking carefully about what a mature answer to that question might entail. Second, while our students will have responsibility for the choices they make among our offerings, we on the faculty must bear responsibility for the decisions we make about which offerings to put before them. If there are essential qualities that we want our students to develop while they are here, we must be sure that we provide ample opportunities for them to do so.

This first set of questions drew by far the largest number of responses – although, surprisingly, relatively few from students – and the responses were rich and provocative. Some found this an opportunity to consider whether it was time to depart from the founders’ view, to move in the direction of a mandatory “core curriculum.” Although some respondents were tempted by such a possibility, most shared my own view that we would do better to stay the course set by the founders.

Some respondents went even farther, rejecting the questions' premise that we should be cultivating any kind of well-roundedness in our students. Several felt that more attention should be paid to ensuring that every graduate has concrete expertise tailored to the requirements of a particular job. One articulate respondent wrote, "I do not believe that everyone is meant to be well rounded. If someone is truly passionate about biology, then s/he should have the ability to do biology as much as s/he chooses. ... While something might be gained from other endeavors, people are who they are and they will gain more doing what they are passionate about than what a university thinks is in their best interest. No one has won the Nobel Prize in physics for being well rounded."

And another respondent endorsed the importance of education as a means to broaden students' outlooks but commented that "the phrase 'well-rounded' grates a bit. I think I was an undergraduate when I read somewhere that 'they' want us to be well rounded so they can roll us wherever they like. The process of education often proceeds best by strengthening an individual's existing skills and then learning to expand those skills in appropriate directions."

Nonetheless, the vast majority of the respondents seemed to find the spirit of the questions congenial (at least to the extent they were addressing the aims of undergraduate education leading to a bachelor's degree from Cornell). I read most respondents as believing that the "study" an undergraduate student pursues should carry a dual purpose: It should bring substantive knowledge, skill, and expertise within some domain of intellectual inquiry, and it should help the student to become a certain kind of adult.

What kind of adult? I read the responses as suggesting that one who earns an undergraduate degree from Cornell should be what I will call a "comprehensively literate" adult. An adult who is prepared to lead a life of consequence and satisfaction. Overall, I read the comments to emphasize six different attributes of the comprehensively literate adult. Specifically, I read them to suggest that our graduates should be (i) curious, (ii) analytical, (iii) cultured, (iv) worldly, (v) responsible, and (vi) social. Let me say a few words about each of those attributes.

Curiosity. I was struck by the eloquence with which several alumni spoke about intellectual curiosity. One referred to the importance of having "an inquiring mind -- an eagerness to continue learning, a curiosity about the world." A second stressed the importance of having a "sense of joy and curiosity about learning." The essential element is that our students should know the pleasure of understanding for its own sake, without any need to justify that understanding by reference to some instrumental goal.

Analytic power. An undergraduate education should, undoubtedly, nurture intellectual rigor – care in thinking about the world. Many responses stressed the importance of both logical precision and critical skepticism, especially with respect to empirical assertions about the world. Other responses noted the importance of having a well-stocked analytical toolkit, one that draws on the methods of many different disciplinary traditions.

Cultural literacy. A critical aspect of what it means to be educated does not involve logical reasoning. Rather, it entails cultural fluency – knowledge of an essential base of material associated with a cultural form, together with a rudimentary ability to interact with that material according to the conventions of that form. Many respondents identified different domains of cultural fluency that they consider essential to adult life. The most frequently invoked domains were the arts and humanities – indeed, one cannot gainsay the importance of knowing how to appreciate a poem, a play, a work of art, or a food. But the responses included strong arguments for other domains as well. I was particularly moved by those who noted the importance of familiarity with the principal areas of general consensus and lively debate in modern science.

Worldliness. One of the hallmarks of our time is a greater appreciation of the extraordinary variation among the cultural traditions that help to constitute our world. To be effective in such a world, it is essential that adults feel at ease moving through different communities, interacting with people who are very different from them. Many respondents noted the importance of nurturing within our students a sense of openness, tolerance, and appreciation for difference. Others spoke of the importance of a student acquiring knowledge of where he or she “fits” relative to others along dimensions of wealth, religion, language, cultural traditions. Others emphasized how such “worldliness” ought to extend to communities who are sometimes less visible on campus – communities such as the deeply religious, or the hearing impaired.

Responsibility. Many respondents wrote with passion and power about the importance of living responsibly. For many, this primarily concerned the individual’s responsibility to a larger community and a larger world. It was often expressed in the language of civic engagement, ethics, and environmental stewardship. Interestingly, another important set of responses spoke about the importance of maintaining a responsible approach to life, not out of duty to a larger world but out of duty to oneself. These responses emphasized such matters as physical fitness, healthy living, a strong work ethic, and a healthy balance between that work ethic and other aspects of life. Still other responses, perhaps searching intuitively for a balance between these two concepts, spoke of the importance of leading lives that respect self and others.

Social effectiveness. Substantial numbers of responses raised the fact that adult success depends upon the ability to work effectively with others. They stressed the importance of being able to communicate well through spoken and written language. And they also stressed the importance of teamwork skills – especially the abilities to listen, to cooperate, to persuade, and to lead.

Because of its breadth of disciplinary offerings, because of its traditional emphasis on student responsibility, because of its historic commitments to tolerance and diversity, because of its stature as a free-standing, self-sufficient intellectual community, Cornell is unusually well structured to prepare comprehensively literate adults. Indeed, I believe no other university is better situated to offer its undergraduate students so complete a preparation for adult life.

Excerpts from Category 1 Responses

Curiosity

Graduate: (1) an inquiring mind -- an eagerness to continue learning, a curiosity about the world; (2) an open mind -- a willingness to examine important issues from all points of view, to submit propositions to the rules of evidence, and to withhold judgment until sufficient data is available; (3) a desire to pursue the truth wherever it may lead; and (4) a reverence for our intellectual heritage.

Graduate: The student of the future has to love learning. The world changes so quickly that in order to be in control of one's destiny, the development of insatiable curiosity is critical. Always ask why. The student of the future must be grounded in the thought that not all cultures have the same mores and modes of operation.

Faculty member: We must counter excessive professionalism among our undergraduates, by which I mean their obsessive focus on careers in medicine, law and engineering.

Analytic Power

Weill faculty member: We should be taking a multidimensional approach toward problem solving where we teach about issues not only at the micro level, but integrate the ideas into a systems approach.

Faculty member: Our students should become critical consumers (if not producers) of the many facts and statistics about the social world with which they are bombarded every day. Critical thinking skills. Able to read carefully. To process information. Facility with the methods of scientific, social scientific, and humanistic inquiry.

Graduate: Ways of looking at the world, analytical skills, and critical thought are more important than content.

Graduate: Rhetoric, logic, critical thinking, mathematical modeling, media criticism and the like.

Graduate: The best preparation that Cornell can give its students is to push them to be as numerate as they are literate and to be in the habit of critically examining information provided them, identifying the unstated underlying assumptions upon which it is based.

Faculty member: I would hope that every Cornell student could experience a sense of their own imagination and hidden creative resources during their time at Cornell.

Cultural Literacy

Graduate: The university should also take a stand against the dull, grindy hyper-specialization that characterizes almost all higher education in this country today, and try

in some small way to make it 'safe' for graduates entering the workforce to know about more than one thing.

Graduate: A sense of history; a sense of tragedy; a belief that reasoned argument can lead one to change one's mind or to recognize that some values and opinions deserve greater respect and loyalty than others; the materials, written and otherwise, of a common conversation; a deep appreciation of any culture other than their own.

Graduate: The study of humanities and social sciences is critical for our students because these areas focus on the human condition, the relationships between people, the origins of governments, and the evolution of society and ideology. Students enriched in the humanities and social sciences learn to become critical thinkers, intellectual and political leaders, and humanitarians. I believe that a Cornell education, regardless of which college a student attends, is not complete without significant immersion in the "soft sciences".

Weill faculty member: Is there a way for our students to spend a brief period of time in a series of seminars that relate to specific areas such as literature and medicine? Maybe there is an idea that a student could spend a week on the Ithaca campus focusing on certain areas of study related to medicine, but incorporating [topics] like philosophy and ethics.

Graduate: I think every Cornellian should know the difference between legitimate science and pseudoscience and why the difference is critical to a meaningful inquiry into the world. I think every student should emerge from Cornell with a respect for the rigors and discipline of science — regardless of whether they are science majors — and understand what constitutes a compelling evidentiary basis for scientific and historical ideas. I think Cornellians should have a solid background in the history of science as an unfolding of human knowledge rather than some kind of close-minded adversary to intuitive beliefs. I contend that the intellectual values of science (outside of learning scientific facts within a particular discipline) are as fundamental to a solid college education as any mandatory course in English, etc. All together, Cornell can provide a coherent whole to all students, not just science majors, who, by the way, rarely see science in its philosophical totality anyway.

Graduate: I suggest that there be a freshman requirement for a one-year course with the more general theme of Science and Society. This course should transcend the traditional boundaries of any one scientific discipline. Among the topics that need to be covered are logic and critical thinking, a broad survey of issues related to the mapping of the human genome, the implications of the law of conservation of energy, enough chemistry so that they are no longer terrified of anything "chemical" and accepting of the safety of all natural products, and some basics of nuclear science. I further suggest that this general topic be revisited by at least a one-semester seminar course during the senior year. The student would then have the opportunity to relate the concerns of their major discipline to the broader structure of scientific development.

Graduate: Cornell ... has a special responsibility to protect and continue teaching the acknowledged great ideas and intellectual works. This is especially true in the fields like literature, philosophy, government, history, music, and the other "arts" courses. "Mass" culture and the need for all of us to absorb increasing amounts of information due to advances in science, make it even more important that society not lose or push further

into the background the classic works and the greatest thinking on fundamental subjects dealing with humanity.

Faculty member: The idea of translational work from basic science to a broader human arena is nowhere more needed than at undergraduate instructional level, and the focus should be on the revolution in biomedical science (of which genomics and computational biology are but two recent examples) and its translation into courses that prepare non-scientists to make personal and collective decisions about matters involving quantity and quality of life, issues of "bioethics," for lack of a better term.

Graduate: One could envision a required first year course that provided an overview of man's current knowledge. The course would be taught by professors from a large number of the university's departments and follow a historical timeline. The initial few lectures could be devoted to how knowledge is accumulated, in particular the role of mathematics and the scientific method (of which many college graduates are surprisingly ignorant). The current theories on the origin of the universe, chemical elements, stars, and planets would follow with the lectures being given by professors from the appropriate departments. The origin of life, evolution, and the rise of man on earth would follow. Then with the development of agriculture and culture there would be many offshoots into the social sciences, the humanities, the arts, and the professions.

Graduate: Graduates should have an intimate acquaintance with the great works of literature, art, and music of Western civilization (and, if possible, with other civilizations); an intimate acquaintance with the great civilizations of the past, particularly the Greek and Roman; an understanding of the origins of our political, economic, and social institutions; a thorough grounding in mathematics and science; and the ability to read at least one foreign language with ease and comprehension.

Weill Medical Student: At WMC, we are missing the intellectual breadth and depth that occurs when you are part of a larger university campus. To the extent that outside electives in humanities, public health and other areas such as ethics can be offered to WMC students, this would enrich our lives. Maybe we can have faculty from Ithaca come down here to teach some seminars.

Worldliness

Faculty member: The sheer magnitude of our country creates an inward-looking perspective. However, I believe this inward-looking perspective is potentially dangerous. To provide a more realistic perspective, I think our teaching needs to recognize that all humans, wherever they are on the planet, are now closely interconnected with each other. To me, the interconnectedness of all humanity is an inescapable fact, but judging from the political polls and the subject of the news media, a majority of the US population seems to regard the United States as an independent entity that can function independently of the rest of the world. My view is that our economy, our culture, our science and our environment are all part of a global interconnected system in which activities by one entity have influences on the other entities.

Graduate: Students cannot learn to live well rounded lives by cocooning themselves in a blanket of comfortable, like-minded, instant fellowship. They cannot learn to succeed and thrive in a diverse world by excluding others. While engineers may continue to seek out their fellow engineers, Asians their fellow Asians, musicians their fellow musicians,

and so on, all undergraduates should at least have the opportunity to choose their friends and acquaintances from a wider pool and to live with a diverse group that has not been assigned or even self-selected on the basis of race, ethnicity, or any other such factor.

Graduate: Cornell, it seems to me, must not only continue to seek to enroll students with diverse backgrounds, but also, once they are on campus, seek to make the most of the diversity that they provide.

Student: The key thing to teach is how to conceptualize the world from different perspectives. Being able to take multiple viewpoints is crucial in good problem solving. More important than facts is the ability to search for information, critique it, synthesize it, and use it. While topical subject matter provides a vehicle for good thinking, conceptualization transcends simply learning information.

Campus chaplains: "Moral leaders" need to understand competing moral orientations. Relativism in morality leads to justification of just about any deed or misdeed. Even though one should not, and probably will not be able to manipulate a student's moral bent, I think that Cornell should orient the students to various moral camps, and the potential consequences of residing within those camps.

Faculty member: I believe we should place additional emphasis on bringing the situations and decision frames of other countries and cultures into the classroom for examination, clarification and engagement. I believe we should expand our use of interactive distance learning methods to help achieve this goal. It is not enough to learn about other places and societies and their issues and needs and knowledges, we need to learn with others in a spirit of understanding, compromise and compassion. Video conferencing among faculty and students in institutions of higher learning throughout the world is now possible at a low cost. We should use this capacity to learn about and address global issues such as biodiversity loss, hunger and malnutrition, unemployment, over consumption and other topics related to sustainable development.

Graduate: Students should be comfortable in "a community of dissensus" ... Indeed, they should actively strive to avoid the tyranny of consensus: the human species was not meant to agree, it was meant to live embracing the diversity of disagreement. Cornell students should recognize that working across ideologies and disciplines is necessary. Many Cornell students already participate in the current movement for global justice that requires the careful collaboration between groups whose methods and goals may actually sometimes be at cross-purposes. While by no means does this movement function perfectly, it is inspiring to be a part of processes where there is increasing awareness that a diversity of viewpoints is a gift to a group, and working with this variety can lead to novel solutions. We need to embrace the creative friction that can emerge from such an environment, while at the same time maintaining our analytical independence.

Graduate: All students, whatever college or division, should be required to learn about another culture - not just another language, but, through a systematic study of 3-4 courses, have a basic grounding or understanding of the other culture.

Responsibility

Graduate: The purpose of the university is not to feed the labor force, but to have civically engaged citizens who contribute to their community, however they may choose to define it.

Faculty member: So many students today seem to have a more pronounced sense of entitlement, rather than a belief that they have an obligation to give something back to their communities, to their country. Thus, I think it even more important that public service be made a value that the Cornell community encourages, supports, and recognizes.

Graduate: Cornell should teach its students that grades, salaries and success are important but self-confidence, honesty towards one's self and others, having hobbies and an attitude to enjoy life with integrity are the essential traits to have a happy life.

Graduate: More than ever, corporations are focusing on accountability, ethics, and avoiding appearances of impropriety. To the extent that Cornell can adopt an honor code, or promote its commitment to developing character in young people, the mission of the university will be advanced. This includes, no doubt, spiritual formation, opportunities to give of oneself in service projects, and overseas work to relieve poverty. To such a great extent we have become self-absorbed as a nation and as individuals. A commitment to character among our young Cornellians needs to be a principal emphasis of your "call to engagement".

Two graduates prepared an extremely detailed proposed curriculum organized around "six areas of study – Self Knowledge; Career Planning; Personal Health; Planning a Family; Integrating with the Community (choosing your life circles); and Life-Long Learning."

Student: I believe that the most important thing a human being living in the modern world should know is how to adapt to change.

Staff: Kindness, Acceptance, Honesty, Responsibility to self, Responsibility to others, Nonjudgmental attitudes, Respect for self and others.

Graduate: The emphasis should be on survival of our planet, and the propagation of world peace as a universal ethic.

Graduate: The Zeitgeist of the next generation will be a better balance between the head and the heart.

Faculty member: That understanding of environmental issues, and responding to the challenge of a deteriorating natural environment, become a central part of the our teaching mission, i.e. "essential knowledge we should be nurturing." My study of the effects of natural resource extraction, waste disposal (especially toxic waste), and fossil fuel combustion, leads me to believe that the stability of our advanced society over the long term, and with it the quality of life, maintenance of a stable global economic system, pursuit of artistic and cultural activities, and so on, depend on a successful outcome of this quest.

The Call to Engagement triggered an email exchange between a current student and his graduate father, which the father then shared with me. The father suggested, "the education of the heart should be parallel and linked with the education of the mind."

Faculty member: A liberal arts education in the best sense of the word. A depth of view tempered by historical study. A means of intelligent communication gained through an understanding of literature. A compassionate view informed by studying philosophy and religion. A true world view derived through area studies. It is through this primary emphasis on a well-rounded education, in which students become aware the interrelationships between all things and the consequences of their actions, that we can encourage them to live their lives in a way that moves us toward a future technology alone cannot attain. As much as anything else, respondents in this domain spoke about public service.

One eloquent presentation by a group of students began with the suggestion that we should teach our students environmental responsibility for themselves, their actions and their planet.

Staff: We must continue to nurture students' physical and mental well being by focusing on wellness and providing opportunities for students to balance their lives and learn to practice life-long physical fitness.

Graduate, quoting Carl Sagan: I propose that Cornell address the difficult question of what we must do to "survive our technological infancy", and that this question be embodied at the core of all of its academic programs. This is a broader application of the fundamental need to sensitize all elements of the university to critical ethical issues. Part of such a program requires that the university educate students in ethics. To be successful, however, this program should also require that faculty be educated in ethical issues relating to university governance, other faculty, students and non-university organizations. It is not enough to educate people in proper behavior within social systems. We must educate people how we as a human species must behave in order to survive.

Faculty member: The major social, political, and economic issues of our time (and of the future) are grounded in human relationships with the environment and natural resources. Globalization, peace and security, race/bias issues, etc. are all complex societal issues, each based in the way humans relate to natural resources and the environment: who has access to natural resources; who benefits (and who bears the costs) of the ways in which natural resources are used; issues of environmental justice and equity associated with natural resource development and with environmental pollution and environmental quality -- and the list could go on. The relationship of long-term societal sustainability (peace and security) to long-term environmental sustainability should not be ignored. How many wars, and how many class struggles, have been based fundamentally on issues related to distribution of resources, or conflicts between "indigenous" or local communities and "outside" communities seeking to control in some way the quality of the environment?

