Long Range Resistance

Issue no. 1
November, 2007

UCSC's new Long Range Development Plan is a blueprint for future expansion of campus facilities in order to accommodate up to 4,500 new full-time students by the year 2020. This expansion plan is highly unpopular, on campus and among Santa Cruz residents.

The administrative side of this story is readily available in news articles and campus bulletins. Far less accessible is any critical analysis or factual overview of the issues to counteract the self-congratulatory statements of trained university spokespeople.

There are many more than two sides to the complex issue of campus expansion. This newsletter offers a sampling of critical arguments addressing budgetary, academic and ecological planning concerns. We hope that this project will be helpful in the task of developing your own informed perspective.

This publication attempts to provide an accurate and accessible source of information about UCSC's expansion plans, and a forum for related discussion. We will report on legal proceedings and actions of resistance, while initiating an unwavering inquisition into who will gain and who will suffer from the implementation of these plans.

The views presented in articles belong to the individual authors. If no author or source is attributed, it is correct to assume that the material was composed by someone from our editorial collective.

LETTERS & SUBMISSIONS

We welcome the submission of letters, articles, poetry and artwork for future issues. Please inform us of any significant inaccuracies herein, and fire your criticism at will. We will selectively print the letters that we find to be most relevant. The submission deadline for our second issue is January 12th.

SUBSCRIPTION INFORMATION

Contact us for a free subscription. Believe it or not, we will literally deliver a copy of each newly produced issue to your dorm room or door step, as long as you live on campus or within Santa Cruz city limits. We are estimating that our publishing frequency will be every three months (four issues a year).

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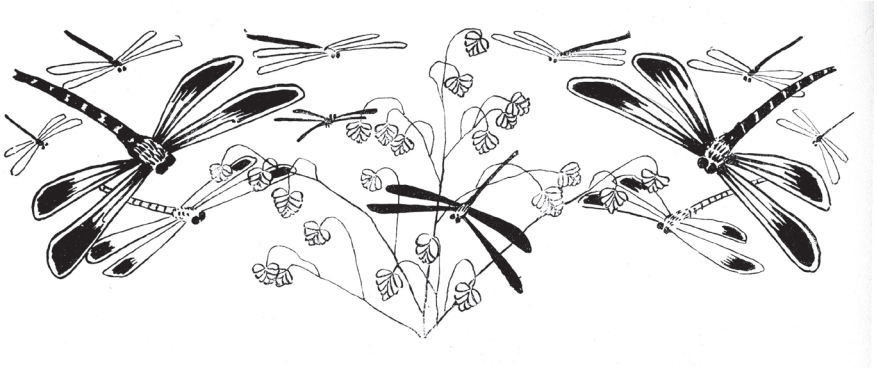
This is the 1st printing:
November 14th, 2007

The documents in question:

2005 LRDP (this document is the LRDP's happy face):
[http://lrdp.ucsc.edu/]
2005 LRDP "Final" Environmental Impact Report (the real deal):
[http://lrdp.ucsc.edu/final-eir.shtml]
Draft Strategic Academic Plan, March 2007 (read between the lines)
[http://planning.ucsc.edu/acadplan/docs/AcadPlan.Mar07.Draft.pdf]:

Highly recommended additional reading:
Eleven Theses on Growth, by Bob Meister (Professor of Politics):
[http://www.aaup-ca.org/SCFA-Theses_on_Growth_Final.pdf]
Santa Cruz Faculty Association Newsletter: Special Edition on Campus Growth:
[http://www.aaup-ca.org/]

More links and resources available online at:
[http://lrdpresistance.org/]



The Long Range Degradation Plan

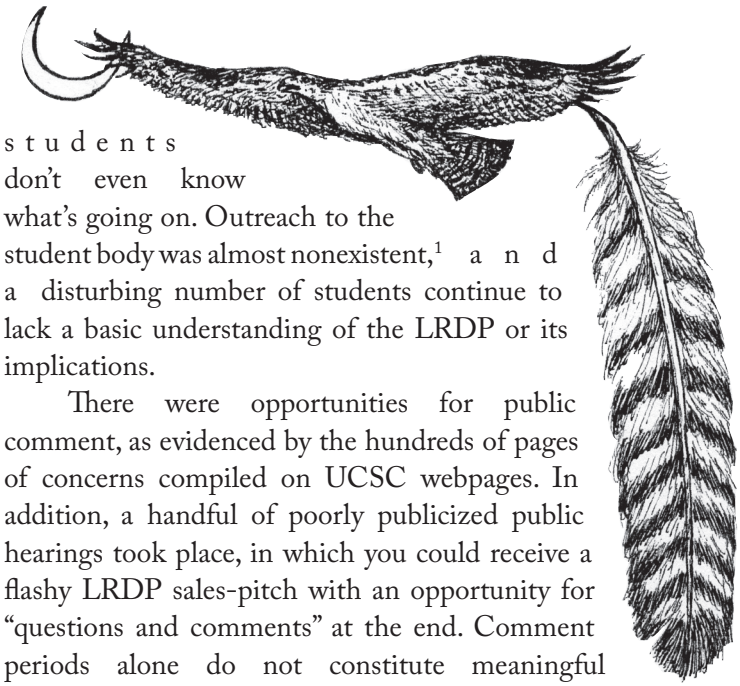
Tensions on campus related to UCSC's expansion plans have escalated dramatically in the past few weeks, and more people are talking about the Long Range Development Plan than ever before. A demonstration against the LRDP on November 7th turned out hundreds and marked the establishment of a tree-sit and student occupation on Science Hill, where the first construction project of the LRDP is set to take place. The Long Range Development Plan is finally receiving the sort of widespread attention that it deserves, considering just how much is at stake.

Though many people on and off campus possess a faint notion of what the proposed expansion would mean, essential facts and details remain buried in highly inaccessible documents, such as the 900 page Environmental Impact Report. This article offers a summary of the environmental degradations threatened by the 2005 LRDP and discusses the context that made such a destructive and irresponsible plan possible.

LRDP Planning Process

The wide array of concerns regarding campus growth plans are all underscored by the inaccessibility of the decision-making process. In the drafting of the LRDP, opportunities for student and public participation were minimal and perfunctory. The Administration has offered little more than polite disregard to critics of its plans, be they faculty members, qualified specialists or community leaders.

Facing a colossal institution that behaves as if it is not beholden to the law, community members and city representatives have resorted to filing numerous lawsuits to force the University to heed their concerns. Student opposition has been limited in comparison, probably because most



students don't even know what's going on. Outreach to the student body was almost nonexistent,[1] and a disturbing number of students continue to lack a basic understanding of the LRDP or its implications.

There were opportunities for public comment, as evidenced by the hundreds of pages of concerns compiled on UCSC webpages. In addition, a handful of poorly publicized public hearings took place, in which you could receive a flashy LRDP sales-pitch with an opportunity for "questions and comments" at the end. Comment periods alone do not constitute meaningful participation.

Throughout the process, faculty members were treated essentially as members of the general public. The administration is required to "consult" the Academic Senate, but not legally obligated to take its advice. Strong faculty objections to the LRDP and the findings of the EIR have led to a striking division between faculty and administration. [2] A Spring 2006 Academic Senate motion to delay submission of the LRDP in order to deal with faculty analysis was brushed aside as higher-ups pushed ahead for Regent certification.

Inaccessibility and lack of transparency aside, there is much to criticize about UCSC's planning methods. Campus representatives often respond to any number of concerns about the LRDP with a stock answer that "the LRDP is not a mandate to grow or a detailed plan for implementation"; it is only a general *framework* for future growth. For many critics, this is precisely the point - the LRDP is a poor plan because it is not really a plan at all. UCSC has not carried out the necessary fiscal, academic, or physical planning that would make beneficial growth possible.[3] It is backwards to open the door to expansion without first addressing current academic and environmental inadequacies that were caused by the rapid and poorly accommodated growth of past decades.

> The future of this campus has been mapped out and rubber stamped as "final," all without the consent or significant involvement of the student or faculty body.

It is probably fair to assume that most of the administrators and faculty members who sat on the planning committees were trying to make the best decision possible, within the established parameters. So why are we left with

"We generally found a lack of accountability, standardization, and clarity in the current process, and recommend steps to make the process more transparent and effective (such as ensuring greater legislative oversight and public involvement in the development of an LRDP)."

- (from a 2007 Review of UC's Long Range Development Planning Process, by the highly regarded California Legislative Analyst's Office)

such an unsatisfactory plan? Perhaps the blame lies in the way that various aspects of planning and decision-making are kept isolated from one another. Each committee is charged with a specific set of tasks, and required to make decisions based on options that were predefined in a process that is not transparent. Within these confines, there is no place for considering the broader picture. At each step in the process, everyone is just "doing their job."

As the first step in drafting a new LRDP, the Strategic Futures Committee (SFC) was appointed in 2003 and came up with the figure of 21,000 as an enrollment target for 2020. John Isbister, an Economics professor who sat on this committee offers that "it may be useful to understand that there was nothing in our deliberations which bore on the question of whether a figure of 21,000 was *feasible*." [4]

The LRDP Planning Committee was given the enrollment figure set by the SFC and assigned the task of drafting a plan that would accommodate this level of growth. After the initial drafting process, an outside company was brought in to conduct the Environmental Impact Report (EIR). This company was hired to take the Planning Committee's product and essentially "make it work" -- or at least make the plan *appear* feasible.

If we acknowledge that academic quality, environmental quality, and resource availability are closely inter-related, then why doesn't the planning process unite these considerations?

The UC Regents themselves are the highest authority to review and certify the EIR, and neither the LRDP nor the EIR are subject to an independent evaluation. UC, the entity proposing development, is also the only agent responsible for enforcing the mitigation measures set forth in the EIR.

The unilateral nature of UC decision-making combined with a consistent avoidance of legally binding language in the EIR leaves mitigations and future planning discretion entirely in the hands of top administrators. Can we reasonably expect them to act in our best interests? A minimal study of campus history and consideration of ongoing administrative scandal leads to a resounding "No".

The future of this campus has been mapped out and rubber stamped as "final," all without the consent or significant involvement of the student body or faculty. This plan belongs to the powerful minority who orchestrated it, not the communities who will bear the brunt of it's impacts.

The City Beyond The Hill

In many ways, the future of UCSC defines the future of the Santa Cruz community at large. Severe quality of life and cost of living impacts are sure to result from the addition of thousands of students to the area. City representatives and community organizations such as the Coalition for Limiting University Expansion emphatically assert that the growth proposed by the 2005 LRDP would far exceed the "carrying capacity" of Santa Cruz. The resource capacity to support this expansion simply doesn't exist.

The local housing market is already one of the least affordable in the nation, and a sharp increase in UCSC students' demand for off-campus residences promises to make it even worse. Traffic, which is already chronically congested at peak hours, will become unbearable as it inches along the narrow streets that wind up to campus. Water shortages already point to an impending crisis in Santa Cruz County. The city is expected to provide all of the water services to UCSC's new facilities, but no one is sure where this water will come from.

Widespread public concern about UCSC's expansion was made clear by the large majority of Santa Cruz voters who passed ballot measures I and J in November of 2006.[5] These "sustainable growth" measures sought to limit campus expansion by prohibiting the city from providing the corresponding services to campus until UC commits to fully mitigating the impacts of their growth.[6] Despite the majority vote, UC lawyers managed to invalidate this legislation on grounds that the city did not provide adequate notice prior to the election.

Numerous lawsuits have been filed by the city, the county, and community organizations in attempts to force the University to alter its plans. At the present time, the city and University are negotiating a settlement that is looking like it will allow the LRDP to proceed essentially as planned, while offering more compensation to the city. What became of challenging the plans themselves?

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Pleasing the Hand that Feeds: University Biomedicine

As UCSC gets ready to drop a four-story Biomedical Sciences Facility in the middle of Science Hill, there are many social and ethical questions that still need to be asked. This new facility, which was formerly slated for construction in October 2007, is the first new project tiered underneath the 2005-2020 Long Range Development Plan. [1]

For the last twenty years, large pharmaceutical corporations have been pouring enormous amounts of money into university labs conducting research in Biomedicine. Pharmaceutical and biotechnology corporations alone invest more than 44 billion dollars annually to fund Biomedical research.[2] The holy grail of this industry is the patenting and marketing of new "miracle drug" discoveries.