Law School Advisory Council: The nobility and obligation of engaging in pro-bono endeavors and the importance of lawyers exercising intellectual and moral leadership in our local communities and nationally.

Faculty member: 1. Establish a President's Fund to support teaching initiatives. ... 2. Provide matching money to faculty who seek external funding for educational initiatives.... 3. Support educational grant writing and agency/foundation targeting via the Office of Sponsored Programs and the Development Office. ... 4. Facilitate direct fundraising from alumni, industry and private foundations for classroom and laboratory instruction needs.... 5. Renovate our classrooms.

Faculty member: What other campus can boast of having two gorges, meandering creeks, a lake, broad forests, agricultural fields, and a botanical garden and arboretum, all contiguous to its academic buildings? I feel that we need to more fully utilize these natural and adapted features in our efforts to produce students who graduate as fully formed individuals. Given the academic rigors placed on most undergraduates, it is far too easy for them to reduce their lives to a daily circuit of dorm room to classroom to library. I would propose an approach to the undergraduate experience that required of all students an engagement in the natural environment. This could be undertaken either formally, through physical education or academic classes, or informally, as part of the resident life experience for first year or upper class students. I would further propose a concomitant requirement that all students enroll in at least one class on ethical and value issues related to our natural world. Such courses could focus on such critical questions as: how will we stem the loss of biodiversity without sacrificing economic strength; how the genetic engineering of plants and animals can benefit humankind without further endangering the natural environment; or how invasive species impact both economic strength and natural systems.

Social Effectiveness

Faculty member: Students should be ... aware of different ways of thinking about the world. Students should gain critical thinking skills, and excellent communication skills (writing and speaking), not just exposure to facts and figures. Students should be able to articulate the implications of various ideas, of proposed policies, of public statements. They should be able to demonstrate and apply critical reasoning, but in a way in which they can reflect sensitively (with respect and understanding) on others' beliefs.

Engineering graduate: Being a good communicator sets you apart in the engineering world.

Graduate: We should encourage their writing for publication as undergraduates.

Graduate: Flexibility, and ability to function with uncertainty: Students need to learn to make decisions when there is no clear answer or solution.

Faculty member: Students are not necessarily possessed of the slightest notion of table-manners, or for that matter plain and simple manners of any kind.

Graduate: In addition to contributing to their basic fund of knowledge, we need to be more cognizant of the importance of emotional intelligence skills that students often lack. Success in the world is highly dependent upon relationship building and the ability to create resonance of thought among those around you, regardless of your field of endeavor. Cornell students are future leaders, and we must expose them to ways they can enhance their emotional quotient.

Graduate: Encourage team-work from day one. Collaboration, team-building, public speaking, listening skills, and leadership are some of the essential traits expected ...regardless of major.

Graduate: The University must utilize its considerable human and physical assets to explore fundamental questions affecting the world in a civil manner that permits, or even encourages, disparate views.

Faculty member: Make a broad-based commitment to the study and teaching of conflict and conflict resolution.

Category 2: How should we be teaching?

How should we be teaching? Have new technologies and research on how students learn created possibilities for better pedagogy, or are they mere distractions? What kind of mentorship, inside and outside the classroom, should we be providing our students at the different stages of their educations?

These questions drew an intriguing set of responses from the community.

I saw within the responses, on balance, a sense that new technologies have created exciting new possibilities for teaching. At the same time, many responses suggested that the potential of these technologies can only be fully realized when it complements an inspired human interaction between teacher and student.

Among the respondents who spoke with excitement about the potential of new technologies, many discussed the ways in which technological advances allow students to be more “active” in their learning, which makes it more likely that they will fully absorb the material. And many others noted how new technologies open up the possibility that data and information might be transmitted more effectively, and at much lower cost, than is the case when that data and information are transmitted via live classroom lectures.

In the same vein, it is clear that the current generation of college students uses technology in ways that are radically different from prior generations of students. Contemporary student culture is powerfully defined by digital media, video gaming, email, the internet, instant messaging, text messaging, away messages, and wireless connectivity. None of those elements were significant forces in the undergraduate lives of their teachers – not even our youngest teachers – and yet they work powerfully to shape everything from how our students socialize with one another to how they gather information about their world. It is not surprising that they would also shape our students’ expectations for how they might learn in college.

Yet the responses also sounded some important cautionary notes.

First, as the prior category of questions made clear, it is expected that students who earn a degree from Cornell will be absorbing more than data and information. They are developing a host of important personal qualities, and a technology that effectively transmits data and information may or may not be effective at nurturing those qualities. To be sure, a cautious lecture, limited to transmitting data and information, would be no better. The most important variable is not the medium of instruction, but rather whether the form of instruction successfully engages the student and the professor together in thinking about the material in an active, critical way.

Second, student and alumni respondents expressed a powerful desire that students have significant opportunities for contact with faculty members outside the classroom, preferably over a meal. To a degree that might surprise most faculty members, a significant aspect of undergraduate education involves the opportunity to know and be

known by a professor. Recent survey data (not associated with the Call to Engagement) indicates that the vast majority of our professors do make time each semester for social contact with students outside the classroom; it is not clear whether our professors appreciate just how important that investment of time is to their students.

These two points might perhaps be taken together to have the following implication. At least in those areas of instruction that are intended to lead to a Cornell degree, we on the faculty should be thinking about how to structure our teaching (with or without technology) so that our students become actively engaged with the material and so that we have frequent occasions to get to know them as individuals.

Of course, it is the rare teacher who can get to know students “as individuals” in a class of several hundred. For that reason, a number of respondents commented on the importance of ensuring that within each student’s mix of classes he or she has repeated occasions to take a small class taught by a tenured or tenure-track professor, or to conduct a research project under the supervision of a tenured or tenure-track faculty member.

Excerpts from Category 2 Responses

Possibilities of Technology

Faculty member: We need to figure out how to harness the visualization and tactile/visual link established so well in kids of the video-game generation.

Staff: People learn in different ways. Some people learn best from facts, data and linear analysis. Others learn best by hands-on, creative, and non-linear thinking. Although various educational software, online case studies, and distance learning programs are advancements in teaching, they can't completely clarify or replace the complexity of human interaction. By combining opportunities to dialogue in addressing complex topics with the creative advancements of technology, an innovative approach to accelerated learning that incorporates all styles of learning can be implemented.

Faculty member: A respected faculty member, skilled in the use of technology, should be deputized to visit large classes, sit in on lectures, and offer suggestions on how to improve and strengthen the technology. Might we be able to use emeritus faculty and Weiss Fellows to help faculty in need? As a first step, how about a booklet describing what the Weiss awardees did in their classroom to win the award?

Faculty member: New technologies enable a different kind of interaction between teacher and students through electronic "polling."

Staff: Students' attention spans seem to have gotten shorter, perhaps as a result of television, video games, and other media. Most people's learning modality is visual. There are also kinesthetic and tactile modalities. Lectures require an auditory style. It would seem that a mix of visual and auditory would be more effective for students than simply auditory.

Weill faculty member: Whether we like it or not, there is a great move to simulation within the medical school curriculum. We need to think about how we can utilize this and should not think of technology as an end in of itself. The idea of using simulators is fascinating and poses the challenge of how to make the technology run well.

Faculty member: The most essential qualities of intellect and character can be best nurtured through instruction in computer game design.

Faculty member: Two strategies can be used to lower the cost of education while increasing its quality. • Capital-intensive courses. Put more effort into preparing course materials and less effort into delivering courses. • Distance education. Reduce residential requirements and make more effective use of the time that students are on campus. A combination of residential and distance education would allow Cornell to educate a greater number of students. It would allow mature students to take Cornell courses, despite commitments to families or careers; this is particular important in fast-moving fields, such as computer science, where education must continue throughout a career.

Other Comments On Teaching Methods

Students often asked for more small classes, experiential learning, mentoring, access to faculty, and participation in research.

Faculty group: We would like to emphasize that teaching of laboratories in undergraduate and graduate science courses will remain a vital component of the education we offer for the foreseeable future. ... We strongly believe that a mechanism promoting steady incremental improvements and maintenance of laboratory instruments should be a high priority.

Graduate: Eliminate evening prelims; scale down problem sets that take more than 5 hours per week; make sure that no class demands more than 10-15 hours per week of a student's time, including the time spent in lecture and section. Only when Cornell does these things will students be able to breath and discover intellectual life.

Graduates: The Socratic method of teaching law should be "retained and reemphasized".

Weill Medical Faculty Member: Problem-based learning in small groups and clinical experiences would be important for the undergraduate experience. Could Cornell establish an experimental educational track for some undergraduates which would have this type of intense interaction work on the undergraduate level?

Faculty member: Every Cornell student should have in each semester of the student's first two years at Cornell a class that is taught by a tenured or tenure-track professor (not an instructor or lecturer) in which no more than 16 students are enrolled. (Classes in the Knight Writing Program would count for this purpose.) Academically, students need a class in which they can participate in discussion, and they would benefit from a professor's close attention to their learning. Professionally, many students need recommendations from professors who know them as individuals. Emotionally, the majority of students would benefit from knowing and getting to know a professor.

Faculty member: The most important thing that alumni remember about college teaching is "the enthusiasm of the instructor."

Faculty member: I believe that we accomplish much when we address these issues on the departmental level, and very little when we address them as a college or a university.

Faculty member: Give them an intellectual experience in which they felt they had fully engaged a subject, framed a problem within it, and executed a disciplined and focused investigation of that problem. In other words, the senior thesis or senior project should no longer be confined to honors students: it should become universal.

Staff: Many students prefer active learning, while many professors teach passively, that is, by lecturing. There seems to be a mismatch.

Faculty member: During the first and second semesters of their first year at Cornell, every freshman would have one class with a tenured or a tenure-track professor and no more than 15 other students. Call it the "small class."

Faculty member: Instructors should be encouraged to incorporate opportunities for personal development in their existing courses. For example, within the [XXX] curriculum we have integrated the laboratory classes of four, sequential introductory courses across a hands-on activity that requires students to take individual and group responsibility for animal care, data collection and analysis, and written and oral reporting of results. Major objectives are to foster leadership, teamwork, and analytical and communication skills.

Faculty member: I propose a formalized program where the final semester is spent in full-time research with, at most, one course, and the real opportunity to attend research seminars by the plethora of visitors to campus each spring semester.

Faculty member: To me this goal suggests that an educational experience that requires deep immersion be incorporated into the curriculum. This is related to the observation: "If you understand one thing through and through, you understand everything". My interpretation: certain educational experiences bring you face to face with your own patterns of learning and offer the surprise of discovering things "unthought". Any arena can be a conduit for this kind of learning if structured away from quick responses, repetitive memory exercises and "let me just get it done" objectives. Grades might be counterproductive in this arena and perhaps the Colorado College model of one area of focus for three and a half weeks is more conducive to this experience. It's the kind of experience from which a student emerges to say to him or herself: "Where did that come from? How did I think of that?"

Staff: In terms of their ethical, moral, and citizenship development and education, Cornell students [should be] involved with and experiencing public service, leadership, and followership. To make the most of these experiences they need support, consequences, reflection, and the opportunity to both fail and succeed. We need to promote such pedagogy through internships, public service, leadership opportunities (such as Cornell Outdoor Education provides), travel abroad, or other experiential learning opportunities. To prepare them for the real world, our students need real world learning. ... Students are only in the classroom 15-18 hours a week. If we are to further engage students, we must take advantage of the non-formal opportunities for learning.

Several spoke in support of expanded outdoor education and experiential learning projects.

The physical campus matters. One staff member quoted A.D. White, "the atmosphere of sentiment which gathers about the University is a most powerful factor in its success." He further lays stress upon the educating value of the natural features and environment, which "have their value in creating an atmosphere which shall make our students something more than machines."

Faculty member: Cornell has an opportunity to carefully shape its built environment to represent its changing mission and values. What pedagogical methods does our current environment foster and what future models ought we be preparing for? What environmental ethic do we project in the way we build, design, manage and create our campus? How well are we thinking about our buildings, sites and spaces as places of dynamic learning and engagement?

Faculty group: As the campus continues to grow, Cornell must re-imagine its campus as a blend of urban and traditional campus patterns that complement one another in

exciting ways. If we are to continue to pride ourselves upon the ideal that is Cornell, then increased attention must be directed towards the future development of the campus.

Graduate: Have faculty declare specific political or social points of view they may hold that will affect their teaching. Hopefully, this candor will encourage students to explore and challenge ideas with reasonable expectation that alternatives exist.

Faculty member: Consider developing a "Great Issues Experience," through which students would be exposed over a sustained period of time to different perspectives on one of the "great issues" confronting humanity and would then be pushed to develop their own perspective on that issue. They could observe the way faculty explore a complex issue together – the style of serious, engaged, cooperative, critical exploration of a difficult topic. "Dialogues about contemporary culture and technology."

Graduate: Why not a junior year or semester at home rather than at school or abroad – nominal tuition, student at home – less stress on all student and parent budgets. Use the resulting vacancies to create an extra matriculating class on campus. The math is simple: students and parents save, the University doesn't lose revenue.

Cautions Regarding Technology

Faculty member: The focus, we all agree, should be not on buying sophisticated technologies, but on solving teaching problems. Teaching technologies in the classroom must be intuitive enough for anyone to use, including more techno-phobic teachers. ... [A]s much attention as possible should be placed on engaging interest and enthusiasm for teaching among our faculty. ... We need to spend more energy and resources training graduate students to teach.

Graduate: Too much reliance on self-directed, Internet-based study risks having no core, no sense of shared scholarly effort - no Eros of learning.

Student: I agree with Professor X who said, "PowerPoint is the death of human knowledge."

Mentoring/Advising

Graduate: Focus on the importance of less formal student-faculty interaction outside the classroom, and second, to enhance that interaction, find places to nurture it and opportunities to promote it, all as an integral part of Cornell's future.

Graduate: The educational quality of Cornell would improve if faculty spent more time talking with undergraduates outside the classroom about academic, professional, and personal matters.

Graduate: The separation between the classroom and the off-campus location or dorm room is stronger than our nation's separation between church and state. It shouldn't be. Students need to be comfortable talking with professors about academic and non-academic issues outside of the classroom.

Graduate: Some effort should be made to encourage the entire faculty to interact informally with the student body. Classes with sections could have an informal section

meal with the lecturer.

Graduate: I don't think we can inspire our students to become intellectual and moral leaders of their communities except by exposure to role models among the faculty.

Faculty member: With respect to mentorship, we must find ways to convey to students our interest in them as individual scholars. Relationships outside of the classroom are important, but they need to have the essential framework of one scholar to another. Within this framework it is important to find a variety of ways for professors and students to interact, a challenge in our overscheduled lives.

Faculty member: Getting students and teaching faculty to meals together is a key way to bond.

Category 3: Whom should we be teaching?

Whom should we be teaching? What mix of undergraduates, graduate students, professional students, and non-degree students will best help Cornell achieve its educational mission?

The third set of questions in the Call to Engagement generated a lower level of response than some of the other categories, perhaps because respondents perceived there to be some overlap in these questions compared to other categories. Nonetheless, the third set of questions stimulated two very interesting yet different strands of discussion. One had to do with the balance between extramural and degree-oriented instruction. The second had to do with the diversity of the resident student population.

The term “extramural” literally means “outside the walls.” Extramural education – education of those who are outside the figurative walls defined by the community of scholars in pursuit of a common degree – has been an essential commitment of Cornell since our founding as a land grant university. It is expressed in the education that we provide to New York residents through our extension services, in the education that we provide to our graduates, our staff, and others through our programs of continuing education, and in the education that we provide to the general public as a matter of general community service.

Perhaps the most important lesson to draw from these responses is the simple observation that education for a degree and extramural education are significantly different activities. Whereas degree education is oriented towards preparing comprehensively literate adults, extramural education is oriented towards a more focused aim relating to the transmission of a specific body of knowledge. And whereas degree education is designed in part to construct a community of individuals who learn together, in part from one another, extramural education can be quite solitary. Finally, students who are pursuing degrees are generally paying substantially higher tuition than extramural students, in order to obtain the benefits of a more resource-intensive education.

There was a clear divergence of opinion about how we should be striking the balance between degree-oriented education and extramural education. Several respondents stressed the special bond between a student and the university from which he or she earned a degree, arguing that this bond warrants far greater focus on degree-oriented instruction. Others noted that Cornell's historical attention to applied knowledge presents tremendous opportunities for non-degree and certificate programs.

By and large, the respondents who commented about the diversity of our degree-oriented student community urged that we pursue ever greater degrees of diversity. Several respondents suggested that our student body is drawn too much from the east coast of the United States. And several different student groups expressed a strong belief that Cornell should be even more careful to attend to the many different forms of diversity that contribute to the educational experience, including racial and ethnic

diversity, geographic diversity, socioeconomic diversity, cultural diversity, and ideological diversity. A number of responses, however, objected to formal programs of affirmative action or other “set asides” and urged that Cornell not pursue such programs.

Several respondents pointed to the danger that rapidly increasing tuition levels pose to our ability to maintain socioeconomic diversity. Although Cornell today has the highest level of socioeconomic diversity of any Ivy League institution, we certainly should not take it for granted that we will be able to maintain that distinction indefinitely. One respondent suggested, in this regard, that we might pay particular attention to one group of prospective students – those who would transfer to Cornell from a two-year community college.

Excerpts from Category 3 Responses

Balance of Students

Graduate: Students should be encouraged to take one or more years off and make some sort of mark on the world, and let the world make some mark on them, before they begin their undergraduate study.

Graduate: Why can't there be more "students" who are already achieving in business? Very clearly, there should be a greater on-line offering of advanced degrees.

Graduate: How would we induce retired people to return to campus as part-time students? This would serve as a source of tuition revenue and would add some interesting experience and perspectives to the student body.

Faculty member: Cornell might consider the development of a regular weekly (monthly?) national radio or TV program in which faculty present their latest findings and ongoing research of public interest.

Graduate: Cornell should have no non-degree students.

Weill faculty member: Our list of trainees should include teachers. That is, we should research and teach the science, art and process of teaching at two levels: the University itself (we should teach our own teachers how to teach); and public pre-college education (we should devise, test and expound ways to rescue the nation's public education system). In short, the University should establish a School of Education with an emphasis not on graduating teachers, but on training and sustaining researchers who advance the science, art and process of education, including through field study and experimentation.

Student: Cornell should increase the number of professional students, and decrease that of non-degree students who potentially can affect the reputation of Cornell.

Staff forum: There was talk about a web-based learning program, "Cyber Tower," that is used to engage alumni to continue learning. The group thought that this idea needed to be revisited to see if it could be relevant to staff. In that same vein, several participants expressed the need for Cornell to offer seminars outside of the degree path, such as seminars given by faculty on their research and on how it applies to the everyday world. The goal here would be to ask the best of the best to offer these seminars. Staff also need a greater understanding of Cornell's mission. The more that staff could feel that they are part of Cornell's learning mission, the more they would buy in to that mission, feeling like part of the community and working as one university.

Graduate: Set up an "educational extension service", remote campuses around the country offering courses geared for freshman and sophomores who are interested in transferring to the Ithaca campus for their junior and senior years (provided they perform acceptably).

Graduate: Cornell needs to maintain the right mix of graduate and undergraduate. Without top notch graduate schools you can't attract the faculty that make a great

institution. On the other hand, Cornell's basic mission has always been and should remain teaching at the undergraduate level.

Student: Cornell, because of its position, has a very broad audience of learners. Most certainly its commitment to the formal student body is strong and must be continued. And, likewise, its own faculty and staff should be given every opportunity for continued training.

Diversity

Graduate: We need more students from west of Trumansburg.

Graduate: Cornell should consider merit scholarships to draw highly motivated, upwardly mobile, serious students whose middle class backgrounds might make them ineligible for very much financial aid and who would otherwise go to local and/or public universities or take on so much debt as to discourage them from the most scholarly post-graduation choices.

Graduates: We would urge that secondary school interviewers and application processors keep constantly in mind the quest to identify potential leaders for our country and the world, in whatever discipline they pursue.

Graduate: I believe that the most important positive change Cornell can make for its current students and for its future is to institute a race-blind admissions policy.

Student Group: Diversity is itself a valuable asset to Cornell: geographic diversity... cultural diversity... ideological diversity.

Graduate: Cornell should be teaching the intellectual elite – without regard to race, ethnicity, and gender – as determined by past academic performance and scores on competitive exams.... This means the end of all forms of affirmative action. I should point out that in the culture at large there is enormous hostility to racial and ethnic preferences as practiced at elite universities such as Cornell, and a corresponding devaluing of the degrees obtained by the beneficiaries of these preferences. In addition, you should be aware that few people are fooled by the use of the cant word “diversity,” which in practice has come to mean little more than “people with visible black African ancestry or some, unspecified amount of Hispanic ancestry.

Graduate: Whom should we be teaching? Students learn from each other, and everyone has something to contribute. Willingness and ability to make a contribution should be among the criteria for admission. Cultural and social diversity are as important as racial, ethnic and religious diversity.

Trustee: Cornell should continue to seek a student population (undergraduate, graduate, and professional students) for Ithaca and Cornell that is diverse in all respects. It is difficult to say, without more information that the current mix of students is inappropriate, as the undergraduate student population is reflecting, more and more, American society. To the extent that the diversity of economic circumstances is not reflective of the US population, which I think should be the model to choose, additional effort to reduce barriers for those students should be made.

Staff: The more the mix the better in my experience, and the more teaching/learning environments that can combine difference constituencies, and categories of students, the better. We have so much to learn from each other, the more diverse the learning environments, the more to learn, and grow, from that education.

Category 4: Where should we be present?

Where should we be present? As our world has changed, we have added new places where we teach those who would earn Cornell degrees. How much should we be extending ourselves, our resources, and our reputation around the globe?

The responses to the fourth set of Call to Engagement questions took seriously the question of how broad Cornell's reach should be. They did so, in significant part, by separating the question of where we should be present from the question of what kind of presence we should be maintaining.

On the question of where we should be, responses frequently mentioned New York City and Asia, but other locations – from Buffalo to Oregon to Oceania – surfaced as well. Perhaps more interesting was the fact that different responses implicitly or explicitly proposed different criteria for deciding where we should go. Some suggested going places where our research can have the greatest impact. Others suggested going to cultural and population centers to minimize the risk of parochialism. One suggested that we view our presence as “an investment, rather than a mission, by selecting global places that offer higher returns, in terms of the accessibility of the location with the highest quality of students and the potential of students who would become leaders in their fields.”

With regard to where we should be in this country, numerous responses spoke eloquently of the natural beauty of the Ithaca campus. One respondent urged, “the heart of Cornell should remain in Ithaca.” But many responses also urged that we take better advantage of opportunities in New York City, beginning with the Weill Medical College and including a variety of teaching and extension programs. Faculty members in Ithaca and at Weill Medical expressed strong interest in research collaborations, and deans and faculty in most of our undergraduate colleges spoke about opportunities to complement their Ithaca campus with distinct features of New York City.

As for how we should be extended, once again a wide range of options was discussed. These included programs of extramural education, new overseas degree programs, for-credit study opportunities for students pursuing degrees in Ithaca, research collaborations, and service projects.

Not surprisingly, the cautions were consistent. We must be sure that when we engage overseas we do not attach the Cornell name to an activity (whether it is degree education, extramural education, research, or service) that is of lower quality than we expect of our activities in Ithaca and New York. And we must also be sure that we do not end up committing so many resources to such activities that we leave ourselves spread too thin, unable to keep making the investments necessary to be working at the very highest level.

I believe that these cautions must be taken seriously. At the same time, I believe that we must be careful that they not skew our perspective to the point where we evaluate

new opportunities primarily for their potential as streams of net revenues that might contribute to the overall costs of operating the university. We should consider such opportunities as “academic infrastructure” investments: investments in our long-term ability to attract the finest students in the world to study for Cornell degrees, in our long-term ability to offer our students the highest quality educational experiences, and in our long-term ability to conduct research that makes significant contributions to the human condition. Where such an investment holds strong promise on those terms, then it warrants consideration, subject to the twin cautions mentioned above.

Excerpts from Category 4 Responses

Where We Should Be

Staff: I have one question that I think needs to be considered: are there qualities of a Cornell University education that cannot be instilled outside of Ithaca?

Staff: I believe firmly that developing international sensibility is where the greatest value in higher education lies, and we neglect internationalism at the peril of stultifying parochialism and potential irrelevance in the larger world over the next century.

Students: Mentioned, among other places, China, West Coast of the U.S., NYC.

Graduate: I am a strong proponent of leaving undergrad art education on campus and moving some portion (one yr?) of graduate experience to NYC, which is presently an under-valued, terribly under-used resource.

Faculty member: It is high time for an American university to establish a complimentary "Center for Muslim-Jewish Understanding." ... I imagine it would require some sort of base in NYC to complement what we do and could yet do here in Ithaca.

Graduate: Move business school to NYC.

Graduate: The heart of Cornell should remain in Ithaca.

Graduate: Benefits for Ithaca students of spending some time abroad -- Darwin comes alive in the Galapagos. The complexity of the Middle East is evident strolling the Old City in Jerusalem.

Graduate: If I could change the world, one thing I would do would be to require that every college student in America spend one full year overseas, or at least within a greatly different American (Native American, South or Central American, Caribbean) culture.

Staff: Cornell could give better aid to international students and develop a more diverse campus here.

Faculty member: We should probably embrace the original "land grant" mission of "being" where we can make a major difference. The two areas of the world that we should consider are the Middle East and Africa. However, because the challenges are greatest there, the resource demands (financial, individual, organizational, etc) also will be the most daunting is those sites.

Graduate: As many students and schools as possible should have a relationship to Manhattan because Cornell is the Ivy League hub of New York State. Toward this end, a broader vision for humanities and the arts is necessary.

Graduate: Anthropologists identified 6 cultural regions, and ideally we should have one "station" in each region. Europe, Africa South of the Sahara, South Asia, East Asia, Oceania, Native Americans.

Graduate: At the edge. At the point where one well placed individual can make a systemic difference. To my mind, at this moment, that would be India, Asia, and select emerging South American countries.

Graduate: Having an educational facility on the West Coast would be fantastic.

Faculty member: Cornell, especially our faculty and students in the arts and humanities, desperately need a complex in New York City. Where the action is in music, visual arts, theater...I have in mind a centrally located building ... which has both a living facility for short visits, and a permanent gallery and studio.

Weill faculty member: We also should mention that Cornell has excellent programs in foreign countries such as a strong infectious diseases program in Brazil, Thailand and Haiti where our students go and spend time. It's an education for our students and they perform great services for the countries in which they are working.

Vet Graduate Council: The Council feels that it is important to increase our visibility as a veterinary college in the downstate areas.

Faculty member: Our international reputation, certainly in Asia but also in Africa and Latin America (less in the Middle East because we have been MIA there; the Bridging the Rift initiative may correct this), is driven by our involvement and visibility outside of Ithaca, and our ability to attract the highest quality students and faculty, which contributes in turn to our overall reputation, is similarly enhanced.

Faculty member: We collaborate worldwide and extremely effectively at the research level. I think it would be worthwhile to structure specific training and research collaborations with economies in most rapid growth areas. China, Brazil, Mexico and Thailand come to mind. Yes, we can fill our graduate school with Chinese students, without any action on our part. I have in mind collaborations between universities in research, the forming of collegial ties, the direction of research in those countries.

Graduate: Buffalo's rich tradition, architecture and role in trade make it an area ripe for creativity and vision.

Graduate: My bold idea is for Cornell to create the second Cornell West (Stanford being the first). Where should this be done? The most fertile location on the West coast for a new world-class university is...Portland, Oregon. This is because every major city needs a world-class university to continue to move forward (e.g. NYC has Columbia, Boston has Harvard & MIT, Chicago has the University of Chicago & Northwestern, and here on the West Coast, SF has Stanford & Berkeley, LA has UCLA & USC, San Diego has UCSD, and Seattle has the University of Washington). Yet Portland has nothing [like that]. Portland is a growing metro area, about the 25th largest in the country (in some respects, it resembles a larger version of Ithaca), and there is a decent amount of technology in the local economy. It could benefit tremendously from a world-class university, and there is a real need for one. A new university would actually fix a major structural issue with the state of Oregon. ... Cornell could supply some of the management/oversight, help design the university, and provide the institutional strength needed to lend credibility to get it launched.

Former Graduate: We need to expand our Global Presence. The Medical school in

Qatar and the Bridging the Rift Center are wonderful examples of humanistic activities that provide real time, helpful activities in terrorist afflicted areas in the Middle East.

Student: We should be present here at Cornell-Ithaca. It would be nice to focus most on our resources in Ithaca by lowering tuition.

What Kind of Presence

Weill faculty member: Cornell needs to have presence nationally in shaping the future of health care. This needs to encompass innovation delivery, access, and cost.

Staff: We should set our sights on new and challenging international initiatives similar to the historic Nanjing (China) Cooperative Crop Improvement Program in 1925 and the University of the Philippines/Cornell cooperation (1952-1972), which served as the most comprehensive agricultural development effort undertaken in the early years by Cornell's College of Agriculture.

Staff: Cornell is pre-eminent among US universities in work on rural development in the poorest countries of the world. Continuing this work is of the utmost importance, not only for humanitarian reasons but because the future of the "third world" will influence the safety and prosperity of countries such as the USA in the present century.

Graduate: DVD or Internet is the logical platform for delivery of global information, and I think the DVD platform is the more robust of the two for the next decade or so.

Staff: Cornell University is a global institution that should have a presence throughout the world. The presence will take many forms: Cornell alumni in many nations, Cornell students studying in many different parts of the world, Cornell faculty sharing their research and teaching expertise throughout the world, Cornell programs operating in other nations, as well as Cornell's strong contribution to the international marketplace of ideas and the worldwide body of knowledge. In order to have a worldwide network of talented alumni, we must continue to recruit the best and brightest students from every area of the world. We must recognize the great contributions that these students make to our campus, and we must give them proper support while they are here so that they can make the difficult adjustment to the Cornell academic environment. We must prepare our domestic students for the challenges they will face in an increasingly interdependent world. This includes expanding opportunities for study abroad, increased emphasis on foreign language facility, and a greater understanding of the various cultures and religion around the world. We must encourage our faculty to continue to seek out and enhance collaboration relationships with international colleagues and institutions. We must provide the institution support to allow these relationships to flourish. This includes support for visiting faculty and researchers to come to Cornell for temporary teaching assignments and collaborative research. Cornell should also expand its physical presence throughout the world, through projects such as the Cornell Medical College in Qatar, or the Bridging the Rift project in Jordan and Israel. This must be done thoughtfully and carefully in ways that promote the values of Cornell. We must be sensitive to the local environment and culture in which we operate. We must not impose our systems on others, but rather create environments where people can come together to share ideas and learn from each other. Finally, the most significant way that Cornell will enhance our international presence is through our contributions to the knowledge base in many different fields. We must continue our funding of research initiatives that

expand the boundaries of human knowledge. We must take full advantage of the opportunities presented by distance learning.

Staff: In addition to more online courses and distance learning, it was felt strongly that Cornell should have a larger presence in New York City, with a building, assigned faculty, courses, internships, with real exposure to all parts of the city, not just Manhattan, in many disciplines. But we should be careful of selling our "franchises". We should have an online presence, with many courses available, but a degree should require time on campus, because experience with faculty and other students is a valuable part of an education.

Graduate: Cornell programs should be located in carefully selected U.S. and foreign cities where there are resources to enhance the educational program of the students, needs that can be identified by Cornell students/faculty, and that can have the potential for a lasting effect on the students/faculty and community. I feel that perhaps with the exception of the Medical School, Cornell degrees should be conferred to students who have been on the Ithaca campus for two and preferably four terms. In my opinion, too many off campus programs could create an undesirable diffusion of the alumni body and therefore of much needed future financial support. Financial support of off campus programs should include funds for local outreach and for public relations.

Faculty member: I'm not sure that we need to have major permanent, physical facilities in other locations world wide, but I am sure that we need to be welcoming to international students who wish to attend graduate school here. Their influence is already important -- particularly as we address applied problems globally. An important action for us in the short term is to remove the current obstacles that make it difficult for international students to study in the United States.

Graduate: I suggest that you set up an internship program in the New York City area with a branch campus. Students could spend one or two 6-month internships at this site working in their fields

Trustees: Cornell has a significant presence in New York City, including programs of Weill, ILR and Cooperative Extension through the regional office in Manhattan, and internships such as the Human Ecology urban semester. Nevertheless, given the importance of NYC on the world scene, and its vulnerability as evidenced on 9/11/01, we should be examining additional ways to tie into New York City's international influence and to serve its needs. Doing so will be an important facet of becoming a transnational university.

Cautions

Faculty member: The master-apprentice magic of learning is an intensely human action, losing its efficacy when the professor is on the web. The bond between professor and student, the bond that encourages first learning and then giving to Cornell, is not two-dimensional. I would prefer to set up Cornell "squads" in economics, plant biology, nanoscience which (paid well) would go into a country or an industry and teach or consult.

Graduate: I believe it is better to bring the students of the world to Cornell rather than create mini Cornells elsewhere. There is more to a Cornell education than the

classroom.

Graduate: Don't dilute the learning environment. I think it only makes sense to open a new campus if it would be large enough to provide the "full" Cornell experience in every way. Small branches can not offer the rich Cornell environment and bring down the school's reputation.

Graduate: I'm not sure if we should continue to establish satellite campuses and a virtual university. It diminishes our sense of place and community. I think that the same objectives can be accomplished by sending faculty to other universities for a semester abroad, strengthening our student exchange program and inviting international faculty to take a semester in residence at Cornell. In addition, communication and transportation technologies mean that faculty can collaborate with researchers throughout the world. We should encourage international engagement, but take care not to fragment the University itself.

Graduate: While the financial burden of the overseas units may be limited by agreement with our partners, such as in Qatar for example, we should remain mindful, in considering other outposts, of: (i) the non-financial resources that are required to sustain the overseas units to assure that such resources are not diverted to the disadvantage of the Cornell "center"; (ii) the need to retain an equal quality of scholarship and reputation in the "outposts" which may require extra efforts because of long distance; and (iii) the conflicts that may arise when permanent academics (which may be required to establish credibility and success of the program) may have different interests than New York or Ithaca faculty who are temporarily resident overseas - we can not and should not be missionaries, and must respect local needs and cultures in any overseas effort.

Faculty member: Our international presence is tremendous, but it should not appear to be an "Americanization" of the designated country.

Graduates: Many said that we should look before we leap into any new endeavor, greatly increasing the probability that the outcome will be of the highest quality. Simply having a presence is not enough; the reputation that accompanies that presence is just as, if not more, crucial.

Weill Medical Student: From a selfish point of view-how are we implementing a new program in Qatar? From the educational side, if we have our professors go there, it could take away from our program.

Student: Expansion is good as long as resources are not stretched and quality sacrificed. A global presence is important for the school and the students.

Category 5: Our land grant mission

What does our land grant mission mean today? What forms of extension and public service are the best modern expression of Senator Morrill’s program for having outstanding universities contribute to the practical education of society? Should we do more to ensure that the fruits of our research become part of the fabric of the larger society?

“[A]ll moneys derived from the sale of the lands ... shall be invested ... and the interest ... shall be inviolably appropriated ... to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts ... in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.”

Section 4 of the Morrill Act of 1862

Cornell's land grant mission is grounded in the 1862 federal statute known as the Morrill Act. Under that law, the United States Congress granted public lands to each state, the proceeds of which were to be invested in an endowment for the purpose of providing instruction – both a "liberal and practical education" – to the working classes. In 1865, the State of New York chartered Cornell University and designated it as the state's land grant university. With that designation, the State committed itself to use the Morrill Act funds at Cornell for the purposes specified.

In addition to the Morrill Act, two other federal statutes have also shaped the evolution of Cornell’s land grant mission. The Hatch Act of 1887 linked the teaching function with a research mission in agriculture that would be pursued not only in Ithaca but also at our Geneva Agricultural Experiment Station. And the Smith-Lever Act of 1914 promoted a system of cooperation that would extend the fruits of our research in the fields of agriculture and home economics beyond the campus to the larger community. Almost a century of federal legislation since 1914 has reinforced this collaborative commitment to teaching, research, and extension.

The world has changed dramatically since Cornell’s founding as a land grant university, and there is a widely shared sense that the meaning of our land grant mission today must reflect those changes. Indeed, we engaged in a significant review of our land grant mission, concluded in 2002, that will continue to inform our thinking on this subject. The responses to the questions in Category 5 suggest, however, that different members of our community favor different approaches to “updating” our land grant mission, because they see different features of the nineteenth century land grant mission

as fundamental.