Corporations believe there is a profitable technological revolution emerging from the intersection of biotechnology and other fields like medicine, and each one is competing to lead it. One group involved in this movement—the Silicon Valley Network, on which Chancellor George Blumenthal serves—calls this intersection of technologies the "bio-info-nano-tech revolution". [3]

It is in this context of huge corporate interest in labs researching Biomedicine that the Biomedical Sciences Facility is planned. There will be no classroom space in this facility. [4] It is meant to provide research and lab space mostly for graduate students and to be a hub for stem cell research and interdisciplinary studies combining biology, nanotechnology and chemistry.[5]

Administrators cite this proposed facility as an example of UCSC's efforts to move into the 21st century as a major research institution. They see outside corporate grants as one way to deal with the widespread scarcity of state funding. Yet any funding that does come in from outside corporations will do so at the expense the students it purports to benefit.

Students in the departments being funded externally are affected most strongly by corporate involvement in their education. Scientific integrity cannot flourish where the sincere quest for understanding is hindered by external interests. And students of the Humanities rarely see the money that is supposed to trickle down from the more lucrative departments.

Before UCSC spends more than $80 million dollars on the Biomedical Sciences Facility, we must ask ourselves who really stands to benefit from its construction.[6] It is slated for a parking lot next to the Physical Sciences Building on Science Hill, a place currently shared by several tall redwood groves (and a student autonomous zone, as of

> Scientific integrity cannot flourish where the sincere quest for understanding is hindered by external interests.

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Why Are So Many Faculty Skeptical About Campus Growth?

Huckleberry

Craig Reinarman, Sociology
taken from the Santa Cruz Faculty Association Newsletter: Special Edition on Campus Growth (Spring 2006)

By more than a two-to-one margin, the UCSC Faculty Senate voted in April in favor of delaying submission of the campus's long-awaited Long Range Development Plan to the Regents. This was a surprising outcome. The administration had pushed hard to get the LRDP sent forward. And don't we all support growth? Don't we desperately need new resources? There is no doubt that faculty strongly support the Master Plan under which all qualified high school graduates have access to a high-quality university education. So why are so many faculty ambivalent toward or even opposed to UCSC growing from roughly 15,000 to 21,000 [now 19,500]?

Faculty are worried about a number of things. First, the university has not done an adequate job of dealing with the last jump in students, when UCSC went from about 9,000 in 1989 to its current level approaching 15,000. Not enough faculty have been hired. A basic measure of educational quality - - student-faculty ratios -- have risen in many departments. Almost everyone seems to support expanding graduate programs, but the administration has not provided enough TAships to handle existing enrollments without pushing student-TA ratios up to 60-1 in some divisions. Not enough classrooms have been built, even with all the campus construction we've been navigating.

Second, while the UC system was busy accommodating the Legislature by accepting steady increases in new enrollments, it was allowing faculty salaries to sink still further below where they should be -- the average of the Comparison Eight universities. This problem is especially acute in high cost-of-living areas like Santa Cruz, where housing is among the most expensive in the country. UCSC draws faculty who are in the top ranks of their fields, and such accomplished professionals quite reasonably expect to be able to live a decent life. Yet few faculty who don't already own a home here can afford one, and the construction of new faculty housing has been very slow and will not be very affordable.

Third, there are problems having to do with the distribution of resources. The enrollment funds the legislature allocated for all our new students did not always follow those students. Successive administrations decided to siphon off much of this money for projects they deemed worthy of investment, such as the School of Engineering. Faculty are proud to have an engineering school but the strategy used to finance it and other favored programs has tended to strain the divisions and departments where the bulk of the new students went – disproportionately to the social sciences. In departments where enrollments have increased and resources haven't, faculty have found it increasingly difficult to maintain the quality of their teaching and their scholarly productivity.

Fourth, faculty are members of the community as well as the campus, which means our interests are bifurcated. Indeed, even faculty who might be gung-ho growth advocates can be forgiven for having second thoughts when faced with the often horrendous traffic jams getting off campus and 30-minute commutes to get 5 miles across town at rush hour. The LRDP's Environmental Impact Report makes it clear that even with all planned mitigations in place, these problems will only get worse with growth. Nor can faculty fail to be moved by the increasing anger of their neighbors in the Santa Cruz community who have taken the brunt of the impact of UCSC's expansion.

It is surely true that UCSC has been an economic and cultural boon to Santa Cruz. But these advantages come with costs (e.g., the traffic burden felt by our neighbors on High and Bay and surrounding neighborhoods). Some people think that because UCSC has the smallest student body and the largest land area in the UC system, it is the natural place to grow. But student numbers and campus acres are misleading metrics. Communities have cultural "carrying capacities" just as ecologies have biological carrying capacities. And in terms of traffic, pollution, congestion, noise, impact on the local housing market, and a number of other dimensions of local life, UCSC's growth has become a burden. Indeed, if we use the ratio of campus size to community size, then UCSC may well be the most impacted campus in the system rather than the least.

Our administration is earnestly trying to bring more resources to campus at a time when the State of California is in fiscal crisis. But it would be a mistake to assume that faculty will fall in line behind their growth scenarios when the new resources will be skewed toward a few departments and not spread around. And when we take into account inflation, higher parking fees, increases in health insurance contributions, and soon the reinstatement of contributions to the retirement fund, faculty salaries actually have been falling. Even without the scandal now raging over self-dealing by top administrators, too many UCSC faculty have been asked, in effect, to do more work with fewer resources for too long. Sooner or later, they are likely to withhold support for growth until the UC system does a better job of ensuring the quality of education, community life, and the lives of faculty.

University, Inc: An Interview with Jennifer Washburn

by Jennifer Borden / CorpWatch - April 11th, 2005

The deal between UC Berkeley and Novartis might be the best known example of the kinds of challenges that arise when corporate interest and Universities mix. But, as Jennifer Washburn explains below, it is not unique. She is the author of the recently published book *University Inc.: The Corporate Corruption of Higher Education*. In this interview with CorpWatch she explains how university involvement in research for financial gain compromises academic integrity and endangers the public health.

CorpWatch: What inspired you to write University, Inc.?

Jennifer Washburn: I had gotten very interested in what was happening with the privatization of various areas of public life. We had seen the privatization of prisons and K through 12 education – increasingly there were private providers moving into all areas of public life…Then I stumbled upon an article by a sociologist and was just amazed to find out what was happening with the universities – that in many ways they, too, were becoming privatized. The dynamics were different, but it was a similar intrusion of market forces into an area that had previously been governed by non-market principles.

CW: How does corporate influence on the universities affect the "information commons" you refer to in your book?

JW: I think the threat to the public commons is really at the heart of my book. Historically, universities have played an important role in preserving the public domain for knowledge that we all can draw upon for free. We do not tend to think about knowledge as something one can own. People don't realize how much we depend on this free flow of information, but historians of common innovation, economists and legal scholars are starting to grow very concerned about this shrinking of the public domain, particularly as it affects innovation and new technological discovery.

The basic building blocks of science need to be commonly shared in order to advance scientific ideas… Now the universities are trying to make a lot of their discoveries proprietary, even very fundamental, basic research.

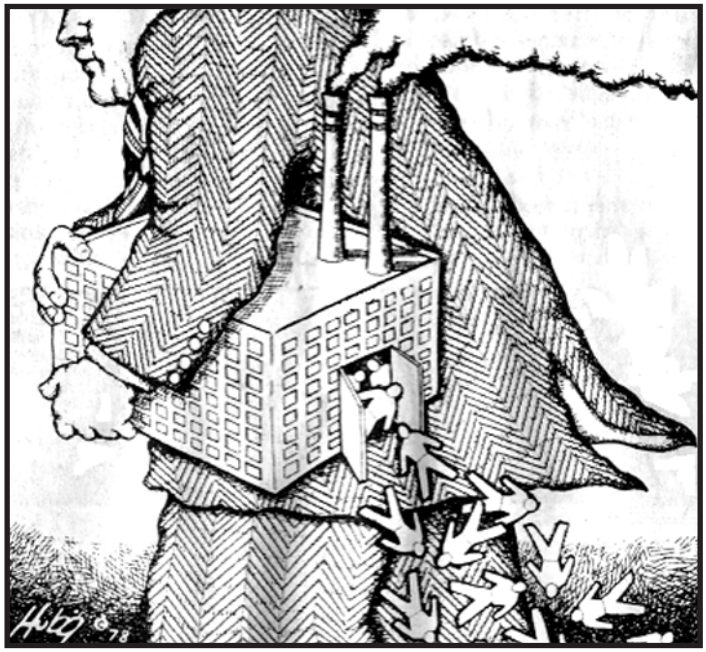
CW: Can you give an example or why this is such a problem?

JW: There is a case at the University of Utah in which a professor discovered a human gene that is responsible for hereditary breast cancer. This research was funded by U.S. taxpayers – approximately $4.6 million – and the University of Utah did not make that gene broadly available to the scientific community. They raced to patent the gene; they licensed it to the professor's own start-up company, Myriad Genetics. Myriad Genetics proceeded to hoard the gene and prevent other academic scientists throughout the world from using the gene in their own research. That's a very vivid example and I could point to many others. Basic stem cell research has been exclusively licensed to private companies.

CW: Can you explain the Bayh-Dole Act and talk about why it is important?

JW: It's named after Birch Bayh and Bob Dole, Senators in Congress who sponsored this legislation in 1980, which gave universities automatic intellectual property rights to federally funded research. In the past, universities did not own publicly funded research on their campuses. Now, they were told, "You own the research. You can patent and license it however you see fit and if you license it to industry, you can extract royalty revenues and this can be a new income stream for the university."

The problem was, no one really thought through what this would do to the university itself. The Bayh-Dole Act introduced a profit motive into the heart of the university for the first time. Never before had the university itself tried to gain financial rewards from the professors' research. Professors started their own businesses on the side, so that they were working part time in the lab and part time at their own for-profit companies. The question of who owned academic knowledge became increasingly complex. Graduate students and post-docs were now working in labs where the research going on was proprietary. If they were working on something



they planned to use as part of their thesis, how were they going to negotiate who owned that knowledge? In the past, those issues just didn't arise in an academic atmosphere.

CW: In University, Inc., you pose the question, "Are conflicts of interest in the university bad for out health?" Aside from the breast cancer gene example, can you name other examples that get at the answer?

JW: Medical schools are probably the most conflicted in terms of industry intrusion. So many professors now receive substantial consulting fees from the same drug companies that manufacture the drugs that they study. They serve on [drug company] speakers bureaus. They go on junkets to fancy resorts. You might even have a professor who owns the patent to the drug that he is testing in a human clinical trial on campus. This happened at the University of Pennsylvania. There was a young man named Jesse Gelsinger who died in a gene therapy experiment, in which there were violations of federal human subject protection rules. Later, it came out that the lead investigator and the university itself had equity interests in the company that stood to profit off of the research. The public was very alarmed because suddenly everyone realized that [the university] had a profit interest in that study coming out favorably. Certainly, we cannot prove that is why Jesse Gelsinger died, but most of us can see that it is very important to preserve the academic sphere where there is disinterested research we can trust. Otherwise, we have no idea if the drugs we put in our bodies are safe for us or not.

CW: Many of our readers are international. Can you talk about the global impact of the corruption in American higher education?

JW: Yes, absolutely. This has been a huge issue with regards to the intellectual property stuff. In the past, it was very important that knowledge developed in the first world was usable by third world countries. Many professors worked on third world diseases that are actually very prevalent, but most drug companies have no interest in funding that research because the people who receive the medicines don't have money to pay for expensive drugs. That would certainly not go on if universities were simply driven by more commercial, market-oriented research. So, that's one area where it is very clear.

There is some very interesting stuff happening with intellectual property and AIDS drugs. For instance, Yale University exclusively licensed publicly funded research that developed the AIDS drug, D4T, to Bristol-Myers. Later, students at Yale, together with Doctors Without Borders, tried to expose the fact that the university was actually profiting off of this patent, while the drug was too expensive for the vast majority of people who suffer from AIDS throughout Africa and the world. If universities were more focused on protecting the public domain and insuring broad access to their research, this would not have happened.