One group of responses focused on the Morrill Act's commitment to the educational needs of a new industrial class and pointed to the structural weaknesses in our state's system of K-12 education. They noted that such weaknesses have grave implications for our state's ability to prepare the next generation of workers to be successful participants in a global post-industrial economy. Others pointed more directly to the needs of adult workers who have been displaced from employment because their skills do not match contemporary industrial needs.

Another group of responses, drawing on the Morrill Act's reference to "agriculture," emphasized the change in the technologies of agriculture since the nineteenth century. They urged us to focus our land grant activities on the need to satisfy the hunger of an expanding global population in a sustainable manner. And they pointed out the extent to which such a focus would draw on expertise from all corners of the university and would extend it outwards across the state and beyond.

Still other responses seemed to hold a broader view of the original land grant concept, perhaps drawing upon the Act's promotion of "practical education." Responses in this category suggested, for example, that our modern land grant mission should entail the maintenance of two separate university systems: one, a modern statewide program of extramural education whose content would depend on where we might see the best match between community needs and our own research strengths; the other, a modern worldwide system of technology transfer.

As we continue to define Cornell's evolving expression of our land grant mission, it will be important for us to sustain the conversation with our partners in state and federal government. In so doing, we will ensure that we are responsive to their perceptions of where the greatest needs lie, even as we consider what contributions we can most appropriately make to meeting those needs; and we will ensure that practical problems inform our research, just we strive to have our research provide solutions to practical problems.

Excerpts from Category 5 Responses

Educational Needs of Workers

Staff: Cornell's land grant mission calls us to be practical stewards of land, people, and knowledge. ... The land grant mission requires us to influence New Yorkers, ... It is my observation that the K-12 classrooms are more successful in teaching content, and less so at teaching the skills students need to organize, structure, criticize or evaluate where more knowledge is needed. The emphasis of the land grant mission on providing tangible skills suggests that Cornell should strive to help teachers help their students become better thinkers.

Graduate: K-12. a. Provide free training to high school and elementary schools teachers on latest teaching technique and research results so to enhance teaching knowledge and ability of these public school teachers. b. Offer free consulting services to lower level public institutions. c. Create free educational awareness programs for high school students. d. Offer competitions for high school students. e. Provide free online newsletter with specific subjects to specific high school students (e.g., empirical sciences newsletter with latest development to students seeking a sciences degree) to stimulate interest in students, to help students on their research and to promote the quality of faculty of Cornell.

Staff: Design and implement Cornell-sponsored, practical retraining methods and opportunities for economically handicapped, displaced factory and farm workers in New York State (and, possibly, beyond) by expanding our extension education programs, governmental and industrial partnerships, and local availability for those lacking post-high school level training and residing in or near depressed areas.

Faculty member: A unified, centrally determined answer to the what? question would be uncharacteristic of Cornell. Outreach, like research and teaching, will reflect the informed choices of faculty (and others) about what the most important issues are that scholarship can illuminate. Although incentives and rewards might be offered to influence these choices, trying to control outreach would be unwise. ... I think it makes sense to identify a few areas in which Cornell has considerable expertise that are also of high value off campus and to try to leverage current activities in such a way that they have a greater impact and can generate additional resources. The leading example is K-12 education, especially in science, technology, engineering, and math (STEM). ... Another area that appears promising, if not quite so ripe, is economic development. ... "A Virtual School of Education": Would it be possible with a modest deployment of resources to link faculty having relevant expertise, outreach programs, and teacher education and try to expand these activities so that we could legitimately claim to be doing what a school of education does teacher education, educational research, graduate education, and outreach to improve schools without hiring new faculty or constructing new buildings?

Faculty group: Efforts that raise the level of public discourse; Policy relevant research and scholarship that addresses policy at multiple levels; Efforts that improve the quality of public education overall, particularly in science and math. Engaging those with the least access to knowledge and skills key to survival in the 21st century world remains the land grant mission.

Staff: Cornell could contribute to the economic health of the State by sponsoring

practical re-training for the economically disadvantaged such as displaced farm and factory workers.

Graduate: We should build a stronger bond between K-12 education and Cornell. A program to support exceptional lower school education and to integrate lower school students with the university would yield benefits not only for those K-12 students, but would also benefit Cornell by resulting in a more seamless transition from high school to university, and in better qualified new entrants to Cornell, and to other schools of higher learning.

Student: An area where we could do more investing is Citizen Science. As an early leader in this area, Cornell's own Lab of Ornithology serves as a great example and model. This allows Cornell to engage our various publics, to train and educate them, and to even further our own work in discovery.

Agricultural Model (Modern Expression, Environmental, Hunger)

Graduate: I think we still need to worry about manufacturing and food supplies, so Cornell should retain its world renown in these fields. Most of us will give up all of our modern technology in exchange for safe food, if that was the choice we faced. I think our efforts such as nanotechnology are examples of moving towards 21st century fulfillment of the land grant mission.

Graduate: Look at National Academy of Science panels:

<http://www.nap.edu/books/0309052955/html>

<http://www.nap.edu/books/0309054338/html>

<http://www.nap.edu/books/0309084946/html>

<http://www.nap.edu/books/0309072778/html>

<http://www.nap.edu/books/0309085357/html>

Weill Faculty member: Although the Ithaca campus has extension programs in New York City (e.g., nutrition), these have NO interaction with the medical college. Why not and how might that be rectified?

Graduate: The land grant mission is as important as ever as its scope can be expanded to include environmental protection and natural resource management beyond the traditional agricultural issues.

Faculty member: The land grant stands for engagement, commitment and responsibility to society and human needs. It also stands for the generation and application of knowledge to all areas of human and societal need. The dynamic tension that exists between these two traditions within Cornell has produced the great university we have today. However, I believe that the fundamental concept of the land grant mission is not well-understood by society today. To continue to impact society, the land grant mission must evolve to meet current societal needs. Furthermore, we must refresh and change the image of the land grant mission, which in most people's minds, is deeply rooted in 19th century agricultural traditions. ... I believe that some of the most pressing issues faced by humanity world-wide today are in the general area that we call Environment. These issues of environment are not limited by the boundaries of states or countries. Environmental issues are, indeed transnational.

Faculty forum: "Environment" should be a focus of what we teach, what we focus on in our extension and public service functions, and a particular priority for special emphasis by the University. ... The relationship of long-term societal sustainability (peace and security) to long-term environmental sustainability should not be ignored.

Staff: Established to serve an agrarian society, land grant universities and their extension services must now address the needs of a post-industrial world; that world has reshaped and continuously reshapes urban, suburban and rural life. More than ever before, the land grant university must therefore address complex and systemic sets of problems: economic, environmental and social.

Student: As we move towards the sesquicentennial, I and many other Cornellians hope that Cornell will emerge as a true environmental leader. Cornell can make unique and lasting contributions to our struggle for a sustainable existence on Earth.

Modern Application of Knowledge to Practical Problems

Graduate: One of your Questions for Engagement is "What does our land grant mission mean today?" I believe it means a continued commitment to serving local communities in Tompkins County. I believe the essence of Cornell's identity lies in the balance between local and global. And I believe Cornell has an opportunity to lead an international dialogue on this subject.

Staff: What does our land grant mission mean today? We feel strongly that it is our mission to extend unbiased research-based information to the citizens of New York and beyond, to help them address problems that require knowledge.

Staff: If the activities of the University contribute answers to particular questions or solutions to particular problems, the University has an obligation to make that knowledge freely available to whomever may benefit from it. In the context of the human condition world-wide and in the role of a trans-national university (and as a land-grant university), the University should extend its knowledge (especially in specialized areas such as crop management, seed development, and animal health) to those areas of the world where the need for such knowledge is critical, regardless of the end-users' ability to pay.

Faculty member: We've already expanded our mission to the urban NYC environment. I think the immigrant communities of New York City and other cities --Latin Americans, Koreans, Russians, Africans--need an extension service that focuses on getting them out of taxis and sweatshops. Could one transform Extension into an "Immigrant Corps"?

Graduate: The CRF for too long has maintained strict control over research, and has stunted the ability of professors to help change the world with Cornell technology, by focusing on licensing Cornell's IP for short-term gains to large corporations, who sit on the technology rather than generating value with it.

Graduate: Land grant means full cooperation with the D.O.D. in excellent R.O.T.C. teaching.

Graduate: Cooperative extension could be further developed and should be an outgrowth of all (not just the agricultural) areas. For example, there should be extension of technology, engineering, arts and other subjects coming out of all of the schools - not

just the state schools.

Faculty member: To me the land-grant mission means working directly with nonacademic organizations, private and public, at the departmental, college, or center level to help solve their problems. ... Cornell can establish more generic shared space in NYC for enhancing corporate discussions etc.

Faculty member: The ROTC programs are an extremely valuable contribution to society. I have been very impressed with my students that went through it. At the end of this email is an appendix, it contains a recent message of one of my former students from Baghdad. We will increasingly need better and better trained reserves. The University should strengthen this program.

Faculty member: We've solved the initial land grant challenge of making American agriculture productive and competitive, but have failed at the larger and current challenge of revivifying the State's communities and residents. ... There ought to be an Urban (OK, Metropolitan) Extension Network, and Cornell should be in the leadership of that effort at the highest levels.

Graduate: For every one of us, our parents and taxpayers somewhere made it possible for us to have that wonderful Cornell experience, and, in receiving that experience, every one of us has incurred an obligation to leave the world a better place than we found it. Culturally and sociologically we expend more and more of our national effort managing our assets, whatever they may be, and less and less of our effort feeding ourselves and making things.

Graduate: A primary vehicle for the delivery of outreach programs continues to be through County Cooperative Extension programs. As we think about broadening the scope of our outreach, modernizing delivery systems and avoiding the limitations of "antiquated" structures, how do we deal with the existing county association structure and the substantial financial support for outreach from counties through those associations? ... It will be critical to develop a more user-friendly portal, including an office and web-based technology, for industry, government, academics, not-for-profits, and the public to efficiently access Cornell's resources. ... Improved means of transferring the fruits of campus-based research and scholarship for the practical benefit of society need to be developed: As we strive to broaden the delivery of our land-grant mission throughout Cornell's colleges and units, an important ingredient must be innovative ideas, policies, and processes for technology transfer. ... Cornell's outreach mission should extend beyond traditional, and even expanded, forms of institutional program delivery; it should include the educational objective of instilling a service and outreach ethic in graduating students, as well as staff.

Staff: The Cornell Cooperative Extension System in New York State has been a tremendous success story over its nearly one century of existence. ... Our current Mission Statement reads: The Cornell Cooperative Extension Education System enables people to improve their lives and communities through partnerships that put research knowledge and experience to work. ... In the age of internet we must take this mission a step further and as your question itself suggests we "must do more to ensure that the fruits of our research become part of the fabric of society".

Faculty member: We probably need to think of all the people of NYS as our target, not

those just from rural or agricultural backgrounds. ... Clearly as the ethnic diversity of our population changes, this socialization/Americanization will be more and more critical. At the same time, we will also need to learn more about, respect, and adjust to a different set of cultures and values, that are no longer centered in Europe.

Faculty member: Collaborations with industry could be conceptualized and expressed as part of our land grant outreach mission.

Graduate: Today and in the future we should be providing more educational programs, not only via Cornell Cooperative Extension, but via modern technology, inter-net and whatever means possible. These programs should deal with some of the basic educational needs of a modern society. We could even own a radio station and/or have a free-to-the-public web site for educational instruction. We need to guarantee that such instruction is not politically skewed. Instruction could be in computer use, language, grammar, courses in basic astronomy, horticulture, gardening, mechanics, electronics, etc.

Staff: In my mind, there is still a need for community-based, practical learning that enhances the everyday life of individuals and families.

Staff: A relationship between what is discovered and known in the university, what is known and experienced in communities, and what either side may still need to know more about can only be mutually informative and, more than likely, beneficial.

Staff: We need to broaden the mission of our land grant university so that our research and outreach is meaningful to all New Yorkers—19 million of them.

Staff: Cooperative Extension is not simply an information service bringing research-based knowledge to people in their communities. The internet, in many ways, can take care of this function. People in their communities have a need for much more than factual information; our system, more than any other, can provide this. Cooperative Extension is a local presence in all counties of New York State and has a history of credibility. We know community issues through our first-hand knowledge of the people and their concerns. This means that there can be a tailor-made fit between what is needed on a local level and what the university has to offer. Moreover, there is a vehicle for having national educational issues addressed on a local level. Research can only become part of the fabric of the larger society if it reflects the needs and concerns of people in the communities, which make up the larger society.

Weill faculty member: The undergraduate campus, with its location, has to devise more strategies to connect with New York City's disadvantaged areas. Our medical college faculty could be linked in with the undergraduate science faculty in inviting those students in for laboratory and research exposure.

Faculty member: Today, I suspect that most folks at Cornell, if they know anything at all about Cooperative Extension, believe that the cooperative extension system is important because it provides an outlet for the great discoveries that are made at the university. In my opinion, the reverse of that process is far more important: the cooperative extension system is essential because it helps professors and scientists to recognize critical problems in society and stimulates them to design research to address those problems.

Staff: Why couldn't the local offices of Cornell Cooperative Extension – one in each county in the state – be portals through which all of our citizens can access all of the university? Why couldn't we provide admissions information to local students interested in attending Cornell? Why couldn't we become distance-learning outlets for Cornell faculty and guest speakers? Shouldn't we be working more closely with the Office of Alumni Affairs? The possibilities for increased campus-community connections throughout the state seem endless.

Faculty member: Take the lead in effecting positive change in relations between indigenous peoples and institutions of higher learning.

Staff: Some of the ways that the university at large can share research is through distance education courses, technology based approaches such as videoconferencing and web-based resources, and student service learning projects.

Faculty member: At the recent meeting of the advisory board for the new Cornell Center for Technology, Enterprise and Commercialization (C-TEC), it was reported that there is increased interest by the faculty in start-up companies to commercialize their technology. In many locations, the success of start-up companies has been increased markedly when they are involved with business incubators that are affiliated with universities.

Graduate: One question that has recently arisen for me in the experience I have had with university research is the transfer of research results that emerge out of a project supported by a public mission. The trend (in Canada, at least) has been towards commercialization, where research results have been bought by a private enterprise to be developed for release on the market. The ethics of this transfer bother me, as I am unsure whether publicly-supported research should be transferred for private gain without more transparent mechanisms to govern such transactions.

Staff: It seems to me that there has been an erosion of support from the Federal Government since the creation of the Land Grant Colleges and that we need to expand such support beyond the Department of Agriculture. We need to develop relationships with such federal agencies as Homeland Security, The Center for Disease Control, The National Volunteer Service agencies such as Americorps, National Senior Service Corps, and Health and Human Services. If we can work with such federal agencies so that they understand the effectiveness of Cooperative Extension and its outreach and education potential it will result in greatly increased partnerships. Perhaps too, we could establish a linkage with the "Space Grant" program and NASA.

Alumni group: A characteristic of Cornell's Land Grant Mission, perhaps uniquely distinguishing it from other Ivy League institutions, should be the responsibility it feels and commitment it makes to transforming ideas and knowledge into behavioral change options for individuals, families and communities, as well as businesses and industries. One form of Land Grant university output is technology (which can include innovations in social processes as well as those in engineering and biological or physical sciences) with potential to benefit society. The transfer of technology, moving from ideas to implementation, and the development of specific university research projects into economic development for the region and the state, should be an expectation across the University.

Staff: One of the key challenges facing the State of New York in the coming decades will be the process of revitalizing and maintaining our rural communities and re-connecting them to urban New York in ways that promote sustainability and improved quality of life for both rural and urban residents. Cornell University and Cooperative Extension can be a major player in this challenge if we change our approach and realize that we need each other to be effective.

Graduate: We should engage the public in a dialog about the research at the university, through forums or internet discussions, and take care to evaluate the effect of new technologies in addition to developing them. We need to come down some from the 'Ivory Tower' or the public will increasingly see us as irrelevant. Science and scholarship have intrinsic merits, but we should also be committed to using them for the benefit of society. This means recognizing and rewarding other forms of scholarship than simply research and publication in the promotion and tenure system. Students should see faculty who are truly doctors of philosophy; experts in one subject, and able to put their work in context ethically, socially and politically. In this way, faculty will become role models for the next generation of public citizens.

Category 6: Collaboration

How should we collaborate? We already collaborate with other great universities in the United States and around the world, on projects large and small. What other institutional partnerships, international and domestic, might permit a scale of endeavor that would allow us to accomplish things we cannot do alone? With whom might we collaborate, closer to home, to enhance the upstate New York economy and/or strengthen our ties to New York City?

Responses to the sixth set of questions in the Call to Engagement overlapped with responses to other sets of questions (especially Category 4 – where in the world should we be – and Category 8 – how should we be organized). In this section, I will discuss some interesting responses that could not be easily assigned to other categories.

I have grouped these responses into three sets. The first set raises cautions about any form of collaboration. The second set concerns approaches to beneficial collaboration with institutions that are similar, in order to obtain greater scale or geographic reach. The third set concerns approaches to beneficial collaboration with institutions that are different in significant ways, in order to create synergy or strategic complementarity.

The cautions took three different forms. One form warned against the dangers of what might be called “precipitous collaborations” – partnerships with unsuitable partners, where the anticipated benefits never materialize or are dwarfed by unanticipated costs, either to resources or to reputation. A second form of caution warned against the dangers of what might be called “shotgun collaborations” – partnerships imposed on schools or individual faculty members by exuberant administrators that fail because they do not reflect the goals of the professors who must make them work. A third form of caution warned against the dangers of what might be called “poisonous collaborations” – collaborations that distort the university’s priorities. This last caution warns both against the possibility that a collaboration would make the university’s interests more venal and also against the subtler possibility that a collaboration would make it more difficult for the university to play its traditional role of societal critic. Each of these cautions is, I believe, well taken. Collectively, they signal the importance of thorough deliberation before commitments are made.

Several respondents wrote about different forms of collaboration that might bring Cornell important scale improvements in various domains of activity. Some noted the success of existing collaborative agreements, such as our participation in the NSF-NSDL digital library projects and our partnership with the University of New Hampshire to operate the Shoals Marine Laboratory. Others noted the potential benefits that might be derived in different contexts from joint ventures with peer research universities.

The most numerous suggestions for collaboration had less to do with the opportunity to acquire necessary scale than they did with the opportunity to capture the benefits of synergy – of bringing complementary attributes to bear on a particular problem. Roughly equal numbers discussed the possibilities for synergistic collaboration

among different parts of Cornell University and the possibilities for synergistic collaboration between Cornell and an external partner.