> These institutions depend on public support and they do not like to look like profiteering, self-interested institutions. So, if students can point that out, it's a really strong leverage point.

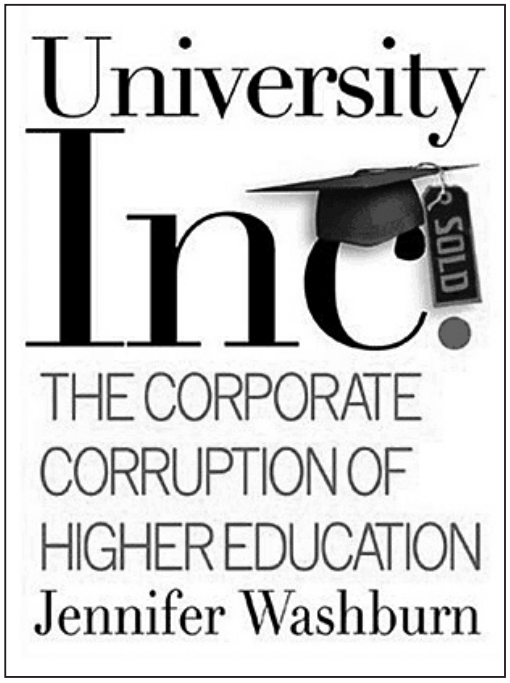
CW: In your book, you talk about potential solutions. Can you go into some of them here?

JW: Probably the most important thing is for people who are on these college campuses to start to look into where industry money is playing a big role and demand to see the contracts. Increasingly, universities are signing contracts that allow industry to dictate the terms of the research in ways that violate academic freedom. The only ways those contracts can become public is if someone starts to raise questions and insists on openness. A lot of these contracts are considered proprietary, and even public universities are reluctant to make them available. At U.C. Berkeley, it was very important that professors and students insisted on making the contract with Novartis open so that people could see the terms of the contract. Public exposure is critical.

CW: In your book you talk about various student groups that played a role in raising awareness around these issues…

JW: Yes, [it was] students who exposed the fact that Yale was profiting off of the D4T drug, while people in Africa did not have access to this drug. The professor who invented D4T was so upset to learn that his invention was not being made broadly available, that he actually wound up siding with the students and that humiliated Yale University.

Essentially, the whole thing became such an embarrassment that Bristol-Myers did cave in and substantially lowered prices for these drugs in the developing world. Students have enormous power because a lot of the activities that these universities are involved in so fundamentally go against their educational research mission that it simply requires exposure. These institutions depend on public support and they do not like to look like profiteering, self-interested institutions. So, if students can point that out, it's a really strong leverage point. And just being students at the campus, they are in a very unique position to expose these things.



The cover of Jennifer Washburn's highly acclaimed book. It can be found at the McHenry library and downtown bookstores.

Science as a Social Practice

submitted by Tim

Western bleeding heart

We find ourselves at an extremely important, potentially devastating moment in the history of this institution. UC administrators are drooling over yet another incarnation of the Long Range Development Plan, one that promises to expand science programs and partnerships with outside corporations. The focus, purpose, tenor, and culture of the school are being reshaped, in some ways consciously and some ways unconsciously. As a student with degrees in both science and social science, I urge students to approach the changes being pursued across campus with a critical eye.

Demands to expand science departments to attract research funding must take into account the negative effects corporate involvement has on the entire university. I am fully against expanding the sciences at the expense of the humanities. But the sciences themselves cannot be broadly dismissed as nefarious plots to manipulate innocent particles of nature in order to turn a profit. Do pharmaceuticals profit from attempts to cure disease? Clearly, and their practices should be scrutinized. But lab work that tries to understand and prevent disease should not be banned just because it could be involved in producing a profit.

Sometimes profit-making coincides with improving people's lives. But that is not always the case—take, for example, the UC's involvement in nuclear weapons labs and military technology. When the goal of research shifts from the beneficial improvement of people's lives to profitability, its place in the University is highly questionable. Indeed, the overall value of the research can become cause for concern. Profitable research is often pursued without taking into account its potential dangers.

The disconnect between the science and humanities is partly what has brought us to this point. To fully understand the limitations of this expansion plan requires us to place science and society in context with each other. What exactly do the categories "science" and "humanities," and more broadly, "science" and "society," mean? The very terms "science" and "society" can only be understood through one another, not through exclusion. These concepts are locked in an intimate relationship in which they mutually lend one another meaning and integrity as cogent terms.

Science is a practice. This may seem self-evident to some, but here I want to stress what I mean by practice. A practice is "the action or process of performing or doing something," thus the practice of science entails a willful, voluntary, and engaged activity. Doing science is not something that happens to the student, lab technician, or professor. I think understanding science as a practice might help us understand how science can be done differently in light of various ethical, political, and social concerns.

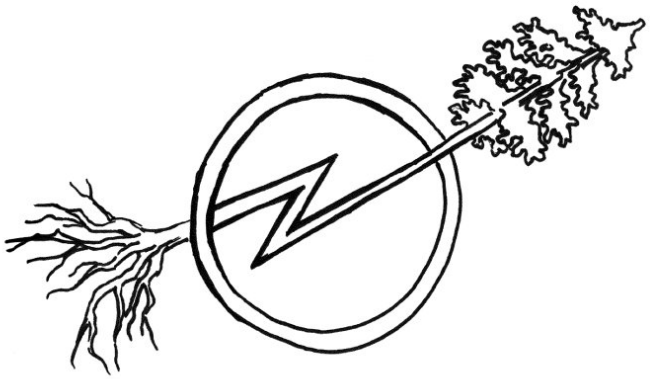
In other words, bridging the so-called divide between science and society might be helped by understanding science as a practice. In terms of UCSC, this means that students, staff, and professors can and should think critically about the science they are doing, the practice of science, in order to grapple productively with messy issues of social and political import.

Currently, the university seems to have its fingers in multiple academic pies. Strong sciences, especially programs in engineering, astrophysics, and biotechnology, are balanced with a strong feminist studies department (which only manages to be strong despite a lack of institutional support), the History of Consciousness, linguistics, and more. As a UCSC student, I have been able to experience a healthy mix of academic pursuits, without the mechanized, competitive, impersonal edge of a huge research university like Berkeley or Stanford. Unfortunately, current projects like the Biomedical facility represent UCSC's effort to become like their competitors.

UCSC looks much different today than it did during its initial years. As a product of the anti-war and counter culture movement, UCSC was a part of a dream of radical political transformation. It is still a descendent and embodiment of this dream to many students, both past and current. Through the decades it has managed to hold on to critical vestiges of a socially and politically engaged past. Recently, however, the university has attempted to shed its experimental reputation. The sciences, having grown slowly at first, now grow at the expense of other less lucrative departments.

Growth and science are never neutral; they reflect the conditions that make them possible. Excessive corporate involvement in university research compromises the dignity essential to the scientific pursuit. As science buildings multiply and research moves into brave new fields, we must take this opportunity to question the direction of the university and its implications for science and society at large.

Journal entries of a forest-dweller



September 26th
Winds are gusting splendidly through the trees, breathing life into those who are there to receive it. Leaves and needles are drifting and dropping as I pick up speed down windy footpaths. The bounty of Fall lies decomposing. Insects commence their gnawing and squirming, while hungry birds get in tuffs over the last few chinquapin nuts.

October 9th
It's raining! I rejoice and it feels as if the thirsty chaparral plants share my excitement. Salamanders and banana slugs twitch in their subterranean hideaways as fresh droplets sink down, beckoning them.

October 10h
My friends slept in the forest beneath a tarp last night. They lay awake, awestruck by the distant yips and howls of coyotes. Or so they thought. Morning gossip at the trailer park informed them that the din in the night was in fact the awkward collegiate screams of first-years at Porter and Kresge carrying out a prosaic tradition, the naked run. What a strange intersection of worlds this is.

October 15th
It's rained for a few days now, a patient, gentle sort of drizzle. An older friend mentioned to me that this is how Santa Cruz used to be: it's only in recent years that these late Fall sprinkles have been amiss. Another milepost of climate change. I fear the loss of things I have never known, precious, beautiful, delicate things, and I comfort myself with what often seems to be the only optimistic notion in reach: there will be no lack of excitement as our world falls apart. I will be no spectator.

October 16th
Mushroom hunters adorn funny knit sweaters and set out eagerly, in small numbers so as not to give away their secret spots. Fungus turns out scarce for now. The mycelium are hesitant, knowing these rains are only a foreshadowing, and a dry spell is soon to come. But even still, little brown mushrooms have sprouted up all over and I have seen a couple of oysters and chanterelles in the gleeful clutches of friends.

November 2nd
Nighttime. Crunching along on this familiar gravel road, relieved to finally be back on the wild side of the gate. Rounding the bend (never with a flashlight) my nostrils await the first drift of chilled air that greets me, along with the vastness of the sky, as I emerge from the cover of trees. It is beneath this explosion of stars that I feel the earth welcoming me back again—welcoming me back, no matter how many days my ambitions have kept me away.

Can UCSC Grow?

An excerpt from an article of the same name, by Economics Professor John S. Isbister from the SCFA Newsletter, Spring 2006

Professor John Isbister sat on the Strategic Futures Committee that preceded the drafting of the 2005 LRDP. The task of this committee was to come up with a target figure for enrollment growth. Looking strictly at academic factors, they decided upon 21,000 new full time students by the year 2020.

In this article written for the Santa Cruz Faculty Association's newsletter, Professor Isbister offers a series of hypotheses exploring the feasibility of UC Santa Cruz growing to the size laid out in the Long-Range Development Plan. What follows is the text of his third and final hypothesis.

What if it really is true that growth of the student body to 21,000 will bring with it increases in housing prices, traffic congestion and water shortages that will seriously compromise the local environment and the quality of life? I suppose it could be argued that all these effects could be mitigated, but that brings us to social and economic analysis. How likely is it that they would actually be mitigated?

Here are some possible mitigations:

1. The impact on housing shortages could be mitigated by the University's building more units. But construction and infrastructure costs are high. Since the state will not contribute public funds to housing, the expenses must be borne by the users. So this mitigation will not reduce housing prices.
2. Traffic congestion could be eased if the City and County were to build an eastern access to the campus, through the Pogonip, as they promised they would do when the University first came to Santa Cruz. But that was before the era of environmental consciousness, and before Proposition 13. Today, there is almost no possibility that local government will undertake such a project.
3. Water resources might be increased (I am not certain of this) with major new public-works expenditures, but again the expenses are far beyond the capacities of local governments, and the state seems unlikely to kick in.

In sum, when you combine technical analysis with political and economic speculation, you may well have to conclude that further expansion of the student body is impossible, without severe deterioration of the environment, public services, and the quality of life.

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The evidence available so far is consistent with such a conclusion. If it turns out to be the case, then we will have the answer to the question posed by the Strategic Futures Committee. The answer will be "No." No matter how desirable growth is from the point of view of academic programs and student demand, it is not possible on this site.

How we proceed from here on in will be important to the future of UCSC. Of course it will be important for the issue of growth, but I mean more than that. If I interpret the vote in the Senate correctly, the faculty are not inclined to cut the Administration much slack these days. We have been buffeted for months now by news of wrongdoing at the highest levels of our institution, and by the betrayal of the public trust. Along with the rest of Californians, the faculty at this point want honest, trustworthy communication, and we are not sure we are getting it.

The Administration has the legal authority at this point to ignore the Senate vote, and to present the current EIR to the Regents. It has the authority, but the consequences of such action for cooperative decision-making on and off campus will be serious. I hope the Administration takes the opportunity to rethink completely the analysis of the impact of growth. I hope it holds off its decision about what growth rate to adopt, and that in the end it adopts a growth plan that takes full and honest account of the likely impacts on our community.

Animal Experimentation at UCSC

A new rodent vivarium is slated for construction in the basement of the proposed Biomedical Sciences Facility. A vivarium is a facility used to hold small mammals used in scientific experiments, also known as vivisection.

It is no secret that UCSC has been conducting animal experimentation for decades. According to campus guidelines live animal research on this campus can include such practices as drilling, grafting, implantation, transplantation, surgical attachment of 'instruments', dehydration, food/air deprivation, isolation, abortion, infection and non-anesthetized surgery. [1]

Scientists know very little about the long-term effects of many Biomedical procedures. For this reason, the research done in Biomedical laboratories is theoretical in nature, depending heavily on animal experimentation. The U.S. Congress Office of Technology Assessment estimates that biomedical researchers in the United States use between 17-22 million animals each year. [2]

Biomedical researchers are engaged in all sorts of experiments involving live animals. One example is the engineering and patenting of animals that act as "drug factories" for producing pharmaceuticals and vaccines. [3]

These experiments are not only cruel—they are also unnecessary. Diseases that are artificially induced in animals in a laboratory are never identical to those that occur naturally in human beings. Animal species differ from one another in many biologically significant ways, making it unlikely that animal research will yield results that will be correctly interpreted or truly applicable to human conditions. [4]

Animal testing is harmful to humans as well. According to Dr. Stewart Newman, professor of Cell Biology and Anatomy at New York Medical College, "no amount of data from laboratory animals will make the first human trials anything but experimental." [5] Only 5-25% of toxic effects found in animal experiments occur in humans. [6] Unwanted side effects of genetic-modification, for example, may not be recognized for a generation or more. [7] By lending these unsafe Biomedical experiments the guise of legitimacy, animal testing expedites the transfer to human trials.

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2. "Frequently Asked Questions." California Society for Biomedical Research. < http://www.ca-biomed.org/csbr/faq.php>
3. "Animal Experiments: Overview." PETA Media Center. <http://www.peta.org/mc/factsheet_display.asp?ID=126>
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5. Newman, Stuart. "The Hazards of Human Developmental Gene Modification." Council for Responsible Genetics. < http://www.gene-watch.org/programs/cloning/hazards.html>
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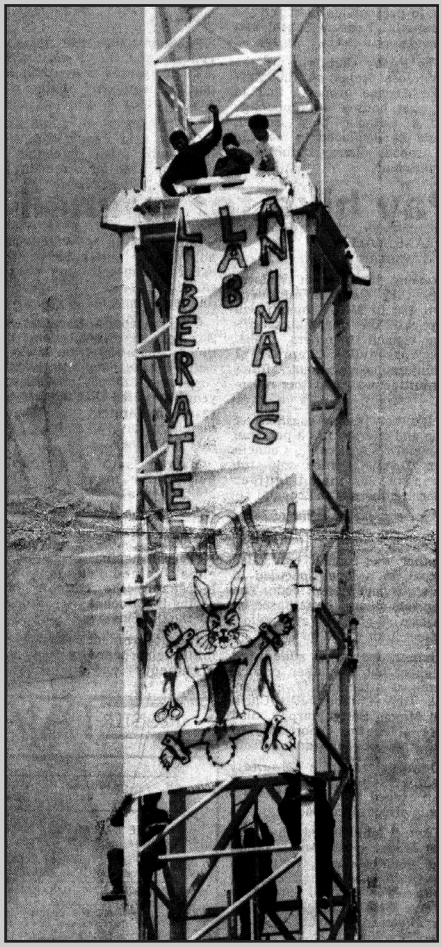


'Animal Rights' protest at UCSC

By Kathy Salamon
Register Pajaronian, April 21, 1988

A demonstration against using animals in science experiments erupted into chaos at UC-Santa Cruz yesterday as five people were arrested for blocking offices on campus and five climbed 100 feet up a construction crane and stayed there overnight.

As of press time this morning, five protesters still remained atop the crane.

About 100 people first gathered for the animal rights rally at noon yesterday at the construction site of a new natural sciences building. The protesters say that part of the new building will be used to house experiments on animals.

During the rally, several people blockaded a hallway at Thimann Hall in an attempt to gain access to the labs where the animals are kept. UCSC uses mice and rabbits in experimentation.

Several others climbed the construction crane in order to hang a banner stating "Liberate Lab Animals Now," which depicted a rabbit being dissected.

Meanwhile, campus police waited at the bottom of the crane for the five climbers to come down, but they remained perched on the crane.

Finally, one protester who said he had to go to work came down at about 5 p.m. yesterday. He was cited for trespassing, given a court date and released.

Tom O'Leary, a UCSC spokesman, said another protester apparently climbed the tower sometime last night and joined the others, bringing the total on the crane again to five.

Also, a Stevenson College student was arrested last night for trespassing when he climbed a fence around the construction site in order to deliver food to those atop the crane, O'Leary said.

Jonathan Paul, spokesman for the animal rights protesters, said his group had several demands for UCSC. Among those demands are that the university allows its animals labs to be open for inspection and that the public be kept apprised of what experiments are being done and the usefulness of those experiments.

"LIBERATE LAB ANIMALS NOW!"

Expanding the Crisis

submitted by Aaron

The 2005-2020 Long Range Development Plan (LRDP) serves as an unconditional authorization for expansion, yet it includes no economic analysis and no forward planning. Rather than providing a step-by-step process, the expansion template for the UC system begins with an "envelope," or a maximum enrollment—in this case, 19,500 full-time students. After receiving final authorization—which is granted by the UC Regents—the administration goes about filling in that envelope without ensuring the foundations necessary for proper implementation. Rather than planning carefully to reduce the negative effects of growth, the administration attempts to mitigate these effects after the fact. The few targets that are set (housing and transportation infrastructure, for instance) are not binding and therefore remain unfulfilled. Inadequacies on our campus are often left to get worse, building until they reach a breaking point. This has effects in three main areas: environmental mitigations, physical planning and infrastructure, and academic quality—all of which are related.

Mitigations cost money, but the Environmental Impact Report (EIR) gives UCSC permission to begin the LRDP without setting aside guaranteed funding sources for mitigation.[1] In some cases this means that mitigations will not be pursued, an option available to the administration because it conveniently did not require binding language in the EIR.[2] Funding must somehow be acquired as problems demanding attention arise. This funding can come either from increasing revenue or from decreasing costs. Increased revenue usually comes in the form of increased student fees (already at around $10,000 per year) or private sponsorships. Decreasing costs means using portions of the budget that had previously been allocated elsewhere; in other words this means program cuts, academic support cuts, outreach and retention cuts etc.

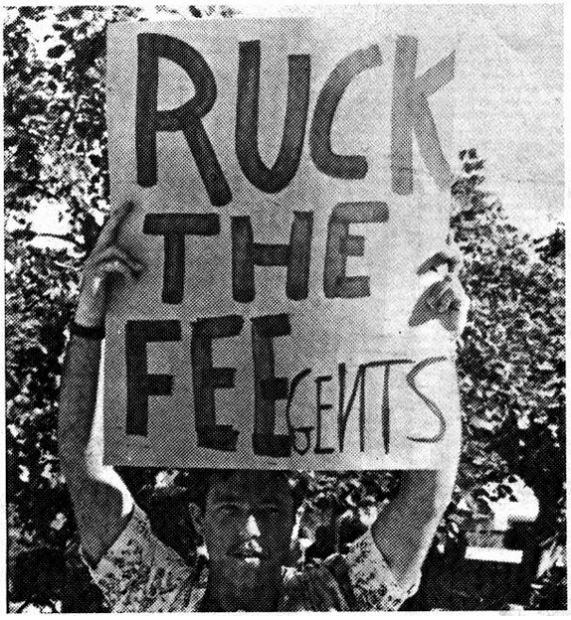
Robert Meister, Politics Professor and member of the Strategic Futures Committee at UCSC, explains the results of this approach to growth: "In the absence of a plan for conditional growth, the default plan is for the campus to grow as fast as it can and then mitigate the ways in which that growth has already made it worse".[3] In this context, mitigations are often pursued only when absolutely necessary to the continued functioning of the system.

As tuition continues to rise at an alarming rate, students will find themselves paying for more buildings but fewer professors, more classrooms empty of TAs, more assignments that no one has any time to review.

It is this type of planning that leaves the majority of environmental concerns by the wayside. It also causes budget crises by letting pressures stack up until the last moment, when they are most severe and expensive. Without proper infrastructural foundations, the potential for growth of any kind is constricted. More importantly, this approach guarantees that growth will lead to unfulfilled responsibilities, significant and unacceptable decreases in quality, and perpetual crisis.

Physical planning was not sufficiently pursued for the 1988 LRDP, and almost none of the resulting physical or academic inadequacies have been settled to date. The present case is no different; in fact, it continues the legacy of shortsighted expansion choices.[4] Rapid and unplanned growth increases pressure on physical infrastructure. The result: maintenance, improvement and expansion costs grow at a faster and faster rate. With the ever-insufficient attempts to catch up on infrastructural neglect, funds get diverted from educational and community resources and from forward-focused infrastructural support planning. This cycle is never addressed; instead it builds and intensifies the problems. Without pausing to actually catch up and lay the groundwork for the future, physical systems at UCSC degrade more with each new building and student.

Academic planning is another major problem with the LRDP. The current LRDP process does not require plans and support for either infrastructure or academics to precede the new influx of students. In light of the administration's past and current attitude toward expansion, there is no reason to believe that plans and support will not be put off even longer, compounding stresses on the system. With a large and rapid influx of students that requires new infrastructure, the money each student brings to campus will be eaten up for



Poison oak

costs *other than educating them*.[5] As tuition continues to rise at an alarming rate, students will find themselves paying for more buildings but fewer professors, more classrooms empty of TAs, more assignments that no one has any time to review.

Rather than continuing the pattern of deficient planning, we should learn from the compounded mistakes of the past and keep them from being repeated in the present. Distinguished faculty members have tried their best to reform the LRDP process, calling for more foresight in planning. The concerns of these individuals have too often been, and continue to be, ignored. The Academic Senate, the formal faculty body at UCSC, adopted "a motion asking the Administration to delay presenting the LRDP and EIR (Environmental Impact Report) to the Regents from September to November [2006], and in the interim to deal with the faculty analysis. Many administrators, including the Chancellor and the Executive Vice Chancellor, urged the faculty to reject the motion."[6]

Despite the Senate request for more time to review concerns, and to integrate foresight into the planning process, the Administration did not postpone their presentation of the LRDP to the Regents and it was approved in September. The faculty's concerns were ignored because they interfered with the Administration's goals. It is no surprise then that the institutional attempts to influence the LRDP process are not reflected in the current plans.

The administration argues that they simply want to fulfill their responsibility to accept as many eligible students as possible. But the responsibility to accommodate more students is only one among many pressing responsibilities; other factors of overriding importance—both on their own and as they relate to the goal of accommodating more students—are being ignored. And why is the administration spending $80 million[7] on a new Biomedical Facility with no direct instructional application? Why is this the first major building project of the LRDP?

Despite the Administration's concern with research and prestige, students continue to make major sacrifices, often going into debt, to attend UCSC. Public education for students—education that used to be nearly free—balances on an ever-narrower distinction between a public university and a publicly funded corporation. The quality of education is being sacrificed in this process.

Some LRDP advocates accept the inevitability of degradation hoping, at best, for minor mitigations. Acting in this framework will compound the problems we all face. This expansion seriously risks deepening the crisis at UCSC. It's time to come out and ask: What will be left by 2020?

Endnotes

1. Isbister, John. Professor of Economics, UCSC. "Can UCSC Grow?" Terms and Conditions: Newsletter of the SCFA/AAUP, Spring 2006. <http://www.aaup-ca.org/>
2. Terms and Conditions: Newsletter of the SCFA/AAUP, Spring 2006. (pg. 4,7)
3. Meister, Robert. Professor of Politics, UCSC. "Eleven Theses on Growth." http://www.aaup-ca.org/SCFA- Theses_on_Growth_Final.pdf., pg.2.
4. Meister, pg.3.
5. Terms and Conditions, pg.7.
6. Isbister, pg.1.
7. "UCSC's $80 million lab facility gets go-ahead despite protest." Santa Cruz Sentinel, 17 January, 2007

WRITE-IN CONTEST

Re-define bureaucratic acronyms!

Administrators are quite fond of encoding their nefarious agendas in the form of acronyms. In this contest, we will help our superiors to define themselves more accurately, in language that may be readily understood.

Please pick any number of the acronyms listed below to re-define:

LRDP (Long Range Development Plan)
EIR (Environmental Impact Report)
CSO (Campus Safety Officer)
SCPD (Santa Cruz Police Department)
SVC (Silicon Valley Center)
BIN-RDI (Bio-Info-Nano Research & Development Institute)
UCSC (University of California, Santa Cruz)
PL (Protected Landscape)
UC (Under Construction)
SFC (Strategic Futures Committee)
URS (United Research Services)
CDF (California Department of Forestry)

Please pass along your entries via our e-mail or PO Box, before the next submission deadline. We will print the most accurate redefinitions.