Some of the most promising discussions of synergistic internal collaboration involved prospects for joint activity between the Weill Medical College and the Ithaca campus. A significant number of respondents identified particular areas of potential benefit, including obvious domains such as the life sciences, biomedical engineering, and comparative clinical research between the Medical and Veterinary Colleges. But several medical faculty members noted the possibilities for potential collaborations in other areas, such as business statistics, epidemiology, health services, and environmental/ecological studies. And they also commented on the potential benefits of involving undergraduates from Ithaca in biomedical research projects in New York City.

A second area of synergistic internal collaboration that warrants mention involves efforts to bridge the gaps between humanists, social scientists, and natural scientists. This is particularly promising in areas associated with the impact of technology on society. As one former trustee commented, “The opportunity is for Cornell to involve its humanists and social science faculty in the early stages of new technical developments so that Cornell technical researchers can understand the way society is likely to be affected by the introduction of their new technology.”

The possibilities for synergistic external collaboration were equally well represented. Some of our current partners, such as the Finger Lakes Wine Alliance, wrote in appreciation for existing patterns of cooperation. Many respondents commented on the potential benefits to be derived from strategic alliances with commercial entities. And many others noted the opportunities that might exist with government and NGO partners (including the World Bank and the United Nations).

This set of questions noted the existence of endeavors that are too big for Cornell to accomplish alone, but where nonetheless Cornell might have much to contribute. Recognizing that resources are not unlimited, our choice is often between forgoing the opportunity to contribute and finding one or more appropriate partners. As the cautionary messages noted, however, such partnerships require significant care and energy if they are to be successful. For that reason, it is especially important that we capture the benefits of internal synergistic collaboration – a kind of low-hanging fruit waiting to be harvested.

Excerpts from Category 6 Responses

Cautions

Graduate: Having worked during much of my career to initiate, build and grow joint business ventures overseas, I am well aware of the synergistic gains to be derived from effective collaboration with other institutions. I am also aware of the pitfalls and wasted resources which can follow from poorly conceived or poorly managed joint ventures and partnerships. So, while I applaud the concept of collaborations on the broadest basis, I urge that for each one considered, appropriate and thorough investigation be undertaken prior to making such commitments.

Faculty member: The best collaborations emerge rather than being imposed or engineered, with mutual interests spontaneously linking together. Collaborations can be facilitated with resources and "matchmaking" but cannot be forced without resentment. ... Collaborations are built on foundations of common faculty interests and will succeed only if nurtured (rather than mandated) by administrators.

Graduate: I am skeptical—maybe even deeply so—about planned interactions with society. I am concerned about corruption, both legal and moral, and I fear the tendency of universities to patent everything patentable and some things not.

Staff: We should be vetting our international exchange agreements more carefully to concentrate on institutional relationships that can be more productive in the long term and enhance/maintain Cornell's strong international reputation rather than dilute it through more mediocre alliances.

Staff: I am concerned, rather, that a coordinated mobilization of the university resources in service of social policy problem solving could overshadow the culture of criticism at the university. Refocusing university priorities on direct public application of research could limit the scope of problems that research addresses. The university should play a constructive role as a contributor to social policy nationally and internationally; it must also continue to provide space for the deconstructive work of the intellectual as critic.

Collaboration for Scale

Successful examples

Staff: The NSF-NSDL Program is comprised of about 130 digital library collections, services, and targeted research projects at institutions nationwide. In the three years that I have been a part of the NSDL at Cornell several models for sustainable collaboration have been explored in our effort to enhance science, technology, engineering and mathematics (STEM) education through a partnership of digital libraries joined by common technical and organizational frameworks. ... I believe that the extent to which Cornell can enable a nimble institutional social infrastructure that could certainly be aided by technological infrastructure, will mirror its successes in developing collaborations at all levels. I have some ideas about how Cornell might accomplish this.

Faculty member: From almost the beginning Shoals has been a program with an equal partnership between Cornell and the University of New Hampshire. Shoals is a working

demonstration of how a partnership can function and flourish. Students from Cornell and UNH are well served by the Lab, and the product is enhanced because there is a mix of students from both campuses and beyond. The sense of community and long-lasting relationships that develop in the island setting are dividends that even extend beyond the educational mission of the Lab.

Faculty member: 15 years ago I founded with some colleagues of Harvard and Lille (France) an annual Seminar--that from the name of the initial participants is called CorHaLi--with the following features: we would choose a scholarly theme of discussion from archaic Greek literature--and we would work on this theme during one or two semesters with our graduate students. At the end of the year we would meet in one of the Universities, teachers and students together, and during three days we would discuss and exchange our views. In the course of these fifteen years the members of CorHaLi have increased and Princeton, Paris and Lausanne are now members of the Seminar.

Staff of the Johnson Art Museum: The Johnson is one of the six members of the New York State Museum Consortium, which shares exhibitions, programs, and (to some degree) acquisitions. We are also members of the Discovery Trail (the eight Ithaca museums) and the Museum Loan Network, which is run by the Pew and Knight Foundations and facilitates museums' loans to each other.

Suggestions:

Graduate: Collaborate with Columbia U.

Graduate: Strengthen our ties to the NY State University System.

Graduate: Collaborations occur spontaneously, as faculty needs develop. There should be support for initiating such activities, but I do not think "centrally planning" is necessary.

Graduate: Surely there is much that could be done for the development of this depressed area of New York if there was a renewed effort at collaboration between our two institutions (Cornell and SUNY Binghamton).

Staff: I've imagined a new, high-level design for a partnership of universities. ... * Cornell forms a partnership/league/mega-university composed of a number of institutions. *Each institution retains only its strongest departments. * The full range of academic study is provided only by the mega-university and by none of the individual universities themselves. * The faculty and graduate students of each department are associated with the departments and through the departments to the mega-university. * Undergraduate education is a function of the mega-university. * Undergraduate education is distributed: teachers in the local departments teach locally and provide content for the distributed curriculum.

Student: Open more programs to students, like a study abroad program, but domestically so students can spend a semester at another prominent US college, such as taking a semester at MIT for engineers to take classes only offered at that institution. Also more collaboration with Ithaca College is needed.

Weill faculty member: I support the development of regional centers to maximize the use of large highly expensive equipment that may be used inefficiently on one campus. The development of the New York Structural Biology Center has been an excellent step in this direction. That model could be extended to other areas.

Library staff: A broad collaborative community must work together to maintain high quality, affordable modes of distribution for scholarly research. Moreover, the more scholarly information becomes accessible online, the more costly it will become to maintain large collections of low-use print material. Research institutions must begin work on dividing responsibility for maintaining print information, so that every library is not retaining access to many of the same materials—and so that unique items are not inadvertently withdrawn. Concretely, the staff suggested that a more radically collaborative arrangement with the three other large research libraries in New York—Columbia, NYU and NYPL—needs to be considered and also that the Library should consider working even more closely with the Ithaca community including the public library, the South Central Research Library Council, and local schools, in order to make Cornell library resources and services more available to the residents to the region.

Collaboration for Synergy

Internal collaboration:

Weill Faculty member: We do a lot of collaborations worldwide. WHAT WE SHOULD BE DOING IS COLLABORATING WITH OURSELVES MORE. [This was emphatically expressed.] Cornell-Ithaca is a great resource and Julianne Imperato-McGinley has lined up a large number of faculty at Ithaca who are interested and thoroughly interested in participating actively with the Medical College. We should take advantage of the Engineering to establish an MD/PhD program that includes biomedical engineering from the Ithaca campus. And set up liaison committees comprised of faculty on both campuses. Also look for collaborations which include industrial partnership – the scale at which pharmaceutical companies work is enormous and short term interest in partnerships with academia is increasing. And, in terms of Ithaca's recognition in working with us, leadership in academic medicine includes not only the scientific domains, but the full gamut of disciplines in Ithaca - not just the life sciences – this touches on business statistics, epidemiology and health services as well as the social sciences. How do we make it happen? Should we explore the diversity of new technologies??

Weill faculty member: I suggested that members of the adjunct faculty who are invited to lecture at sites close to Ithaca use that opportunity to strengthen relationships with Cornell and with its Department of Public Health.

Weill faculty member: Consider a program for undergraduates where the students could spend a 'semester abroad' in NYC, we could provide the undergraduates with biomedical research opportunities. It would help the undergraduates and give us more mentoring time and might influence students to go into academic medicine.

Trustees: Discussions have been initiated between the College of Veterinary Medicine and Weill to explore collaborative initiatives in cancer biology with external requests for support, resident exchange programs, clinical research, and MD/DVM professional education programs, among other areas. ... Other areas of collaboration between Ithaca and Weill need to be explored, including among other possibilities those with the College

of Engineering (artificial joint design, nanofabrication of medical implants, etc.), the College of Human Ecology (nutrition and human disease, medical applications of fiber chemistry, health care policy, etc.), and the range of colleges involved in the Life Sciences Initiative (genomics, nanobiotechnology, bioterrorism, etc.).

Veterinary College Alumni Council wrote that it feels strongly that there should be greater collaboration between the Veterinary College and the Weill Medical College.

Weill faculty member: I urge you to breakdown any existing barriers between our two campuses and establish mechanisms for facilitating joint programs in education and research. One of the most promising areas to develop might be an interdisciplinary program in the field of environmental/ecological studies: Man and Environment.

Weill students: To enhance the medical college there should be collaborations with Cornell undergrads to integrate the opportunities and give them some connections with medical students.

Former Graduate: If the world's societies are to benefit from the technologies being developed at Cornell and other leading research institutions, I believe universities must rethink their research model, producing research knowledge is not sufficient. Universities need to involve the social scientists and humanists early on as a technology begins to emerge. The objective is to enable society to adapt and evolve with the new technology. The opportunity is for Cornell to involve its humanists and social science faculty in the early stages of new technical developments so the Cornell technical researchers can understand the way society is likely to be affected by the introduction of their new technology.

Graduate student in applied physics: Whilst cooperation within the sciences is huge and it is also large within humanities and with social sciences, interdisciplinary work is much less across these boundaries. It would be good to increase mixing between areas and exposure of students and faculty to ideas outside their broad discipline. This mixing is the easiest way for radical innovation to take place.

Library staff: For the past three years, the Library has been working with faculty members in Computing and Information Science, and its associated digital libraries group, on a major project funded by the National Science Foundation to create the National Science Digital Library, a portal to educational resources in science, mathematics, and engineering. Mann Library staff members have provided in-depth metadata consulting on building a virtual linguistics laboratory in the Department of Human Development and also worked with faculty members involved with the McKnight Foundation's Collaborative Crop Research Program (CCRP) to improve access to CCRP's collections. Another example, is the recently completed Kinematic Models for Design Digital Library (K-MODDL) project. Working with Francis Moon and other faculty, and with support from the National Science Foundation (NSF), Cornell University Library built a digital library of mechanical models for teaching the principles of Kinematics – the geometry of pure motion – as well as the history and theory of machines, and the mathematics of mechanisms. A new proposal to the Institute for Museum and Library Services seeks funding to establish a partnership with the Boston Museum of Science to build educational programs at the middle school and elementary school level utilizing these digital models. Faculty member: Cornell has an opportunity to carefully shape its built environment to represent its mission and values. Unfortunately, planning and

development at Cornell have historically occurred in a fragmented manner. This has resulted in decisions that lack the complex and collaborative thinking we need to address the holistic design of our campus, such as the historic disintegration of the state and endowed components of campus, which needs to be improved. Better communication, teamwork and interdisciplinary approaches are needed to evolve a campus future that responds to our needs, creates the most compatible land uses and results in the kind of interactive living and learning environment we desire. To accomplish this goal, the University should commit itself to undertaking a comprehensive campus plan, from which the process and the resulting document will serve to guide all future development.

External collaboration

Graduate: Teaming with the business world should be a major emphasis for all the disciplines.

Graduate: We could partner with commercial entities such as IBM, Motorola, Citigroup, Walmart, and Amazon.com on researches that can be commercialized so to advance the human society. We could partner with non-profit organizations (without any inclination on political theme) to increase our public services and influences on public policies. We could partner with US governmental agencies such as NASA, Department of Transportation and Department of States to enhance our research and incorporate our researches. We could partner with foreign governments to enhance our research, to tap into quality students and to increase our international reputation.

Graduate: The World Bank has developed a Global Learning Center and is looking for partners who have competencies and knowledge assets in specific areas of specialization where Cornell has a comparative advantage--Business, Agricultural Sciences, Economics, Medicine (Global Health), Labor Market development, Law, etc.. The World Bank Global Learning Institute is a natural partner.

Graduate: Not with whom but what sorts of collaborations, what sort of mixes? Has an artist or poet ever been inside NASA?

Graduate: I would love to see a collaboration with the U.N. in New York City so students could do internships there for credit for a semester or two. This is important as issues have become increasingly global and can help students assess whether the US approach to foreign policy is adequate. A Cornell at the U.N. program, similar to Cornell in Washington, would be great.

Faculty member: The Institute for Community College Development is an existing collaboration between Cornell and SUNY. Its mission is to enhance the capacity of community colleges to meet society's needs for education and training by providing professional development opportunities for current and future community college leaders, and to support research that informs leadership decisions and improves student success.

Graduate: Contract college collaboration needs attention.

Weill students: Even within New York City, a partnership with Hunter or NYU would allow students to explore electives. For example: there are no piano practice rooms and no

really good athletic facilities at WMC; partnerships with schools nearby would be awesome. We could take Spanish classes and other classes.

Staff: Cornell should work closely with other large public and private employers in Tompkins and contiguous counties, plus Onondaga and Steuben counties, to make this region as rich as possible in employment opportunities for dual-career couples.

Graduate: Cornell needs to collaborate with business and industry, particularly within New York State. The Geneva Experiment Station's effort to build a food and technology park is a good example of such collaboration.

Integrated Pest Management Program staff: New York City is a large, untapped opportunity. We have just begun dialogues with the medical researchers at the Mt. Sinai Center for Children's Health, but we realize millions of city dwellers need information about urban pests and safe ways to manage them. Who might our partners be in NYC?

Staff: Cornell University should work to develop stronger collaborations with other institutions in the city, such as CUNY, NYU, Columbia, the New York Botanic Garden, Museum of Natural History and others. Stronger ties could help facilitate joint outreach/engagement programming and build a larger base of support within the city.

The Finger Lakes Wine Alliance wrote in appreciation for the high quality synergetic collaboration that is in place.

Staff: Failing the ability to make any significant gain in African American enrollment at the undergraduate level for more than twenty years, the institution may consider the prospect of developing articulation programs with secondary school districts that promise the opportunity for pipeline development of under privileged African American students for higher education. For students from selected secondary schools in New York State, the consideration of institutionally funded summer college opportunity instruction might become an option worth attention.

Category 7: Domains for special emphasis

Should we be identifying special domains of research emphasis where Cornell is unusually well situated to make enduring and significant contributions? Can such an identification be reconciled with the highly adaptive decentralization that has been one of the hallmarks of research innovation at Cornell? We have already identified some candidates for special emphasis: information science and computing technology, post-genomic life sciences, and nanotechnology. Additional themes which have the potential to draw on multiple disciplines where Cornell has great strength might include: technology and society; race and religion; globalization's consequences; humanity's relationship to the natural and built environment; peace, liberty, and security; and global health.

The seventh set of questions in the Call to Engagement elicited a predictably broad array of responses. They were a strong reminder of how much Cornell does to realize Ezra Cornell's ideal of an institution that supports "any study."

For the most part, each of the domains mentioned in the question received support as an area in which Cornell could make an important mark. But the strongest expressions of interest concerned an area that might be seen to cut across them all, but also stands apart from them. A large plurality of responses addressed one or more aspects of the challenge we face in this century to establish sustainable modes of living on this planet – a concept that I will refer to simply as "sustainability." The responses in this area offered powerful testimony to (a) the practical importance of the subject, (b) the appropriateness of the subject to investigation by many disciplines – humanities, social sciences, and sciences, undergraduate, graduate, professional, and clinical, and (c) Cornell's ability to make exceptional, enduring, significant contributions.

I will begin by noting some general concerns that were raised about the enterprise of identifying cross-cutting university-wide themes for special attention. I will then discuss the idea of a cross-cutting theme concerning the challenge of sustainability. I will offer a quick summary of domains that were mentioned by one or more alumni. And I will conclude by mentioning several other promising domains that received substantial attention by several faculty members, but did not receive as many expressions of interest as the challenge of sustainability.

The cautions mentioned in the Category 7 responses took several forms. As in the area of collaboration, several respondents noted the dangers of "top down" identification of cross-cutting themes as institutional priorities. Such a procedure runs the risk of committing resources to areas where we might not excel, while simultaneously crowding out opportunities for truly excellent innovation. It also risks a subtle erosion of competence as attention is directed into the more glamorous fields of inquiry at the expense of the core disciplinary expertise that fuels the new forms. Finally, as one respondent noted, any sense of "institutional" commitment to a particular domain could, in theory, lead to the emergence of a "Cornell school of thought" on a topic, to the detriment of our ideals of free and open inquiry.

Those concerns are part of why I believe this Call to Engagement process is so important. I believe that we can best guard against the dangers of an ill-considered institutional priority through this form of iterative conversation about our shared goals and priorities.

In reviewing the responses to the Call, I was struck by how broad and deep the sentiment was that Cornell has something distinctive and important to contribute to humanity's complex search for sustainability. The notion of sustainability, of course, is profoundly interdisciplinary. It entails humanist and social scientific concern with the ends of individual human life and of human societies. It entails a scientific search for understanding of the many dynamic systems – human and otherwise – that structure life on our planet. And it entails an understanding of the process of technological innovation, through which generations of humans have historically transcended the limitations that bounded their parents' environments.

Many respondents noted Cornell's unique breadth and depth of expertise in this area. From the Johnson Graduate School of Management's study of sustainable enterprise to the Center for the Environment in CALS to the Engineering College's record of distinction in the study of renewable energy sources – indeed, in almost every school and college of the University – Cornell has a distinctive record of leadership along many dimensions of this domain. The respondents noted the benefits that might be derived from drawing these sometimes uncoordinated activities into a more coherent university-wide effort.

In framing the questions for this category, I enumerated a number of other areas where Cornell might make distinctive contributions: technology and society; race and religion; globalization's consequences; peace, liberty, and security; and global health. Each suggestion had its supporters, although none of the comments in these domains presented a fully developed vision of what a campus-wide commitment might entail. It is possible that over time some of them might also attract the level of enthusiasm that sustainability has garnered already.

I would, however, also mention four areas of work not included in the questions that received unusually detailed and thoughtful development in the responses. Described more fully in the quotations that follow, they are an X-ray science initiative, a Library of Life initiative, a social science initiative, and a conflict resolution initiative.

Excerpts from Category 7 Responses

Concerns

Graduate: the additional themes mentioned above that are under consideration are precisely those that are likely to be poisoned by political correctness; they should not be pursued unless the university is willing to entertain and present all reasonable points of view.

Graduate: There needs to be some form of faculty and student consultation before undertaking large capital projects or fundraising for special domains.

Graduate: We must be wise with our limited resources. Doing our best, may mean leaving good things undone. To remain a top notch university, Cornell researchers must do what they do best.

Faculty member: Identification of promising areas of research should be made partly by university leaders, but the university must also be open to development of important new fields by others blessed with an innovative spirit and the perspectives and experience that provide vision and foresight.

Student: I do have a concern regarding the potential for erosion within our core disciplines, those very disciplines upon which hybrid domains are built. To swing the pendulum too far in one direction (and too quickly) can be a dangerous thing, resulting in departments which comprise great modern minds yet lack the traditional knowledge base of their discipline.

Faculty member: Clearly a few of your additional themes are close to my heart, like race and religion, and the environment – but the real challenge is how to empower the faculty to take leadership in these areas without a top-down decision.

Sustainability

Faculty member: Another focus that I am personally involved with is agroecological innovation, which capitalizes upon the power of biology to increase agricultural productivity in ways that are protective of natural systems and resources.

Faculty member: The world is facing increasing crises of poverty, pollution, famine, disease, violent trouble, and depletion of natural resources. Energy utilization per person is increasing even more rapidly than the population is increasing, especially due to longer life span. We are uniquely composed to attack some of these problems. Money is important, so we must influence national policy makers to address these problems. ... National priorities must be on a global basis to sustain planet earth as a compatible environment. Otherwise nature has a powerful evolutionary way of affecting, even eliminating species.

Faculty member: Could one imagine a Department of Sustainable Development, crossing between regional planning and the business school?

Graduate: Eco-technology.

Graduate: I believe that the greatest threat to global stability is the world's dependency on oil as its primary source of energy and that Cornell, with its multi-disciplinary capabilities among them government, engineering, law and medicine should be in the forefront of ending such dependency.

Graduate: Try this theme out: Designing Sustainable Economic Institutions for Development.

Graduate: Wine making, sustainable agriculture.

Visiting scholar: We need, as a university, to come to an understanding that the primary solutions for the major problems we confront will be found by modifying the way we live our lives -- as individuals and as a society -- and, that education and research at Cornell should be couched within that broader understanding.

Student: The world needs renewable energy. Our future energy supply should be of utmost concern, in our research and policy studies. The demand for improvement of these technologies is growing. Cornell must respond to this demand with pursuit of more reliable and efficient alternate energy sources.

Faculty member: The search for global equality will involve disciplines from the entire campus, including the life and physical sciences, engineering, natural resources, medicine, management, law, economics, government, sociology and the humanities. Cornell is well placed to play a leading role in efforts, given its founding principles, its interdisciplinary experience, its long history of applied and basic disciplines, its international reach and experience, and last but not least, its long commitment to the search for social justice. I suggest that we start now to examine the moral imperatives that flow from global disparity, and what will be required by the haves as well as the have-nots to accomplish a goal of global social justice.

Student forum: Our relationship to the natural and built environment is fundamentally important to conserving all life on this planet. Globalization and sustainable development is another domain that warrants special attention from Cornell's experts. A third domain and perhaps the most tangible aspect of this environmental leadership is a commitment to research the sustainability of Cornell's own practices in order to promote ecological awareness within all branches of the administration, staff, faculty, and students.

Weill faculty member: I would strongly support the development of a joint Ithaca-New York program in environmental studies. We should examine and improve on the University of Chicago's model at Cornell, adding research components in the physical, biological, and social sciences and the humanities. Global issues of geopolitics impacting on economics, ecology, health and disease will be a major issue facing mankind over the next 50 years. Cornell University should be a strong academic force addressing these multidisciplinary issues.

Faculty member: I would like to see a "special domain of research" focus on agriculture systems that accommodate wild biodiversity as well as agri-biodiversity. Cornell has an extraordinary collection of expertise from diverse disciplines that lends our university to becoming a leading world institution in the development of models and technologies for managing integrative, multifunctional landscapes that help "feed the world" while

generating viable local livelihoods and a range of global environmental services. Cornell has earned itself a unique capacity for convening stakeholders, and I hope we would use this to foster the collective action needed to tackle the critical need to make land use systems in New York and throughout the world more ecologically and economically sustainable.

Faculty member: The mass of faculty at Cornell whose research directly impacts biological conservation positions us strongly to take the leadership role in this field worldwide. Yet, I have had students tell me that they almost did not apply to Cornell for graduate school because it was unclear whether we had strength or interest in the area. There is no coherent internet presence for studies in biological conservation at Cornell. Therefore, one of our short term goals will be to organize a campus-wide list of faculty, their research interests, and courses they teach that are relevant to biological conservation. This could potentially be organized through the Center for the Environment, the Office of Undergraduate Biology, or the College of Veterinary Medicine, amongst other possibilities. This simple act should give Cornell considerable recognition in the field of biological conservation.

Faculty member: One possible university theme might be risk, with all of its implications for so many fields in the humanities, social sciences, engineering, etc. This spring, a group of civil engineering, systems engineering, anthropology, cognitive psychology, and philosophy faculty worked together to submit an IGERT proposal to NSF for a large group of graduate fellowships for students in engineering, anthropology, and cognitive psychology and to support curricular development in the area of risk. Following is a schematic taken from the proposal that captures the essence of the research on modeling risk to the built environment due to natural and manmade hazards.

Graduate: Cornell has an opportunity to be a leader in the important area of environmental sciences, but the current institutional structure does not allow Cornell to capitalize on this expertise. With the interdependencies of a global economy, it's clear that environmental policies will become critically important in the 21st Century. Cornell has a number of excellent departments in this arena that are housed in the Colleges of Arts and Sciences, CALS, and Engineering.

Graduate: I believe that a new generation of leaders must be taught to value sustainable development practices and to incorporate those principles into their workplaces and their lifestyles.

Faculty member: The creation of a campus-wide Center for Sustainable Global Enterprise ... could be one of the linchpins for Cornell's strategy moving forward. ... A form of "new capitalism" is emerging where environmental and social performance is embedded in the competitive strategy of the firm. Sustainable global enterprise thus represents a new private-sector based approach to achieving the goals of sustainable development – by creating profitable enterprises which simultaneously raise the quality of life of the world's 4 billion poor and conserve the ecological integrity of the planet. We envision of the Center for Sustainable Global Enterprise as the world's hub for the generation and dissemination of critical, leading-edge knowledge about how business can achieve unparalleled financial success through the solution of the world's social and environmental problems.

Faculty forum: The major social, political, and economic issues of our time (and of the

future) are grounded in human relationships with the environment and natural resources. Globalization, peace and security, race/bias issues, etc. are all complex societal issues, each based in the way humans relate to natural resources and the environment: who has access to natural resources; who benefits (and who bears the costs) of the ways in which natural resources are used; issues of environmental justice and equity associated with natural resource development and with environmental pollution and environmental quality -- and the list could go on. The relationship of long-term societal sustainability (peace and security) to long-term environmental sustainability should not be ignored. ... We have a diverse range of faculty and expertise focused on this topic from the Colleges of Agriculture and Life Sciences, Civil and Environmental Engineering, Veterinary Medicine, and Human Ecology. Moreover, a healthy environment is the key to sustainability as healthy natural resources provide the resources central to economic growth while degraded water, air and soil resources limit crop yields, other forms of productivity, and influence human health. Cornell is positioned uniquely to integrate applied research in the biological and social sciences. Many policy decisions must be made when there is scientific uncertainty and conflicting value judgments. This is especially true in the natural resources disciplines where we must manage complex natural systems that are only partially understood. Citizens and leaders must be informed of the possible consequences of their decisions (role of biological and social sciences), and make decisions using processes that are fair, equitable and credible (role of social sciences and ethics). Effective management and policy require integration and understanding of the complexity in the biological and social sciences, and ethics/humanities.

Faculty member: We feel the social sciences have been underemphasized in this process. The ILR School is poised to make a unique contribution to "A Fairer Globalization."

Faculty member: Environmental science will provide the background for creating a sustainable future for our planet. Cornell has wonderful expertise in investigating the crucial global questions pertaining to the environment -- whether those questions concern how business interacts with a developing economy, or if those questions deal with food production/processing in a fragile ecosystem. We have a tradition of excellence in biodiversity, organism biology, agricultural effects on the environment, and development. ... I see opportunities for most of the university in an environmental initiative. For example, I wonder if environmental development would not be an appropriate subject for classes in philosophy or government, sociology, economics.

Student: While Cornell researchers should be allowed to continue to work freely, building on their inherent strengths, the university should elevate certain priorities, including environmental science and sustainability. Cornell is uniquely situated to make lasting contributions to the environmental and social sustainability of Ithaca, Tompkins County, NY, the USA, and the world. The College of Agriculture and Life Sciences has recognized Environmental Sciences as a college level academic priority, along with the Land Grant Mission, Applied Social Sciences, and New Life Sciences. Cornell should follow suit and make Environmental Sustainability a university priority, both in academics and in operations.

Graduate: I think having an environmental institution that houses, supports and fosters small, innovative environmental programs is a worthwhile goal for Cornell.

Other Ideas Submitted

Staff: Law and technology.

Faculty member: Health and well-being across the whole life span.

Faculty member: Human services, ethics, and the social fallout of technology.

Faculty member: Vladimir Nabokov Studies.

Graduate: Aging and health care.

Graduate: Housing and affordable housing.

Graduate: Biotech and sensor technologies; aging; migration; wireless technologies and the movement towards "infinite spectrum": a pan-infrastructure focus to engineering.

Graduate: Nutrition.

Graduate: Human-Computer Interaction.

Graduate: Technology and society.

Graduate: Liberal arts:

Graduate: Quantum computing and chemically-assisted nuclear reactions (CANR), or at least some enabling aspect, thereof.

Graduate: Nutrition and agriculture.

Graduate: Any research that furthers human relations and helps to rebuild the reputation of America.

Graduate: Healthcare.

Faculty member: Psychiatry and the neurosciences.

Faculty member: Bioengineering.

Graduate: Agriculture and nutrition.

Faculty member: The physical sciences.

Staff: Agriculture and rural economics.

Staff: Urban design.

Graduate: Government, history, languages.

Graduate: Cross cultural and global mental health research.

Graduate: The decline of the small city/rural community, and the loss of the cultural identity that went with those communities.

Graduate: PEACE.

Staff forum: Diversity, agriculture, industry.

Student: Engineering, hospitality management, veterinarian medicine, and architecture.

Staff forum: Public health; international peace studies.

Staff: Human response to changes in medical technology.

Faculty member: Game design.

Graduate: The built environment.

Faculty member: Materials science.

Graduate: I believe that there needs to be discussion on how to deal with the long term consequences of today's discoveries and projected benefits versus the realities we may not know for many years.

Weill faculty member: Cornell needs to have presence nationally in shaping the future of health care. This needs to encompass innovation, delivery, access, and cost.

Alumni forum: The social sciences

Graduate: Elimination of war.

Student forum: Latino studies.

Staff forum: Mental health.

Graduate: Stem cell modeling.

Student: Liberal arts and humanities.

Faculty forum: Conflict resolution. Staff forum: Race and religion.

Faculty member: Equipping the non-scientific public to cope with the biomedical revolution.

Staff: Religion.

Extensive Proposals

X-Ray Science: Cornell has a long tradition in synchrotron x-ray technology that has enabled a strong synergy among the life, physical and engineering sciences. We are

now poised to enhance that capability in a unique and powerful way by bringing to practice a Cornell invention, the Energy Recovery Linac (ERL), which is a new type of synchrotron x-ray machine. ... The existing synchrotron complex at Wilson lab is a unique and important part of Cornell's scientific enterprise. ... The scientific productivity of Wilson Lab is extraordinary, and results in about a one published research paper a day. The quality of the research is universally acknowledged to be exceptional. A recent example was the award of the 2003 Nobel chemistry prize to Prof. Rod MacKinnon, of Rockefeller University, for x-ray work on the structure of protein channels essential to cellular function. ... ERL technology circumvents the hard physical limitations of storage rings and allows the production of x-ray beams with unprecedented brilliance, coherence and time structure. ... administration. A proposal to prototype critical ERL components has been submitted to the NSF, favorably reviewed and is awaiting a funding decision. A full-scale ERL, which we would hope to propose after the prototyping stage, would be a major project on the scale of the existing storage ring complex at Wilson Lab and would cost in the range of \$300M.

A Library of Life: Growing out of the New Life Sciences Initiative, Cornell faculty members have proposed the creation of a comprehensive digital "Library of Life." The aim of the library is to assemble a digital catalog and living samples of all microbes, fungi, plants, insects, invertebrates and vertebrates ... The complex nature of the data ... will require the development of new software and new database systems. We will need to handle new information at an unprecedented scale as well as to integrate many existing databases. ... Making the Library of Life's huge data set accessible over the Web also will require a number of technical breakthroughs. A new language will be created integrating classification schemes of different life science disciplines, making it easy to navigate between the biology of the small and of the large. The ties between biology and the information sciences have always been deep; this project will generate many hard questions for computing and information science, and provide opportunities to apply our technology to meeting basic human needs. ... We will be challenged to find ways to integrate the many databases being created for the life sciences and to organize them to facilitate problem solving, discovery and education. ... The first stage in development of the Library of Life will entail the creation of a Library of the Desert, focused on species found near the Dead Sea. The Library of the Desert is a collaborative effort with Stanford University, colleagues from Jordan and Israel, under the auspices of the Bridging the Rift Foundation. Ultimately, the project will expand to cover the entire planet. To enable this rapid exploration of data and comprehensive mathematical modeling of life on Earth, data structures and query languages will be created, guided by a think tank of Cornell researchers -- in time to include experts from around the world -- in the biological, computer and physical sciences. For example, the large-scale data integration will make it possible computationally to examine the effects of drug molecules on their environment and ecology.

A Social Sciences Initiative: First, we need intellectual leadership in the social sciences: we need to recruit to campus world-class scholars who will bring attention to the social sciences and who will also set the standard for research and teaching for all social scientists on campus and lead by example; and we need to do a better job of retaining our "star" social scientists. Second, we need to overcome the structural and intellectual divisions that impede innovative collaboration among social scientists. There needs to be far more dialogue across these departments and among scholars working in different disciplinary traditions. Third, we need to find ways to enhance our individual productivity, creativity, and visibility as individual scholars. ... Concretely, the Social Sciences

Advisory Council proposes the creation of 25 new university professorships. ... In recognition of budgetary constraints, and in order to encourage departments to internalize the costs and benefits of their hiring decisions, we propose that these 25 professorships be mortgaged against existing departmental lines. Departments would compete for one or more of these professorships by proposing specific candidates that would be vetted by the SSAC. If successful in this competition, departments would be expected to identify a current faculty line to be cashed in within a specified term (e.g., five years). ... In conjunction with this major investment in 25 new professorships, we for our part would like to work with the central administration to bring about a number of structural changes. These include: The clarification of Promotions Standards ... Best practices for retention ... Spousal Hiring ... Retirements ... Rationalizing institutional structures: ,,

A Center for Conflict Resolution: The foundation for the establishment of a University level center would be the ILR School's Institute on Conflict Resolution. The Institute was founded in 1996 and is now nationally recognized for its work on dispute resolution in employment relations. ... We believe it would require only a modest investment to establish a Cornell Center for Conflict Resolution. The Institute on Conflict Resolution could provide the core of a center's administrative apparatus. ... Achieving justice and fairness in our society and globally requires an understanding of the nature and causes of conflict as well as the methods that can be used to resolve conflict effectively. Certainly the study of justice, conflict, and conflict resolution should not be confined to students in the Law School or the ILR School but should be aimed at all Cornell students. Indeed, if we are to "inspire our undergraduate, graduate...students to become intellectual and moral leaders..." Cornell students must have access not simply to one or a handful of courses on these topics but to a full range of such courses.

Category 8: Organization

How should the University be organized? Our complex web of institutional structures and processes have, for the most part, provided a healthy mix of stability and flexibility. But are some features anachronisms? Do new forms of knowledge production and dissemination require different structures? Might organizational changes better enable faculty, students, and staff to achieve their individual and institutional ambitions?

For many respondents, the eighth set of questions in the Call to Engagement seemed to present the most challenging and important set of concerns. I found it useful to separate the responses into two categories. One set of responses concerned the academic organization of the university – the way in which students and faculty are categorized, and the rules and norms that structure the environment in which they study, teach, and conduct research and service activities. A second set of responses concerned the administrative organization of the university – the way in which the university attracts and distributes resources in order to maintain an institution where study, research, and service take place.

Most of the responses about the academic organization of the university expressed similar views about desirable directions and manners of change. They begin with a desire for a relaxation of barriers, for greater permeability of internal boundaries, more fluidity of movement around the university. Whether the subject is the distinction between endowed and contract colleges, the Ithaca campus and the Weill Medical College, or the difficulty deciding whether to pursue a biology degree through Arts and Sciences or CALS, the message was that some existing attributes of separation are counterproductive.

It seems to me that in many areas we ought to be able to achieve greater integration of the university along these lines without calling either for greater centralization or for the elimination of all local differences. Practices and policies that impede the movement of students and faculty through the university are usually adopted one at a time, and usually for a good reason. And barriers to movement are often the joint or cumulative consequence of several small decisions.

Although the benefits of having a more seamlessly integrated university sometimes require the locus of decision and action to be shifted, that is not always the case. Sometimes those benefits may be realized by enabling decentralized decision makers to coordinate their actions and by encouraging them to internalize within their decision making an appreciation for the costs to the community that follow from a lack of coordination.

In this regard the most frequent suggestions had to do with the way we present ourselves to prospective applicants. Many respondents expressed concern that the lack of coordination among schools and colleges created a system that is unfriendly and confusing. Others noted how a fractionalized process led to systematic under-investment in communication with more remote parts of the country and the world.