An interview with two Berkeley tree-sitters

On December 2nd 2006, Zachary Running Wolf and Jess Walsch climbed into two oak trees next to Berkeley Memorial Stadium and refused to leave. Their intention was to protect a grove of Coast Live Oaks under imminent threat of being logged by UC Berkeley to make way for a new Athletic Training Facility.

The California Coast Live Oak is a locally threatened species and a crucial part of the coastal ecosystem of California. All thirty-eight oak trees in the Grove are protected under Berkeley City law. But the UC says that, as part of the state government, they are "not obliged to obey local environmental laws."

Despite three lawsuits, and general community disapproval, UC Berkeley continued to move forward with their highly unpopular plans to log the Oak grove. After two tense months of tree-sitting by dozens of students and community members--with the looming chance of being violently removed from the trees at any moment-—an injunction was passed by the court demanding that the UC halt all plans for construction until the lawsuits are resolved.

At the start of the 2007 football season, the University surrounded the tree-sit with a chain link fence, purportedly to protect the sitters from football fans. Despite a continued police presence, the tree-sit is still going strong, due in no small part to widespread community support. A judge will soon rule on the tree-sit.

Either the injunction will be lifted, allowing the University to go along with their plans, or they will have to begin mediation. With no clear resolution in sight, the Berkeley tree-sitters will stay put until the bitter end. This January will mark the first birthday of the tree-sit.

In a redwood glade in the forest above UCSC my friend and I sat with two Berkeley tree defenders, Usnea and Blake. Curious about their experiences in the Memorial Grove tree-sit I asked them about their involvement, University repression, everyday life in the trees, and what it means to be human in a more-than-human world.

Agustin: How long have you been involved in the Berkeley tree-sit?

Usnea: I got involved at the end of January 2007. I came in right before the injunction [demanding UC Berkeley to halt construction until the resolution of the lawsuits] came through. So when I first moved in, there was nothing legally preventing them from moving forward with construction—except for the tree-sitters.

A: How did you first hear about the sit?

U: Well, I was playing guitar on Telegraph the day there was a raid on the ground camp. Someone came up and gave me a flier about it. I didn't even realize there was a tree-sit in Berkeley. As soon as I got up there I fell in love. I ended up staying really late that night. We talked and played music and I immediately felt like part of the community.

I came back a few days later and got to go up in the trees, and as soon as I got up there I felt this overwhelming feeling of balance and peace. I knew then that I needed to be a part of the tree-sit. So I took three days to get rid of my job life, and came back to move into the trees. I spent three months up there, before I got arrested. I've mostly been doing ground support since then.

Blake: When I came everything was in full bloom. I only expected to be in Berkeley for a few days, but once I was up in the tree I felt so welcomed and encouraged that I decided to stay.

A: Do you know what it was like when the tree-sit first started?

U: The first people climbed into the trees at like 4 AM. They had almost nothing up there with them at first. There are stories about how they spent the first couple of nights just sleeping on tree branches. It was really just these tree warriors that started the whole thing, just two people.

B: It started on game day. It was the last football game of the season. Everything sort of just happened out of nowhere. It took the university a few days to realize there was a tree-sit and respond. On the fourth day a detective showed up.

A: Why did folks decide to have a tree-sit in the first place? Wasn't there already a lawsuit in place to challenge the logging?

U: Opposition to logging had been percolating, but it wasn't moving fast enough. The university was going ahead despite the legal process—that's why the tree-sit happened. As for the lawsuits, there were actually three of them: one from the city of Berkeley, one from the California Oak Foundation, and one from the Panoramic Hill Association. All of them have different reasons for contesting the UC Berkeley's plan [to log the grove]. They were underway before the tree-sit went up.

B: There's the Panoramic Hill Association. They're rich people who live on the hill behind the stadium. They don't want to

see a traffic increase. They don't want to look at more concrete than they have to. The California Oaks Foundation says that the trees are endangered locally. This is a unifying factor for both the Oaks Foundation and the city. The city is saying that the university is violating a city law that prevents the oaks from being cut.

U: The city ordinance says that Coast Live Oaks can't be cut if they are mature. That's a city law and this is a public state level university, so a lot of it has to do with the fact that they don't go by city law. The university follows its own laws.

A: So the UC comes in and builds a university and somehow that land is no longer under city laws, it's no longer city property—instead its UC property? They have their own jurisdiction?

U: That's what we are dealing with. A lot of this struggle has to do with public property, public space, and community space, versus privately owned land, and private holdings. The UC functions in a world of private property, even though it's supposed to be a public institution. A lot of people have that complaint.

A: Did you say that it looked like they were just going to cut and begin construction despite the fact that they were in court?

B: Yup—that's why even after the injunction was passed, we remained. We don't trust the university. They have been known to break injunctions. UC Santa Cruz logged Elfland the day before the lawsuits against the construction were resolved. The University can't legally override the legal system, but they do. Afterwards they just snub their noses and say "What are you gonna do about it? Throw all the fines you want at us."

> A person can impose an unlimited amount of force on me and my physical body and place me in a cage, just because that's what they have been ordered to do, not even because that's what they think is right...

U: The university doesn't see logging the trees as "construction." For them it's clearing the land. When the people climbed up the trees on Dec.. 2nd. the trees had already been marked and could have been cut at any second. That's important to think about here, because they can start logging before construction has been approved.

A: What's a typical day like in the trees? Does it ever get boring?

B: It took a good few months to learn all the ropes. Eventually it just felt natural: you would go to a tree, tidy everything up, fix all the ropes, make sure all the knots are tied right, make sure the platform is not skewed. There are all kinds of little maintenance things waiting for you. There's always something to be done.

U: People ask what do you do up there all day. Honestly, there is no end of things to do. One morning I can wake up and be like "Hey pal, do you want to have breakfast this morning?" "Yeah!" So then I strap on a climbing harness, attach myself to a rope that's like eighty feet over the sidewalk, and traverse in front of a student gym. So there will be students watching me while they work out, and I'm getting my workout and character-building activity for the day, which is just going next door to my friend's house. I've never felt more alive and present in my body.

B: Just sitting up there and observing has taught me a lot. I find that the best way to observe anything is to sit in one spot, like at a stream, and just watch the stream go by. That's kind of like what happens at the grove. You are sitting in one spot in the trees and you can watch all the people on the ground come and go, and then the police come occasionally and they do their rounds and you can watch this organism, and this is like the blood flow, and these are the different things that it does and its almost like watching an actual living, breathing thing. There can be a certain regularity to it. Eventually it builds your confidence.

A: It sounds like it's not just the political but also a personal experience that drew you to the tree-sit?

U: Yeah. I think I was really drawn to it as a personal experience, as an unfolding of my own path. And with that came all these other political ramifications. I've become much more radicalized and politicized by having these really authentic experiences in the trees.

B: For everyone it's a very healing space. The way things are in the city, it's like a war zone. Some of the things people come in with can be equated to Post-Traumatic Stress, and then you go up in a tree and it's like fasting. You stop exposing yourself to these toxic elements and then you start to purge it all out.

Peter: Usnea, can you talk about your perspectives on police repression?

U: I think when I first climbed into the trees I had a very different perspective than I do now. I came from a much more trusting place in regards to the police. As a privileged person who came from a middle class family I certainly didn't recognize the police as people who would make me unsafe. I never felt threatened. It wasn't until I was arrested that I really felt that police repression. When I was arrested I was actually trying to climb up an escape tree; I was trying to get up into a tree from the ground and a police officer was able to grab my ankle and pull me down. So I was forced to the ground and handcuffed and taken in. I ended up spending four days in jail.

P: He was pulling on you? Was there some sort of tug-of-war going on?

U: First he only had my pant leg - he just wouldn't let go and I was kind of trying to shake him off. He was holding on, trying to get me to cooperate so I just took my pants off to try and run away from him, but he ended up grabbing my ankle. At that point I was trying to hold onto the tree, I had no clothes on below the waist and the police officer was not letting go, he had very strong hands. There was definitely a struggle and I ended up falling to the ground and scraping my ass and stuff.

This was at 2AM and so no one was on cop-watch video taping [to document this]. When my friend arrived there was this police officer on top of me, and I was half-dressed. It looked very bad. I was actually surprised at how freaked out the three cops who had showed up by that time were by my nudity. So I was then trying to calm all of them down so they wouldn't act even more irrationally. I was laughing and saying, "The trees are naked too! I'm just a person!"

I've had to do a lot of processing since then that has not been so hilarious. That experience is very central to my understanding of power relationships, as far as what kind of power the university yields here. The fact that a person can impose an unlimited amount of force on me and my physical body and place me in a cage, just because that's what they have been ordered to do, not even because that's what they think is right—that creates a very striking point to start from as far as raw force and raw power and what's going on here.

I'm still sorting it all out and trying to put it into words. I find all that incredibly terrifying and also incredibly radicalizing. It makes me want to address those forces in a more powerful way, rather than placing myself at their mercy or acting as a sacrificial lamb for the movement. I don't want to repeat that experience.

P: Would you say the University wields too much power?

U: I have talked to so many different people in the community, from all different backgrounds, who vehemently disagree with what's going on. It's incredible to me that when there is such a massive public support for this space the University can still play this card of private ownership and do whatever they wish. And since they have their own police force, and since the courts are set up in their favor, they can do whatever they need to do to strike down our resistance. They know how to play the game perfectly.

My fantasy wish is that this tree-sit will catalyze a huge shift in our thinking about what a university is and what we are doing with our civilization.

B: I think a lot of people are catching on to the fact that the University has too much power. They are realizing that academia is just a guise for other pursuits. They are building the next nuclear age on the hill behind the grove we are sitting in. They have all those research labs. All the nukes that exist in the U.S. were made based on the research of UC employees. They are doing GMO crop research on a hill that's actually in view of the tree-sit. And they are building British Petroleum research labs.

They are doing all these things that have the potential to permanently change the world and they're doing them without anyone's consent. Nobody ever got asked if it was alright to bring the nuclear age. The University of Berkeley especially does not ask questions like that.

P: How is the tree-sit a part of opposing that?

B: The Berkeley tree-sit is so potent in its ability to create a community grassroots movement. All these different people in the city who have taken initiative at one point or another to somehow express their resistance all come together and meet up at the grove. They see that this tree-sit is another method of resistance; it is another organ of the radical body. All the parts serve different purposes, different intentions, but the tree-sit has been like the last-line of defense. Events, benefits, and discussion groups all happen here. They meet up and go home, but the tree-sit is always there. Everyone knows that if you want to hook up with the radical body in Berkeley, that's where you can go.

A: Would you describe what it's like up there more?

B: It has really helped me to develop my ninja skills. Just a week ago I was on the ground and just hanging out with ground people for a couple minutes, tying some knots on some water jugs that had to go up, when just out of the corner of my eye I see a cop car making a really strange maneuver down the road. They turned into park but then immediately turned around and started speeding up towards us.

At this point, these sorts of things are natural processes for me. I'm not even

scared of the police anymore. I just know instinctually, "Well, time to stand up and mosey on over to the tree and start climbing." Two squad cars pulled in and they started looking around and scoping out the grounds. By the time they looked in my direction I was already on the platform, laughing to myself.

U: I think the tree-sit has really affected people mentally. It has brought people and the trees together in a real way. It forces people to stop what they're doing and look up. There's something striking about the visual of a human in a tree. It's almost jarring for our psyches to realize that such close contact is happening. There's such a naturalness to that experience, to seeing a human in a tree. It challenges our ideas of where humans are supposed to be and how they are supposed to act. The tree-sit is a public demonstration of an ideal that I feel strong about—that humans are not separate from nature but part of it.

A: What would the best possible outcome of the tree-sit look like?

B: I think the sit has already been a success. For the past ten months we've been up there it's been a really powerful thing for so many people. It's a powerful symbol of resistance that is constantly maintained. I think that the simple fact that our presence has continued for so long has been a success.