There were other comments about the academic organization of the university worth noting. They concerned the extent to which we are getting the full academic benefit (in teaching and research) from our investment in particular areas, or whether the impact of our investment is being dissipated as a result of duplicative or incoherent organizational structures.

Responses about the administrative organization of the university were less easy to characterize. They generally broke down into four groups, but many interesting comments fell into other domains.

The first major group concerned the importance of streamlining, simplifying, and coordinating our administrative policies. There were important ideas about what should follow once workforce planning is completed.

A second concerned the importance of capturing the full benefits in the marketplace that come from coordinated purchasing of goods and services from the outside world, from paperclips to airline tickets to website design. When the good or service in question is a “commodity,” we should almost always be finding ways to capture the economic benefits that come from the scale of our purchasing in the marketplace. Indeed, that is one of the primary lessons from the university’s workforce planning exercise. And even when there might be good reason to support continued “local” purchasing activity, we should make sure that the decision makers properly internalize the costs of those decisions.

A third had to do with the unintended consequences of our administrative structures: situations where we might need to do more to ensure that the structure’s behavioral incentives do not lead to perverse outcomes for the university. Included in this group were concerns expressed about our “enterprise system” – a system of separate charges for certain services that have been identified as a source of frustration to many students, staff, and faculty. The fourth area of significant comment had to do with the processes of campus planning and development. Many respondents spoke of the benefits that could follow from a comprehensive master planning effort.

I believe there is much wisdom to be gleaned from many of these comments. I have confidence that attention in the years ahead to the internal organization of the university is one of the steps we can take that will enhance to our ability to make effective contributions to our students and to the world.

Excerpts from Category 8 Responses

Academic Organization

Internal

Graduate: I believe the organization of Cornell University is just fine as it now stands.

Graduate: To your comment about anachronism, I say, some of these things are what make Cornell truly great. This link to the past through tradition isn't a weakness, it's a strength. To the extent that these anachronisms return to the core values, they should be retained. With the right core values, the right traditions will be maintained, and they will strengthen the Cornell experience.

Graduate: The decentralized organization of Cornell and the special committee system for graduate systems is already exemplary and I can't imagine how to improve it.

Graduate: Cornell's unique balance of individual colleges and University purpose is wonderful and should be made as strong as possible. Reorganization is energy draining and very often change for change's sake. Changes should be made on a specific basis as real needs drive them. Focus on an overall shakedown of the organization will lead to confusion and will ultimately bring the organization back to where it started, if it was functioning well, or to chaos, if it wasn't. The key to an effective organization is clear and easy communications between its parts, and giving a sense of responsibility to individuals to do what is right and will work.

Graduate: Cornell is a very large institution and the more niches into which a student fits the happier he or she will be. One's college, one's major, one's dormitory, one's extracurricular activities, one's social group - all act together to create an individual Cornell. My own daughter described it to me when she said about a friend, "My Cornell isn't her Cornell. There are lots of Cornells and they sometimes overlap and they sometimes don't." The important thing is that her friend was as passionately fond of the University as she was.

Graduate student: From my (limited) experience as a graduate student at Cornell, I have found the lack of barriers across the academic units to be a tremendous asset. It fosters collaboration and exchange of ideas, all the while diminishing internal competition and isolation that can be damaging. I have not witnessed any outdated structural components at Cornell, so I cannot list any anachronistic areas. I would only comment that, with respect to academic units and disciplines, caution should be urged when assigning the term obsolete.

Faculty member: Evolutionary change is wonderful. Any attempt to drastically alter the nature of the system is going to lead to more morale loss and productivity loss with little gain. If we were to do it all over again, probably we'd do it very differently – but we don't have that choice and a top-down change is only going to hurt your efforts to focus on the key issues you've raised.

Graduate: Cornell lacks Centers for Research. It is too departmental, less topic oriented. This maybe good for teaching, but bad for research and business.

Staff: There is a massive organizational failure in the communication between the school of Arts and Sciences and the Agriculture school, specifically between Econ and A.E.M., but generally between every course of study and Cornell's schools in general. Dual-degree programs between schools should be expanded so that individuals can pursue similar or diverse studies between schools and have access to the maximum classes they can, granted they have accomplished the prerequisites for their appropriate field of interest.

Staff: The fat needs to be cut--there should be no repetition in terms of departments, course offerings, offices, etc.. Cutting these out will make the University smaller, more manageable, and more efficient. For example, AEM and the Johnson School should be merged. All finance courses should stay there--that way, the courses offered in Economics in Arts and Sciences, Hotel Administration, Operations Research & Industrial Engineering (in Engineering) can all be eliminated. There is no need for 10 different Finance courses.

Faculty member: However, there is a structural flaw in the system: Although the fields are the intellectual centers with the responsibility for graduate education, the departments, rather than the fields, control the necessary resources, most notably graduate student assistantships.

Faculty member: I think that it would not take an organizational change but rather a change in organizational culture to get Cornell more ready for the 21st century. We have inherited a structure of departments, mostly based in self-determined disciplines, that comes out of the 19th century, or before. This structure has not served us badly through most of the 20th century, but by the end of the century it was becoming more and more evidently a hindrance. I don't know anyone who thinks that most of the important advances in knowledge in the next several decades will come at the core of existing disciplines, but most will come at the interface between disciplines (biophysics, etc.) or in the interstices between them. Yet Cornell administrators, even CALS which we have a strong-dean system compared to Arts, continue to defer much too much to departmental priorities and definitions. I am not suggesting doing away with departments, though some might usefully be combined or subdivided. Departments are a reasonable way to run a university with decentralized, faculty self-management. Almost all my colleges in one-on-one discussions agree that department/disciplinary organization has many 'negative externalities,' yet once sitting in departmental meetings among colleagues, they engage in the kind of zero-sum, parochial thinking that they know is unproductive for the institution as a whole.

Student: The split of the Johnson Graduate School of Management and undergraduate School of Business is not optimal in a way that the resources in terms of facility, faculty, and activities are not shared.

Graduate: Art, Architecture, and Landscape Architecture must be put back together -- under one roof, one faculty, and one integrated agenda.

Graduate: Cornell should be organized interdisciplinarily, around the initiatives. Like a company, it should be reorganized every few years to allow new collaborations. This will be a highly unpopular process that will dislodge old territories and create discomfort. The discomfort will bring about change.

Graduate: This is an age of specialization. I do not think we can fight that. But we can supplement it with structures that bind the fragments. This could be structures titled Advanced Studies in The Environmental Sciences, Advanced Studies in the Social Sciences, Advanced Studies in Political, Economic and Legal Sciences, etc. Such structures might even teach a course.

Graduate: There may be nuances of difference between Public Policy and C.I.S.E.R. but wouldn't the two be more effective if conjoined in some way? Any such linkage, of course, raises the vexing state versus endowed problem which, I'm sure, the University must have faced repeatedly in bringing together the Life Sciences Initiative. The School of Industrial and Labor Relations has fine new facilities but may face obsolescence in its traditional role. Could it serve more effectively as a graduate school, with a limited and focused agenda in labor economics? If not, could the scope of its present program be enlarged, perhaps in conjunction with Applied Economics, to form a powerful undergraduate School of Business? In short, some of the social science programs in the contract colleges appeared to be marooned and cut off from an academic matrix which make them more coherent, more successful and, in time, more distinguished. Whatever may be the shape of things to come, we should not continue to fund programs in the State assisted schools and colleges which, despite long opportunity to establish themselves, have not achieved distinction. If the prospects for significant improvement seem unlikely, is it possible that such programs can be allowed to "sunset"?

Faculty member: It is imperative to develop a curriculum based on the new needs and in the style of both physics and biology. To achieve these types of changes may require shifts in the current paradigm of single-department control over certain core courses.

Graduate: We should also consider dual career tracks for faculty. One track would be for research people who would attract grants and graduate students. The other would be for teachers who would attract the undergraduates. As I mentioned earlier, teaching and research require different skills which might not be present in all faculty members. It is a good idea to recognize this and to reward people for the contributions their skills allow them to make to the university.

Graduate: I would recommend adding one additional college - a college in which students can create their own specialized areas of study relevant to societal problems and issues of interest to them, much like the College Scholar Program. UCSD here in San Diego has such a college - the Sixth College. Its charter is: At Sixth College we are passionate about building an enriching community as the "picture frame" in which our members will paint their own social and academic experiences. Our community, made up of students, parents, faculty and staff will, through mutual respect and sharing, enable us to explore diversity in beliefs, perspectives, and resources by encouraging the accumulation of knowledge both in and out of the classroom. Students at Sixth College will participate in a well-rounded core curriculum that focuses pedagogically on culture, art, and technology but that challenges them to take the knowledge from the classroom and apply it to all areas of their lives as students. It is the goal of the Sixth College community that we inspire future citizens who can listen across cultures, collaborate and work in teams, are engaged in the community in which they live and who practice respect, humility, tolerance and self-criticism. It is our hope that everyone who comes into our community be inspired to practice and model these traits by becoming a life-long learner.

Faculty member: Many of the today's scientific challenges do not fall within traditional departmental boundaries. The academic community is adapting to this reality slowly and cautiously. Some disciplines are more enterprising than others about reshaping themselves to meet these challenges, usually in response to increased opportunities for research funding. At the same time, we tend to resist change in response to events external to our disciplines. Viewing scholarship only from the perspective of our own research areas and disciplines, faculty, departments and colleges compete more than they cooperate. We pursue incremental research that is familiar and comfortable rather than grappling with new kinds of questions in contexts that force us to stretch ourselves as scholars. We are seldom role models for students to stretch themselves beyond well defined conceptual contexts that are familiar. During my career, I have felt the excitement that comes from new ideas reaching across traditional boundaries. Thus, I would like to see us individually take a broader perspective in our scholarship.

Graduate: I am writing to express my concern over how biological anthropology is organized at Cornell. The field, of course, is interdisciplinary between biology and anthropology, yet the departments of biology and anthropology have no organizational connection. The result is that students interested in a rigorous study of the field must scour the course catalog themselves to find related courses.

Student: Cornell University should start a School of Foreign Service and Diplomacy. The School should award degrees at the undergraduate as well as at the graduate level. The first two years of undergraduate education should be at Cornell's Ithaca campus, while the last two should be at a newly formed New York City campus. I believe that given the nature of the school's work, it should be a state school linked to New York State funding. The New York City campus ideally should be located in the reconstructed world financial district.

Graduate: Architecture at Cornell fails totally to include art as an integral part of social eidos, and all other colleges and departments do as well. Not one building has ever been designed that sought to collaborate with art.

Faculty member: I suggest that we develop structures that will induce science and engineering departments to spend more time working together on their large basic courses, seeking to bring new ideas and new technologies to freshman and sophomore students while pruning material that is obsolete.

Graduate: As an Arts & Sciences student, I had no problem taking courses wherever I wanted to within the University. However, friends in the state-supported divisions were constantly trying (with less than perfect results) to carve out a meaningful education (read: more Arts courses) than their schools would allow. If we could come up with an a la carte approach for them (assuming that they met their school's requirements for graduation, and paid the Arts College for hours over their allowance), I think it would be a good thing.

Graduate: I think the tenure system should be revised to reward those who pursue teaching or outreach as well as those who do basic research.

Weill faculty member: I thought it would be interesting for the President to know this little fact about his far-flung medical faculty member: we are so divorced from the main

university that official policy down here is that we can't even get "Faculty" ID's.

Graduate: All those undergraduate colleges and schools. Perhaps once a source of creative tension, but more likely now a hindrance to getting the most out of Cornell's resources. The idea of the state contract colleges has fostered empires and duplication. Perhaps that idea has seen its day and these colleges and schools should all be reduced to departments and the state money kept flowing to a central budget for covering the traditional areas within each of these schools. Less drastically, perhaps Hum Ec and A&LS should be merged and consolidated. Maybe Arts should recapture Biology; the Speech and Drama department capture Communications, and reform it, because no great university should offer such an insipid course. Gut majors and departments such as student personnel administration should be terminated. All students would pay the same tuition, maybe, so as to reduce economic forum shopping among the separate admissions tracks. ... I think the state/endowed separation in undergraduate education is an anachronism.

Graduate: The cross-college efforts in biotech and other areas are a great step forward. Cornell seems to have identified several key areas for more of this and that is healthy. To me, the successes in these areas seem to call for Cornell to re-evaluate its decentralized structure. Not that a monolith would work. But, the need for so many separate colleges, admissions departments (especially!), and other administrative functions, is questionable.

Graduate: I would suggest that architecture, art, planning, landscape architecture, structural design, civil engineering and construction management be under one "umbrella".

Faculty member: The first step in any reorganization must be to retain the flexibility to retain talent. ... The changes in some fields are so fast that it makes no sense to grant tenure. E.g. CS was hot beyond believe some time ago, but may be much smaller in 15 years when most CS is outsourced to India and China. What to do with a faculty that was hired at 28 and being tenured stays till 68 ? There needs to be more flexibility. Tenure is fine in some other areas, say Classics, Law, and Political Science but not in fast moving fields. ... Retirement is a real problem for all departments that raise research money. Grant agencies have fixed budgets. To fund young talent, they need to cut funds to old faculty. This generates very large problems for departments that need research for one core mission of the University, the education of graduate students. You can educate graduate students in English, very well, at the age of 76, with no research grants. You can not educate graduate students in engineering, physics and engineering without research grants. And you won't have any at the age of 76. There needs to be a buy out program for older faculty in these departments, and only in these.

Student: Many related departments don't even communicate because they are in different schools. For example the many different design disciplines hardly communicate. LA, DEA, ARCH, and art!

Graduate: The College of Human Ecology has struggled to find new missions in the aftermath of the decline of its founding purposes, involving rural life. Can its programs, both old and newly developed, compete with others of a similar kind which are already well established elsewhere? I understand, for example, that the College has done outstanding work in textiles. Nevertheless, it probably cannot and should not attempt to

compete with F.I.T. in the broader field of fashion. Can or should the textile field flourish in isolation? The field of public policy has been created recently. Does the new program fit the Hum Ec agenda? How, if at all, does it relate to similar centers and departments in the Arts College? There may be nuances of difference between Public Policy and C.I.S.E.R. but wouldn't the two be more effective if conjoined in some way? ... The School of Industrial and Labor Relations has fine new facilities but may face obsolescence in its traditional role. Could it serve more effectively as a graduate school with a limited and focused agenda in labor economics? If not, could the scope of its present program be enlarged, perhaps in conjunction with Applied Economics, to form a powerful undergraduate School of Business? In short, some of the social science programs in the contract colleges appeared to be marooned and cut off from an academic matrix which make them more coherent, more successful and, in time, more distinguished.

Staff: There appears to be a number of questionable academic department course overlaps in some areas (such as landscape architecture, communications, and many business programs for example) taught in the College of Arts & Sciences, the College of Art, Architecture, and Planning, the Johnson Graduate School of Management, the College of Industrial and Labor Relations, and the College of Agriculture and Life Sciences.

Faculty member: I think that it is time for the university to substantially lower some of the barriers between colleges. In particular, I would like to see restrictions on cross college student enrollment eliminated entirely, including regulations affecting how cross college student enrollment affects graduation requirements. I doubt that I have encountered a single instance in which these restrictions have furthered a student's education or enhanced research conducted here.

Graduate: When I was at Cornell, the various career offices at each college did not cooperate well. ... Maybe the colleges shouldn't be silos, but more of a matrix organization. All career services groups report up one person and have the same mission. Or at least the groups that overlap, for example: Arts, Ag and Engineering. Transferring between schools should be easier and less stringent. For example, if a student starts in Engineering, but does poorly because they simply weren't prepared for the level of difficulty and wants to transfer to Ag or Hotel, that student has to spend a whole semester in transition and get a B+ average. If that student still doesn't do well in transition, their only choice is to stay in transition, stay in Engineering or leave Cornell. It increases the chance that a student won't graduate on time and increases the cost of their education.

Graduate: What in the world is the Human Ecology School? I propose that we look into a new name for the School, one with clear descriptive meaning. ... I don't think I have the answer, but here are a few suggestions that might spark a vision in someone's head, and result then in the Answer: College of Lifespan Studies, College of Lifespan Research, College of Human Development Issues and Research, College of Human Development Studies.

Faculty member: The best thing to happen to Cornell in my opinion is the CIS rubric. Perhaps the university could abstract one level higher... a sort of IFS (Interdisciplinary Field of Study) rubric? A sort-of non-departmental, experimental course "playground" where new course ideas could be tested? There should be a way for non-standard

courses and thinking be given room to develop and grow or even die. The fact that my team and I had a "place" to test our ideas has already impacted Cornell. Perhaps other such programs would help other units.

Graduate: 1) Changing the status of the Colleges of Agriculture and Life Sciences, and Veterinarian Medicine from state to private, 2) eliminating the College of Human Ecology and School of Industrial and Labor Relations, and moving their best programs into the appropriate departments of the Arts and Sciences College without increasing the enrollment of the Art and Sciences College, and 3) letting the enrollment of the College of Agriculture and Life Sciences fall commensurate with a private level tuition.

Faculty member: Barriers to taking a reasonable number of courses, particularly electives, in other colleges should be kept low in all of the colleges, including Arts and Sciences.

Graduate students: The graduate students of City and Regional Planning support the continuation of the college as it is now organized. We believe the University can act to bridge the differences between departments by encouraging synergetic collaborations (as opposed to forced or symbolic collaboration). Specifically, the University can encourage the departments to create more interdepartmental courses that focus on the fine arts, built environment, processes of development and their respective contexts.

Graduate: It is unclear whether a university needs thousands of courses, something Cornell finds as a hallmark. No company would have multiple staff all doing the same function, -- nor multiple coffee machines serving the same beverage lined up in the cafeteria.

Faculty member: Our Graduate Field system goes a long way towards meeting this challenge by defining groupings of appropriate faculty from different departments and colleges as members of fields. ... However, there is a structural flaw in the system: Although the fields are the intellectual centers with the responsibility for graduate education, the departments, rather than the fields, control the necessary resources, most notably graduate student assistantships. This is not a problem for the disciplinary fields, since their memberships essentially match those of their home departments. But it is a great impediment for the interdisciplinary fields. They must rely on the good will and cooperation of multiple departments, admirable virtues but ones that become stretched in times of fiscal retrenchment (i.e., the present).

Faculty group: We believe further attention needs to be focused on problems of resource allocation across units that impede different units in the social sciences from acting in the best interests of the social sciences as a collective whole. We believe that serious thought needs to be given to institutional structure of the social sciences in order to address such questions as: Are there programs that could be pruned or consolidated? Are there departments across different schools or colleges that would be more effective if they were networked, or even merged? Are there positions that would better be housed in other parts of the university? Are there changes to existing financial arrangements that would encourage greater collaboration among students and faculty from different units?

Faculty member: Inefficient duplication of educational resources. We could do a much better job than we currently are in focusing resources, particularly course offerings. This

might also alleviate another problem--insufficient number of small courses at Cornell for undergraduates. Once a course reaches 150 or thereabouts, in my experience it might as well be 300 or bigger (I currently teach a course of 250 that was double this size in my previous job in the UC system). By carefully examining duplication of course offerings, we could make some large classes larger and then use the freed up time to offer more smaller courses.

Graduate: Cornell still has too many departmental redundancies among the colleges and this generates significant inefficiencies in the University's operating budget. The worst examples of this are the economics departments, which resides in the Colleges of Arts and Sciences, ILR, CALS, Hotel, and Human Ecology. There are other examples, particularly in the social sciences. My recommendation is that Cornell reorganize and create "Centers of Excellence" within a college to serve the entire University. Cornell could have a much stronger economics department if it could create a "Center of Excellence" within one college and allow students from any college to take courses from those professors in that college.

Student: I see little reason why schools like Human Ecology, ILR, and AAP should be distinct from Arts and Sciences. (A new name could be devised so as not to seem imperialistic.) Cornell should see its position as inherently interdisciplinary instead of sectarian. Students would benefit from programs that could incorporate painting, physics, labor history, English, and human development far more than they benefit from the current system which makes it very difficult for a student in one college to investigate more than a cursory sample of courses outside her home college.

Alumni: The Law School should continue to create interdisciplinary programs with its natural partners, The ILR School, The Johnson School, the government, history, philosophy, economics and perhaps other departments of the Arts College, and, as regards life sciences, the ALS College and the Medical and Veterinarian schools. Cooperation could consist not only of joint courses, but also of joint faculty appointments, jointly-sponsored lecture programs, or law courses that focus on joint interests in these disciplines (e.g., the intellectual property aspects of the physical sciences).

Faculty member: The University will continue to have divisions within subject areas as long as we do not achieve agreement on what quality standards we want to have University-wide. One very successful development has been in the graduate field of economics, which has expanded to include the great majority of economists around campus whose books are published by major university and commercial presses and whose articles appear in top general journals such as *The American Economic Review* and *Econometric* and in such leading field journals as the *Journal of Labor Economics* and the *Journal of Development Economics*.

Presentation to Outsiders

Graduate: Our undergraduate admissions are too confusing to outsiders. A universal undergraduate admissions office should be formed with new processes and updated goals. In the same way that athletics made the change from having * 2 * dedicated admissions officers per sport to one group ensuring the best and brightest come to Cornell, so should this apply to admissions.

Graduate: The university should centralize and standardize undergraduate admissions.

Graduate: I always thought there was a lot of redundancy, particularly in the admissions process with each college operating autonomously. If we could streamline the process, i.e. one committee to decide if the student really meets Cornell qualifications, then each college making their selection. It seems silly for a student who has no prayer of getting in anywhere being considered independently by two different colleges thus taking up precious time 2X over.

Trustee emeritus: It is my opinion, Cornell would also benefit by presenting a single admissions office to the outside world. It has always been confusing for applicants to Cornell to decide which college would be most suitable for them. For example, one of the trustees at a recent meeting told me about a friend in the West who had a child who was interested in nutrition. She applied to the College of Arts and Sciences and was rejected. She didn't know that the subject of nutrition was largely taught in Human Ecology where she would have been more likely to have been accepted, based on her SAT's and activities. A single admissions office could have recognized her nutrition interest and directed her application to Human Ecology.

Graduate: I think admissions has been neglected over the years. For CAAAN volunteers on the front line of admissions, little is provided as a central marketing theme. ... I understand the decentralization of Cornell's admissions department but I think it needs to change.

Graduate: Create additional specialty divisions that encompass the faculty of more than one school. To pick two fields that I know nothing about, you have faculty with psychology or economics credentials in more than one school, but I believe that you get no ... credit for the members who are not in the main department. For example, I believe that the Cornell economics reputation is based on an evaluation of "the economics department" and that no one outside of Cornell is going to try to understand whether you have economists in the Ag school or psychologists in the HE school, etc. ... Although you already know that the creation of divisions may serve internal purposes, it should also be a way to show the outside world what faculty and research activities are taking place at a complex place like Cornell. A division of social sciences would probably make the perceived Cornell activity in this realm huge.

Graduate: Another opportunity to create a more effective and efficient operation is to centralize Admissions at Cornell. Each college could still have its own admissions standards and processes for evaluating applicants, however, the activities would be coordinated under one Director of Admissions.

Graduate: It would be desirable to reconsider the admissions process insofar as it requires a student to make a choice of school, cutting off options for a Cornell education in another school.

Graduate: Centralize the Admissions Office. This has been considered off and on for many years. There has always been a reason to keep several of the colleges separate. I think the time is right to overcome this bias and bring all the undergraduate admissions into one office. Because Cornell utilizes alumni in the CAAAN network and informally to assist the admissions process, the communication with alumni (and perhaps prospective students) will be vastly improved by this change. I recognize that the colleges that now

do their own admissions will have to develop new ways to make sure their criteria for new students are properly met. Having seen many reorganizations in the corporate and university setting, I know that their needs can be met with proper planning and careful execution.

Administrative Organization

Streamlining, simplifying, coordinating

Staff: Provide more technical support at the unit level, and more central core services in general, sharing equipment and know-how.

Staff: Building management, as opposed to unit/department management would take into consideration the potential occupancy of a building, assign a base number of staff to handle the administrative needs of that potential group, and a University appropriation to pay the bill. Staff needs over and above the base would be exceptions and could be for limited terms for specific needs (or funded by sponsored funds). ... Short term – start working toward this plan. All new buildings could be budgeted in this manner and existing buildings could have administrative units combined and have three years to reduce staff to conform to the “new” appropriation. Savings – Do away with duplication of services and effort by multiple staff serving individual units in one building. This will go a long way toward fostering unity within the building and a sense of “University” as opposed to “Department”. Do away with the layers of supervision needed to oversee custodial services on Campus. Building custodians could more effectively be supervised by Building Facility Manager. Custodial staff would be participants in the building and would be more responsive to the needs of the group. Could result in less absenteeism and more pride in a job done well. Also, this group could use mentors to encourage additional training and development of skills to keep them from becoming career custodians at high cost to the University.

Staff: Whenever a new service shows up on campus (like a new food service, or copy center, etc.), it appears that Cornell never looks at its own resources first. For example, Kinko's is the official Cornell vendor for photocopying, and yet Cornell owns its own University Print Shop with competitive pricing. Why can't Cornell use its own people and services before looking to outside vendors?

Staff: Why are departments allowed to create their own web servers that they then need to hire someone internally to upkeep and program web pages? Why is it the help desk is rarely used by staff - that every department has to have their own IT staff to answer simple IT questions? Why are we not using students more?

Staff: Operating costs of this university can be cut dramatically, and consequently money spent on research can be increased hugely by thinning out administration.

Staff: Regarding the organization and "running the business" of the University, we should place a higher value on efficiency and speed.

Staff: We can achieve some integration on the administrative side through: 1) changing our organizational hierarchy, which we have done in the human resource field through workforce planning and are continuing to do; 2) through customer-orientation, which is what the service center concept does; and/or 3) a networked model for getting work

done, clustering hundreds of projects.

Staff: I would like to see Cornell address the substantial waste that I see and hear about all the time. The endowed campus is rather wealthy and I hear of perfectly good furniture and appliances being thrown away.

Staff: Recommendations of the workforce planning review team: * Support and Promote Key Operating Principles. * Shared Problem-Solving Focused on Common Solutions. * Accountability. * Priority Allocation of Limited Financial Resources. * Provide Staffing for Continued Review and Assessment of Support Operations. * Work Collaboratively with Operating Unit Leaders to Identify and Address Priority Opportunities. * Define the Role and Primary Responsibilities of an Academic Department Administrative Manager. * Review the Policies and Practices Associated with Cost Recovery Operations (i.e. internal enterprise units). * Critically Examine the Differences in Major Operating Practices Between the Contract College and Endowed Divisions. * Initiate a Review of Research Administration Activities Across Campus Units. * Review Opportunities to Improve Support Operations between the Ithaca Campus and the Medical College. * Establish a Strong Partnership between Unit Senior Administrative Staff and University Administrators.

Staff: The group generally acknowledged that the administrative structure does not need to be the same as the academic structure. To the degree that it is often leads to difficulty and inefficiency in developing and implementing standard, operating processes and procedures.

Graduate: It's not just formalization but also a culture of communication and transparency that has to be fostered and encouraged to reduce the impact of decentralization.

Capturing Benefits of Market Purchasing Power

Staff: Negotiations regarding price with vendors not made University wide but by each department or in the case of negotiations with Dell computer not buying from them. Not using the campus store as their prices are high yet if departments used them perhaps they could negotiate prices. Even a simple thing like printer toner cartridges really adds up.

Student forum: Cornell University is large and decentralized allowing each department and office to purchase its everyday needs independently. As a student group that has spent the past two and half years promoting the procurement of the tree-free (100% post-consumer recycled) paper, we have had a first hand experience of the enormity of this University's purchasing power and at the same time wonder how long the job of educating the campus wide body of purchasers to environmentally sustainable paper products available today will take. Paper is just one of the hundreds of goods consumed campus wide that have environmentally sustainable counterparts at competitive prices.

Staff: On net, we observe that high levels of administrative autonomy may be holding us back. We must balance autonomy with the need for standardization, economies of scale, and more effective communication.

Unintended Consequences

Staff: One area of University organization that warrants scrutiny is the so-called "enterprise system" whereby various units such as dining, transportation, and others are free to charge fees for service to other University units. I guess that the original justification for this policy was that it fosters efficient use of a unit's resources; that is, the unit may shop around, outside or inside the University, for the best deal. The unintended consequence of this policy is that you have Cornell charging Cornell all over the place for goods and services which leads to both redundant bookkeeping and inflated charges, as each unit attempts to maximize its profit position without regard to the greater good of Cornell. An apocryphal story is that F&BO (forerunner of today's PDC) used to hire outside consultants who needed to get around campus with their own cars to examine buildings, pipelines, or whatever. These people had to buy parking permits themselves from Transportation, the cost of which they padded to cover time & trouble and charged back to F&BO. Thus Cornell University was paying its consultants to park on campus.

Staff: There is an obvious tension between the history of private enterprise system of departments and the efficiency and fluidity of the university. I do not have enough information to debate the fiscal merits of the private enterprise system. However, anecdotically it is a constant cause of frustration and a source of management impotence. It is one thing to be responsible for a budget that must face the strains of the (real) external market pressure, but to manage a budget that is at the whim of departments under their own pressure to make their budget can be surreal. The costs that must be charged can at times bear a resemblance to a NASA spreadsheet (i.e., \$2,000 for a meeting room for 60 people for 1 hour, \$900 to install a telephone extension, etc.).

Staff: The university would be giving administrative assistants, HR assistants, etc. a huge morale boost if the titles could be changed into something that would give them more pride in their work. Realistically, so much of our identity and self worth is linked to our jobs (even though I ideally think it should be more linked to our character), and I have often found the "assistant" type of title very negative.

Faculty member: With identity theft being a growing problem nationwide, and since Cornell has the ability to block the SSAN use for thousands of new and continuing students each year, I respectfully call upon you to help provide the same measure of security for Cornell Faculty as is provided for all of our students. There is absolutely no reason for my SSAN to appear on course roster verification forms we receive each year.

Staff: Departments going outside to hire or buy various items or services that internal Cornell departments already provide. Many times they do so as the Cornell department would charge them more - although the department saves money the end result is the University is paying twice: the outside vendor and the salaries of the Cornell people that could have done the same thing. Some examples are: * construction or renovations * red rover - many departments have purchased their own wireless devices to avoid red rover cost * ez backup - many departments don't use it and purchased their own which they have to upkeep. * mail preparation - many departments do their mail stuffing etc needs elsewhere * print shop - many departments do their printing needs internally or elsewhere off campus * courier - many departments have their own staff as couriers even though there is Red Runner * cars - instead of leasing fleet vehicles * catering - instead of using dining.

Staff forum: We have too many departments and enterprise zones in the university – many of which are not contributing to the core mission of teaching, research, and extension. For example, we spend a lot of time and effort on conference services when this is not part of the core mission. This function could be outsourced to local entrepreneurs. In so doing, it would help the community by adding jobs and income. It also would help the university by refocusing our limited resources on our core mission. We need to evaluate all our enterprise units to see if they really add value to the core mission of the university. The high degree of decentralization at Cornell results in fragmentation of focus and effort. It causes us to disburse our resources over too many units; to focus more on our needs rather than our clients' needs; to lose sight of opportunities for innovation; and to over-specialize. This fragmentation also has a profoundly negative affect on our ability to communicate and coordinate between units. We are locked in silos and don't care about what is going on outside our own jobs, or even what our customers are saying about us.

Staff: We have decided to pursue the replacement of administrative systems in ways that are hugely expensive (in both the short and long terms) and will not only offer little or no improvement in service, but will force us to be more homogenous and less able to differentiate ourselves from other academic institutions.

Staff: We as HR professionals need to address the real and perceived overwork issues that staff cutbacks have created. We also need to identify and implement technologies, reorganizations, and changes in policies and procedures that could help address the workload issues.

Staff: The group felt that the current enterprise system worked against collaboration, however, as it creates a world of "haves" and "have-nots". We should re-examine enterprises as a way to meet budgets.

Campus Planning and Development

Staff: Cornell may benefit by appointing an Associate Vice President for Planning and Construction to increase oversight emphasis in Campus Planning, Transportation Services, Capital Contract Management, and Capital Construction. While the University has made marked progress in developing campus precinct plans, an overall Campus Master Plan should be formulated and updated every five to ten years ... Related to your 11/19/03 E-mail comments—"Touching the core of our identity" and pertaining to organizing for the University's 150th Anniversary Celebration, I believe that it would be fitting to complete a major face-lifting on our "Eddy Gate" by 2015 to include the upgrading of its dilapidated landscape corridor leading up to College Avenue(historically the main entrance to Cornell) ... Alternately, or in addition to this improvement, the landscape upgrading of the heavily-traveled, unattractive pedestrian plaza located in the heart of campus between McGraw and Olin Graduate Libraries would make another landmark facilities improvement opportunity suitable for the Cornell's sesquicentennial celebration.

Staff forum: A comprehensive master plan is needed for the campus. Each time a new building is sited, the lack of a comprehensive plan is sorely felt. Instead of new buildings fitting into a pre-determined long-range plan for our inevitable growth, an ad hoc planning study must be conducted to fit the facility into the campus fabric without adequate regard to the total picture. A master plan will help preserve and enhance this

magnificent campus, the fond memories of which, play such a significant factor leading to Cornell having the most generous alumni in the country.

Staff forum: Evolving and new academic needs have to be accommodated in new kinds of buildings, which have cumulative impacts on the user, passers-by, the campus form, its open spaces and the campus infrastructure. The academic vision therefore needs to be linked with the physical vision. It is important to connect teaching and the dissemination of knowledge and the spaces and connections that best facilitate it, through the joint evolution of both. Development generates a gradual change in the physical environment, organization and the character of the University – rural to densely clustered; diminishing quantity and quality of open space and fewer visual links to the unique topography of Cornell and its region; and the resultant demand on transportation and utilities networks. We need to decide what are our principles and "big ideas" about what is important to our campus in order to prioritize what to keep constant and what to change. An expanding campus and a walkable campus are not mutually exclusive. They can be reconciled through the vision and proactive campus-wide planning, not through project-by-project solutions that react to changes rather than anticipating them.

Faculty group: Cornell has an opportunity to carefully shape its built environment to represent its mission and values. Unfortunately, planning and development at Cornell have historically occurred in a fragmented manner. This has resulted in decisions that lack the complex and collaborative thinking we need to address the holistic design of our campus, such as the historic disintegration of the state and endowed components of campus, which needs to be improved. Better communication, teamwork and interdisciplinary approaches are needed to evolve a campus future that responds to our needs, creates the most compatible land uses and results in the kind of interactive living and learning environment we desire. To accomplish this goal, the University should commit itself to undertaking a comprehensive campus plan, from which the process and the resulting document will serve to guide all future development.

Graduate: One area of administration where I feel Cornell could do better is in retaining open space on campus. This is a quality of life issue, not one of environmental protection.

Other

Graduate: At some point in the not too distant future, the cost of a Cornell education will be way out of reach for all but the poorest or wealthiest students. Imagine how much more selective, and effective as an institution Cornell could be if a Cornell education cost less than comparable schools. Tuition at colleges and universities has recently been inflating at rates well above wage inflation, and at Ivies, such as Cornell, annual tuition room and board is quickly approaching the level of the average annual household income.

Graduate: If the University wants to begin to structure a future society that is truly integrated, it needs to start at the beginning of the Cornell experience in Freshman year. The structure of segregation should be eased out, to the benefit of all students.

Faculty member: We not only need an advocate in Day Hall on international issues, but that advocate needs a smaller, more focused portfolio to allow him or her to really think about and address key issues related to international education and the international

dimension of the university.

Faculty member: Classified Research-I think the university needs a thoughtful discussion about classified research and a clarification of policies if we have them in light of the research needs of the country. This discussion last happened in the Vietnam era on most campuses. With large amounts of funding in homeland security research and other related areas, faculty – at least in engineering – are gaining security clearances and spending large amounts of time off campus and doing classified work for national labs like Sandia. This has huge implications for openness in research, interactions with colleagues (suddenly one cannot have discussions with colleagues about their work), graduate student education, etc. This is a dilemma, because it involves applied work on relevant problems – homeland security problems – which are important, but I believe a thoughtful consideration of the downsides of faculty becoming involved in such research.

Graduate: We don't offer training consistently to either department chairs or new members of the faculty. This has a number of negative consequences including, for example, poor handling of annual reviews and tenure files, poor transmission of institutional ways of thinking, and failure of faculty members to make the transition from pre-tenure behavior (focus on personal achievement) to appropriate post-tenure behavior (additional focus on contributions to the department, university and scholarly community).

Graduate: I bring your attention to a subject that requires creative thinking at the highest levels of the University. That is the dilemma of the two-career couple.