I can see a couple of ways it would be even more successful. One way is if no resolution to this never came, if we just stayed for a year, or longer. Tree-sits have been known to go on for years. That would be a success in itself. That's where a lot of our potency lies—it's in defending the trees. And if the trees are saved then that of course would be a success. Then we could pack everything up and take all that momentum and send it somewhere else, some place it's needed.

U: My fantasy wish is that this tree-sit will catalyze a huge shift in our thinking about what a university is and what we are doing with our civilization. And this huge shift would help everyone stop and analyze what all this momentum is. What is progress? What is success? What is a university for?

In that dream not only would the grove be saved but the stadium itself would come down because it is unsafe. [*The stadium is built on a major fault line.*] And the spaces could grow wild again. And they could be still be used as educational spaces, as exercise spaces, and healthy spaces. They don't have to be buildings to serve those functions.

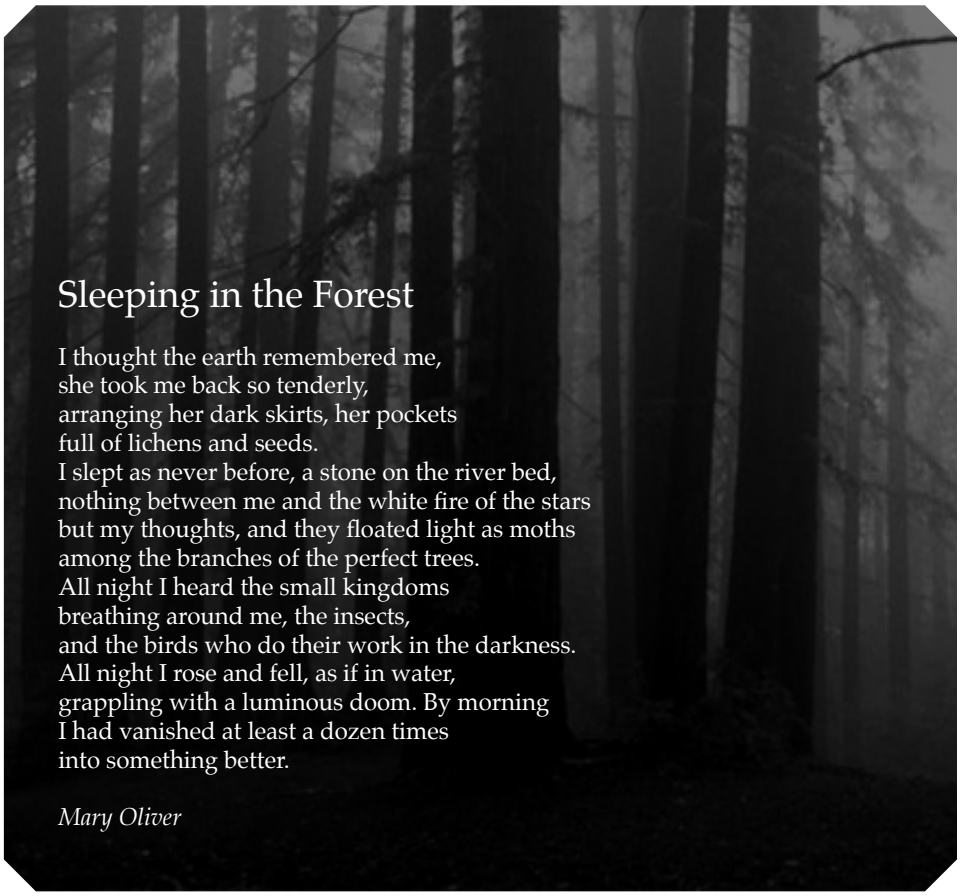
I agree with Blake that every second of this tree-sit has been a success. Every second we have been there has been a very visible and a very public stand. Each person that is up there is a symbol of many others who feel similarly.

We must come to a point where we can value our individual, everyday moments and everyday lived experience in a way that makes us want to take that back. That's what the tree sit gave to me—it gave me my life and my being back. I think if we could live in each moment and experience what's actually happening with our bodies, if we actually took the time to put our hands and our hearts where our ideals are, we would have a radically different world.

Many supporters of the Berkeley Oak Grove are unaware of the larger picture that the proposed Athletic Training Facility is nested within. This facility is part of a multi-project EIR called the "Southeast Campus Integrated Projects" or SCIP*. The SCIP also includes a new 900 space parking lot, expansions for the Law School and Business School, expansion and reconstruction of the Memorial Stadium, and a new building called the "Law Business Connection," a key part of Cal's plans to become a leader in Globalization education. Multinational corporation URS is the project manager for this package, likely to approach a billion dollars in budget when all is said and done.

UC Berkeley also has its sights set on Strawberry Canyon, one of the last significant natural portions of the campus. Strawberry Canyon is the prime destination for Cal's planned expansion of research facilities to allow for increased partnership with the private sector. Sound familiar?

*http://www.cp.berkeley.edu/SCIP/EIR.html



Sleeping in the Forest

I thought the earth remembered me,
she took me back so tenderly,
arranging her dark skirts, her pockets
full of lichens and seeds.
I slept as never before, a stone on the river bed,
nothing between me and the white fire of the stars
but my thoughts, and they floated light as moths
among the branches of the perfect trees.
All night I heard the small kingdoms
breathing around me, the insects,
and the birds who do their work in the darkness.
All night I rose and fell, as if in water,
grappling with a luminous doom. By morning
I had vanished at least a dozen times
into something better.

Mary Oliver

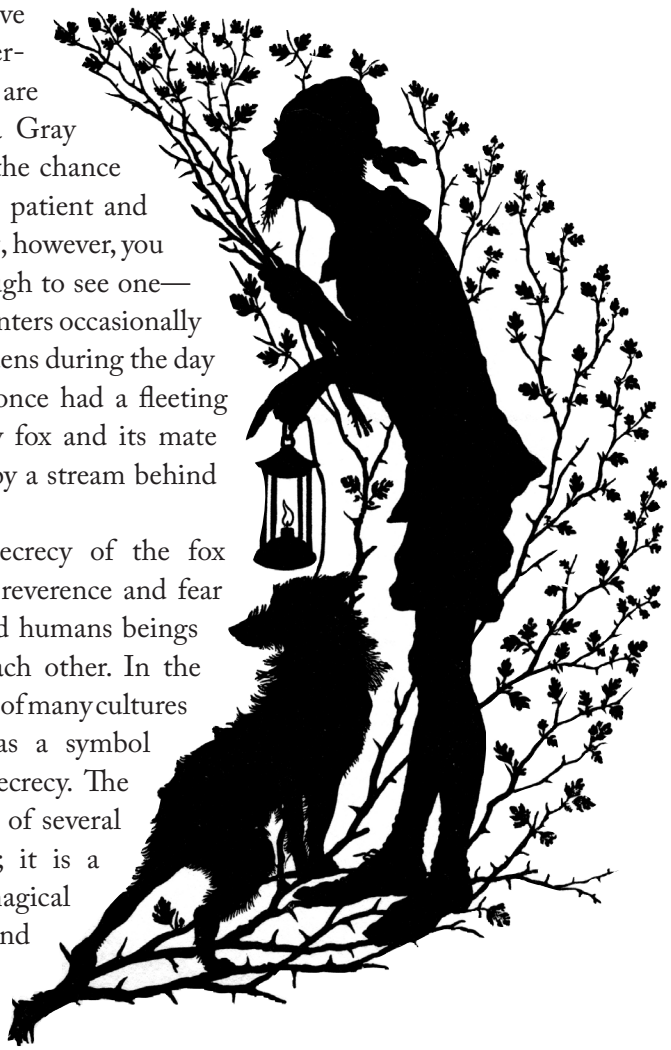
Who Goes There?

Gray fox, Urocyon cinereoargenteus

Despite the never-ending bustle of activity at UCSC, many animals still call the forests, grasslands, and chaparral of upper-campus their home. There are the familiar creatures (like the dusky-footed woodrat, who can be seen scurrying across the floor of many a dorm-room), the feared (such as the mountain lion or cougar), and the iconic (like the famed Banana slug). There are also the many elusive creatures—those who tend to avoid contact with the humans who ramble through the woods above campus. Perhaps the most unique of this last group is the Gray fox.

The Gray fox takes unusual precautions to ensure its secrecy. It is not unusual for this animal to scramble up trees to evade predators or to forage fruit, making it the only member of the canid family capable of climbing trees. Using their strong, hooked claws they can walk up the side of redwoods with the grace of a cat. These sly creatures are characterized by their small, feline-like shape and bushy-black tails. Gray foxes are also unique because they are monogamous. Once a pair mates, they mate together for life. Their diet is quite varied; they are fully omnivorous and are known to eat everything from cottontails and blackbirds to persimmons.

Though they have been seen in upper-campus, you are unlikely to spot a Gray fox before it gets the chance to hide. If you are patient and exceptionally quiet, however, you may be lucky enough to see one—these nocturnal hunters occasionally come out of their dens during the day to gather food. I once had a fleeting glimpse of a Gray fox and its mate walking together by a stream behind the Trailer park.



The untiring secrecy of the fox has inspired both reverence and fear wherever foxes and humans beings have lived near each other. In the traditional folklore of many cultures the fox appears as a symbol of cunning and secrecy. The fox is a composite of several mythical qualities; it is a shape-shifter, a magical spirit, a Lorelei, and a Will-o'-the-wisp. Fox spirits encountered in tales and legends are usually females, and appear as young, beautiful women. Common belief in medieval Japan was that any woman encountered alone, especially at dusk or night, could be a fox. In some stories, foxes have difficulty hiding their tails when they take human form; looking for the tail, perhaps when the fox gets drunk or careless, is a common method of discerning the creature's true nature. Foxes are also said to create small flames by rubbing their tails together. They use their fox-fire to lead lone travelers astray at night.

Gray fox

Long Range Degradation continued from page 4:

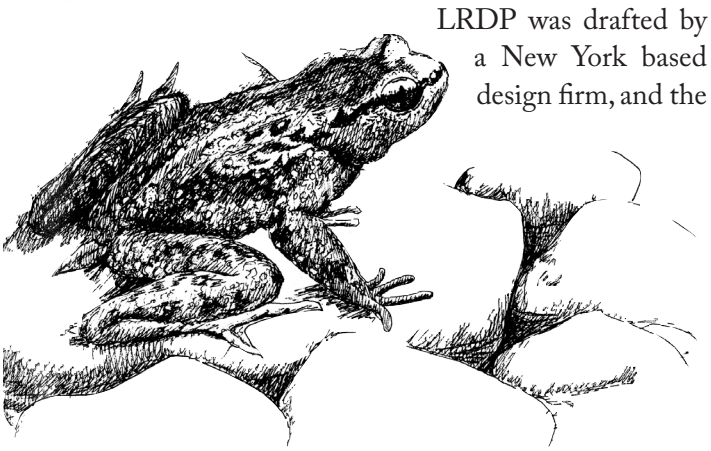
A Legacy of Extinction

The UCSC campus is home to a magnificent diversity of habitat, flora, and fauna. Over 500 distinct species of vascular plants and over 500 species of mushrooms have been reported within its boundaries. [7] The proposed Long Range Development Plan places the delicate natural systems of this campus under grave threat.

On a campus known for it's wild beauty, one might assume that the University would actively value and care-take it's land. Unfortunately, this assumption is far from accurate. UC Santa Cruz has consistently refused to designate adequate resources for land management. There is currently one part-time employee with a minimal operating budget responsible for the stewardship of the entire 400 acre Campus Natural Reserve.[8] Mitigation measures and habitat management plans from previous development on campus have frequently been unsuccessful, or not implemented at all. Grey Hayes, a PhD biologist and former Natural Reserve steward, goes as far as to charge UCSC with "extinguishing at least a dozen species protected by the California Environmental Quality Act" and warns that there are many campus species in a critical state. [9]

In general, UCSC manages its land by doing the minimum required by law, while maximizing it's production of PR about sustainability and stewardship. Campus planners routinely disregard the recommendations of their own biological consultants, seemingly determined to proceed with any given development project regardless of the impacts. Environmental laws appear to be little more than stepping-stones, inconveniences that can be brushed aside with a little deception here, and a little mitigation over there. The current LRDP process was no exception to these precedents.

Rather than drawing upon the wealth of high-caliber research about campus natural systems that UCSC faculty are capable of furnishing, outside consultants were hired. The LRDP was drafted by a New York based design firm, and the



Pacific giant salamander

Environmental Impact Report was placed in the hands of URS, a multinational corporation that also contracts with the federal government, designing weapons systems and military installations. [10]

There appears to be a general consensus among anyone qualified in environmental policy that the current EIR is a seriously flawed document. It chronically understates impacts, proposes superficial mitigation measures and fails to adequately address the long-range, cumulative impacts of proposed development. Discussion of mitigation measures is punctuated with vague language such as "where feasible" and "when possible," carefully avoiding any legal commitment.

The argument is often made that environmentally destructive expansion at UCSC is an unavoidable misfortune, because the UC has an obligation to provide for a growing high school graduate population. What this claim of inevitability overlooks is that there is nothing legally obligating UCSC, specifically, to expand its enrollment. The 6,000 (later reduced to 4,500) figure was voluntarily offered by an administratively appointed UCSC committee, without proper analysis of feasibility. These 4,500 future scholars could be accommodated at other UC campus locations whose site conditions are more appropriate for development. The evaluation of "big picture" alternative plans, such as building new campuses and satellite facilities, was insufficient. There are other communities that, in contrast to Santa Cruz, would likely be amenable to the establishment of a new UC campus.

Let's set aside for a moment the question of whether such dramatic growth is appropriate at all on this campus, and consider, with narrowed minds, the discussion of alternative land use plans. A handful of distinct land use scenarios were identified and evaluated in detail during the LRDP planning process. The planning committee eventually arrived at a choice between an option emphasizing development in the upper campus and an alternative that would call for the same population and building space while allowing no development in the upper campus.

The "Southerly Expansion Alternative" would instead emphasize infill, siting new facilities in the central and lower campus.[12] According to UCSC Natural Reserve Director Maggie Fusari, the LRDP Planning Committee was "split almost 50/50" about whether to go with the upper campus

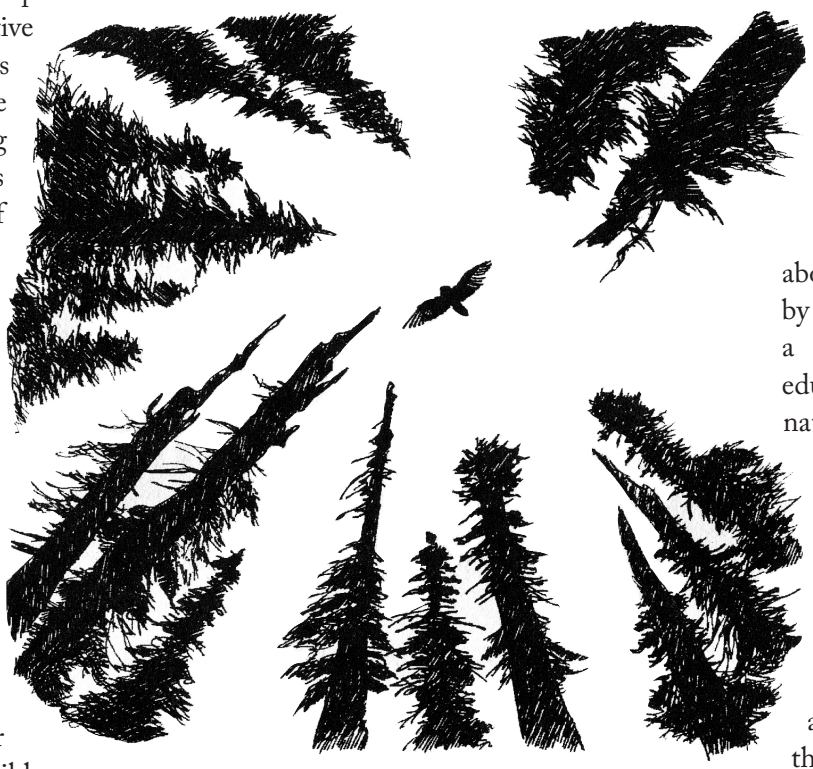
or lower campus plan.[13] The southerly plan was of concern chiefly because of visual impacts to the open, scenic vistas of campus.[14] The debate over lower versus upper campus development raises a critical question: what is more important to the campus community, the appearance of natural aesthetics or the integrity of natural ecosystems?

The Upper Campus plan was chosen, condemning 120 acres[15] of forested habitat for the sake of appearances. No one claimed that this plan was superior from an ecological point of view. It is true that the lower campus alternative would also negatively impact sensitive habitats[16] and is not without it's own significant drawbacks, but these do not begin to rival the degradations currently proposed.

What is more important to the campus community: the appearance of natural aesthetics or the integrity of natural ecosystems?

Long Range Destruction

What is really on the table, ecologically speaking, if the upper campus expansion plans proceed? 120 acres of redwood, chaparral, and mixed-evergreen forests currently stand in the proposed development areas. Impacts to the sensitive habitats of upper campus would extend far beyond the developed acreage, throwing the life support systems of the entire region out of balance. Wildlife corridors would be interrupted, and paving up to 85 acres[17] of upper campus with impermeable surfaces would disrupt the flow of springs and seeps.



The immediate and long-term effects of upper campus development on campus water systems would be devastating, considering that these systems are already in poor shape due to irresponsibly managed development. The campus has no storm sewer system, meaning that polluted run-off water from the ever-increasing square footage of developed and paved areas is sent directly into natural streams, sink-holes and caves. This toxic, muddy flow imperils riparian species and federally listed endangered cave fauna such as the Dolloff Cave Spider and Empire Pseudoscorpion. [18]

Many other species live downstream. The endangered Red Legged Frog has already been severely impacted by the torrents of erosive runoff that have inundated its breeding areas. All three major campus watersheds eventually drain in to wildlife preserves just before reaching the ocean.

Current and former Campus Natural Reserve stewards, as well as the CNR director, have spoken very critically of the upper campus plan. While the esteemed Campus Natural Reserve "seep zone" area above Colleges 9 and 10 is technically spared from development, the new loop road would surround it with pavement. The EIR does not assess or mitigate the inevitable foot and bicycle traffic through this area, as students commute between the central and upper campus. If large sections of upper campus land are paved as the EIR discusses, rainfall absorption will be inhibited, altering or stopping the flow of the springs and seeps that percolate throughout the area. These combined infringements on the seep zone will severely compromise it's utility for teaching and research, as the former habitat would essentially be rendered an ornamental feature.

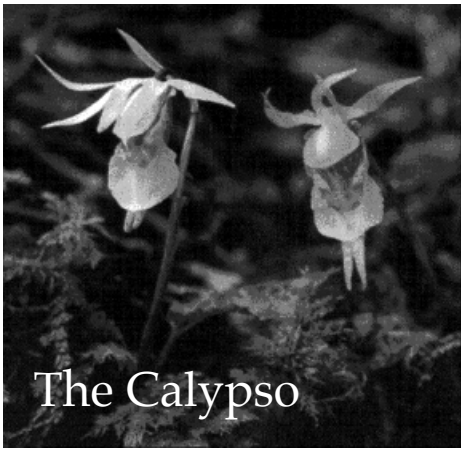
The majestic forest above UCSC is treasured by many and represents a valuable cultural and educational resource. For the native Ohlone people, this area was a seasonal home and a source of physical and spiritual sustenance that remains sacred to this day. Starting with the first class of 1965, students and teachers alike have departed from the classroom to wander up in the woods, finding peace beneath redwood cathedrals and renewing themselves on dreamy footpaths.

The upper campus is alive with magic and mystery, and

shrouded in legend. Students have made shrines, held full moon drum circles, sang songs around campfires and built forts in these woods. Medicinal and edible plants abound, raptors take flight, and salamanders intrigue. Two walks in woods are never the same - how about two walks through Science Hill?

Founding campus architect Thomas D. Church famously stated that "Any design attempt to compete in grandeur with this site is doomed to failure." [19] Let us hope that this rings true in the case of the towering buildings slated to replace the forest of upper campus.

December, 1991—A student surveys the destruction of his favorite Elfland hangout, known as the "Den of Judgement." The trees were cut to make way for Colleges 9 & 10, amidst heated protests. Avenge Elfland!



The Calypso

Once in his life, John Muir got to see a calypso.
He saw it up in Ontario.
Calypsos are extinct
In Canada's Holland Marsh now.

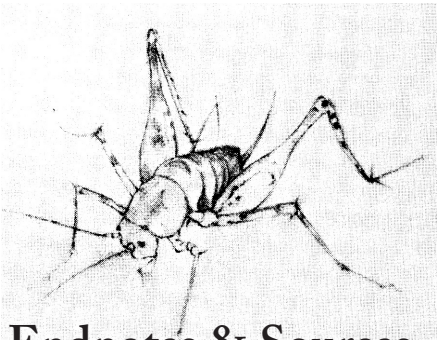
The sight of that calypso
Started him on his writing career
...was the subject of his first published article.

Toward the end of his life
Muir said he had had two
Supreme experiences. One was
Meeting Ralph Waldo Emerson in Yosemite.
The other was seeing that calypso.

Muir didn't get to see another calypso.
But he could have
Visited the site of the future UCSC campus.
He could have seen hundreds of them.
Calypsos survived there
Until at least 2001.

In 2001 just one remaining calypso
Flowered on the UCSC campus.

Ray Collett [20]



Endnotes & Sources

1. There were three token "student representatives" on the LRDP Planning Committee. Minimal outreach to a larger student body did occur, mostly on behalf of Matt Waxman (one of these representatives) and his "Strategic Student Involvement Committee." Moderate Matt was a great man for the job, from an administrative point of view. He collected student concerns, bringing a handful of them up during the Committee meetings. And that's just it -- he *voiced* student concerns, but did not *advocate* for them. Matt was involved because of his eagerness to take part in the political process, not because of any strong convictions shared with fellow students. Junior politicians chosen by administrators are not, in any relevant sense of the word, student representatives.

2. Isbister, John. "Can UCSC Grow?" - SCFA Newsletter, Spring 2006. "...a unanimous recommendation of the Administration was massively rejected by the faculty. I haven't seen a split like this between faculty and Administration in 30 years."

3. Meister, Bob. Eleven Theses on Growth. <http://www.aaup-ca.org/SCFA-Theses_on_Growth_Final.pdf>

4. Isbister, John.

5. SmartVoter. Measure I - UCSC Growth Ordinance results (76.65% in favor) <http://www.smartvoter.org/2006/11/07/ca/scz/meas/I/>. Accessed 9 Nov. 2007.

6. Ordinance to Promote Sustainable Growth. <http://www.ci.santa-cruz.ca.us/cc/election/>

7. Warrick, Sheridan F. The Natural History of the UC Santa Cruz Campus. "Plant Life," p.106.

8. Barth, Lucas. "Interview with Sean Mcstay." The Future of UCSC and the LRDP.

9. Hayes, Gray. Endangered Species and Habitats of Santa Cruz County: University of California at Santa Cruz <http://www.oatney.com/endangered_species/ucsc.html>.

10. URS holds profitable re-construction contracts in Afghanistan and Iraq, managed construction for the Lawrence Livermore National Laboratory and is also in charge of the highly contested Athletic Training Facility that is slated to replace UC Berkeley's Memorial Oak Grove. <http://www.urscorp.com/>

11. Gumz, Jondi. "UCSC growth plan taken to task." SC Sentinel. 30 Oct. 2005
"Santa Cruz leaders blast UCSC growth plan" SC Sentinel. 10th Jan, 2006

12. 2005 LRDP Final Environmental Impact Report. Section 5 (Alternatives). p.26/ Section 5.4.3: "Southerly Expansion Alternative." Also see figure 5.4 (p.44) for map. <http://lrdp.ucsc.edu/final-eir.shtml>

13. Barth, Lucas. "Interview with Maggie Fusari." The Future of UCSC and the LRDP.

14. A secondary factor that lead to the favor of upper campus expansion is strictly financial. Due to the unstable "Karst" topography of lower campus, it would actually be more expensive to build there than it would be to cut down forest and site buildings in upper campus.

15. 2005 LRDP EIR. Section 4.4 (Bio-resources). "4.4.2.6: Effects of Timberland Conversion. (p.69)"

16. The "Southerly Expansion Alternative" would destroy significant nesting habitat for the western burrowing owl, impinge on raptor foraging grounds, disrupt wildlife corridors and remove grassland ecosystems. There are more options than A or B! Neither are acceptable from an ecological standpoint.

17. 2005 LRDP EIR. Section 4.8 (Hydrology). pg 39.

18. Hayes, Gray.

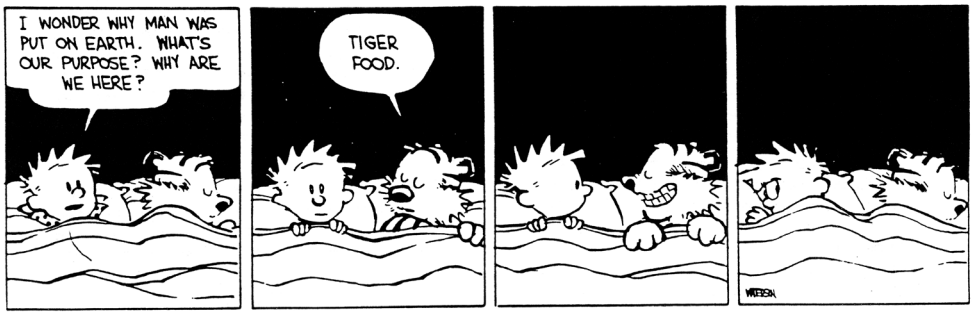
19. Wolf, David. Gentle Be the Hand That Lays Upon the Land: The Story of UC Santa Cruz and Its Campus. 1990. pg 27.

20. Collett, Ray. (co-founder/ former director of the Arboretum and retired UCSC Natural Sciences professor. "Salt-o-the-Earth Po-ums and Cartoons" <http://www.oatney.com/endangered_species/poems/>

Fight!

The short-sighted, ecologically destructive growth that we are up against in Santa Cruz can be understood as a local expression of a global system that is unwilling to acknowledge limits. Those who profit from this endless development will not stop voluntarily. Where will we draw the line?

Although the development projects that would rip into upper campus lie at least a few years ahead, the time to oppose them is now. As administrators sit in their stuffy offices and sell our futures off to San Jose based companies, our resistance movement will grow, drawing inspiration and strength from the places we are fighting to protect.



"Biomedical Madness" continued from page 5:

November 7th). It will contain a rodent vivarium in the basement - a facility used to keep animals for live experiments (vivisection). There is also a 13 million dollar Environmental Health and Safety Facility planned in the LRDP that will serve new research facilities like the Biomedical Sciences building. [7] Disguised under a seemingly benign name, this facility will be used to store radioactive and biohazardous wastes produced partly in the Biomedical Sciences building. [8]

A controversial issue

There are many different grounds on which one could question Biomedicine itself. Some people have pointed to the various ethical issues brought up by Biomedical research in fields like genetics, especially in relation to gene therapy. They say that to make intentional changes in the genes that people will pass on to their descendants would require that our society agree on how to classify "good" and "bad" biological attributes; the definition of the standards and the technological means for implementing them would largely be determined by economically and socially privileged groups. [9]

Others have focused on the basic safety issues that come along with modifying the basic structure of living organisms. [10] They question whether any possible gains made from Biomedical research could outweigh the dangers that human patients could be unknowingly exposed to. Still others say that animal experiments, which are an essential component of Biomedicine, are not only cruel (see "Animal Experimentation at UCSC") but also lend a false sense of safety to new drugs and procedures for humans. [11]

Contemporary Biomedicine has also been critiqued by those who view the patenting of naturally evolved organisms as a violation of life itself. They see corporate patenting practices in the context of globalization and colonization, questioning the corporate practice of patenting the crops or medicinal plants of indigenous people. [12] Other, more utility-minded people criticize the patenting of things like genes, cells and bacteria as an unnecessary obstruction to the free sharing of ideas that medical progress depends on. [13]

For the purposes of this article we will be focusing mostly on issues of corporate involvement in Biomedicine, since that is an issue that will affect our lives most directly if the Biomedical Sciences Facility is built. Though not everyone has the same ethical beliefs regarding the Biomedical approach to medicine, most everyone can agree that medical research that profits major Universities and pharmaceutical companies, while harming the students and public that they claim to help, must be questioned—and certainly should not be allowed here at UCSC.

What is Biomedicine?

"The bottom line in my view is that we are confronted with the most powerful technology the world has ever known, and it is being rapidly deployed with almost no thought whatsoever to its consequences." - Dr Suzanne Wuerthele, US Environmental Protection Agency (EPA) toxicologist. [14]

"And the other thing, because no one has the guts to say it: if we could make better human beings by knowing how to add genes, why shouldn't we do it?" - James Watson, Nobel laureate and founding director of the Human Genome Project during a Q & A session at the Engineering the Human Germline symposium at UCLA, May 1998. [15]

Before we explore in any more depth how the proposed Biomedical Sciences Facility will affect life on campus, a basic understanding of Biomedicine itself is essential. By its very nature, Biomedicine is hard to define. It represents the intersection of several fields, including medicine, engineering, biochemistry, cell biology, and genetics. Biomedicine is not always concerned with the practice of medicine as it is with the theory, knowledge and research of it. For that reason, it is often called "theoretical medicine". [16] Procedures that are often used in a Biomedical laboratory can vary from computer simulation and animal experimentation to human trials of medication. [17]

One helpful way to define Biomedicine, according to the New Jersey Association for Biomedical Research, would be to compare it to Biotechnology. [18] Biomedicine applies the practice of biotechnology—the manipulation of the basic makeup of plants and animals to create products for human use—to medical research.

One major aspect of Biotechnology that has been applied to Biomedical research is genetic engineering. Genetic engineering allows scientists to take DNA from any bacteria, insect, animal

or human, and insert it into another organism. [19] The Biotech company Nexia, for example, engineers goats with the silk protein gene that spiders use to make their webs. [20] The genetically engineered goats can then be milked for this abnormally strong spider protein, which will then be patented and spliced into marketable products.

Gene therapy is one example of how Biotechnology has been applied to medicine. Researchers are currently exploring the use of genetic vaccinations that can isolate desired genes from animals or plants and implant them into humans, such as the MxA gene in transgenic mice to prevent influenza or the HIV-resistant gene in baboons to treat HIV. [21]

Some proponents of this sort of research hope that, once identified, a gene implicated in a particular condition might be appropriate and relatively easy to replace, supplement, or otherwise modify. [22] However, biological characteristics or traits usually depend on interactions among many genes. The activity of genes is affected by various processes that occur both inside the organism and in its surroundings. This means that scientists cannot predict the full effect that any gene modifications will have on the traits of people or their descendents, especially in the long-run.

In purely biological terms, the relationship between genes and traits is not well enough understood to guarantee that, by eliminating or changing genes associated with traits one might want to avoid, one may not simultaneously alter or eliminate traits one would like to preserve. Disease-related genes that cause problems in one context can be beneficial in others.

The side-effects of genetic engineering are too unpredictable to be performed on people. As an article from the Washington Times explains it:

> "Genetic engineering is like performing heart surgery with a shovel. Scientists do not yet understand living systems completely enough to perform DNA surgery without creating mutations which could be harmful to the environment and our health. They are experimenting with very delicate, yet powerful forces of nature, without full knowledge of the repercussions". [23]

The Human Genome Project can also be seen as part of this movement to understand and treat diseases genetically. Some see this sort of research as chasing a white rabbit. According to Ian Coulter, a medical practitioner and a professor at UCLA, "perhaps the most negative effect of the Human Genome Project might come in its diversion of resources, scientists, and physicians from other promising paradigms." [24]

Though we have focused for the past several paragraphs on gene therapy, this is by no means the only possible approach to Biomedicine. Unfortunately, as the university has not been completely open about their plans, any guess about the type of research that will go on in the Biomedical Sciences Facility would be speculative. The rodent vivarium planned for the basement suggests that the research will definitely include animal testing, which could allow any number of experimental fields to be investigated.

Yet as one example of Biomedicine, gene therapy can also serve as a microcosm for the larger field. Biomedicine differs from what we normally think of as medicine in its preoccupation with the smallest components of diseases and disorders.[25] It attempts to produce cures by first understanding and then altering these small components.

One reason Biomedicine is so profitable, and therefore so heavily researched, is that patent rights have been applied to things like genes, cells and diseases. These patents form the basis of Biotechnology and Biomedicine. It would be unprofitable to isolate the medicinal qualities of sea sponges or decode the genes implicated in diseases if the information was immediately made public domain for anyone to apply to products or drugs.

Biomedicine and Universities

> "By trying so hard to acquire more money for their work, universities may compromise values that are essential to the continued confidence and loyalty of faculty, students, alumni, and even the general public"
> -Derek Bok, former President of Harvard University [26]

Recently UC campuses have seen a huge influx of money from corporations "sponsoring" university laboratories in exchange for patentable research. In the last five years alone UCSC has brought in more than half a billion dollars in research funding. [27] George Blumenthal, the most recent Chancellor, says that corporate investment in campus research is a way to make up for failing state funding in higher education.

Life Patents & Biomedicine

Life patents are a central part of the link between pharmaceutical corporations interested in Biomedicine and university laboratories. Universities exchange patentable research for corporate funding.

These patents make it possible to legally own naturally occurring life forms. This is a common practice in Biomedicine, where research largely has to do with isolating the basic genetic material of a known life form and patenting it. It is worth exploring the nature of these patents themselves because the policies that universities like UCSC have affect the entire world.

An unforeseen and deeply troubling aspect of life patents is the transformation of biological entities—the products of hundreds of millions of years of evolution—into private property. This is taking place through a radical extension of patent law to encompass gene sequences, isolated cells and tissues, genetically engineered animals, and even natural species. [1] These profound changes in patent policy, first allowed through a narrow Supreme Court ruling in 1980, are being carried out through the administrative procedures of the U.S. Patent and Trademark Office, with virtually no public debate or Congressional oversight. [2]

The Biomedical industry sends out researchers around the world to discover genes that may have commercial applications. Often this includes asking indigenous people which plants have been traditionally used for medicinal purposes. Then these researchers take back samples to their laboratories, isolate active ingredients, and patent the useful properties of the plants as their own. Phil Crews, a researcher at UCSC, is involved in isolating compounds from marine-based fungi and selling the patents to his corporate sponsors. [3]

Corporations are also patenting the genes of humans. A company called Autogen, for example, recently made a deal with Tonga's government in which they bought exclusive patent rights to the entire gene pool of the Tongani people.[4] This is happening in the U.S. as well. In 2003, the mapping of our genetic make-up was successfully completed by the Human Genome Project, with substantial contributions made here at UCSC. The goal was to generate a reference sequence for the entire human genome and identify all the human genes. Of the 25,000+ genes that make up the human genome, around one quarter of these have been patented or have patents pending. [5]

1. King, Jonathan and Stabinsky, Doreen. "Patents on Cells, Genes, and Organisms Undermine the Exchange of Scientific Ideas." <http://www.genewatch.org/programs/patents/undermine.html>.
2. King, Jonathan and Stabinsky, Doreen.
3. "Frequently Asked Questions." <http://www.nwrage.org/>.
4. Ibid.
5. "Intellectual Property." <http://www.genome.gov/19016590>.

But this strategy makes UCSC increasingly dependent on outside funding and grants. Consequentially, the university must shape its image in a manner attractive to its sources of funding. Grants are mostly awarded to the professors and departments that are capable of attracting outside funding. In this context we can see the Biomedical Sciences Facility as an attempt to attract investments from Biomedicine and Biotech companies in the near-by Silicon Valley. [28] Though this facility will certainly bring in corporate funding, whether or not it will improve education at UCSC is an entirely different question.

To understand the way corporate involvement plays out in universities we first need to understand the nature of this involvement. The reasons different corporations invest in universities are not always transparent. Jennifer Washburn explores the connection between corporations and universities in her new book *University Inc.: Corporate Corruption of Higher Education*. "Academic departments," she explains, "have forged financial partnerships with private corporations, guaranteeing these firms first dibs on the inventions flowing out of their labs." In return for funding these departments promise to conduct the research these companies are interested in and give them the right to patent any profitable discoveries made. There is actually a long history of corporations "sponsoring" UC research labs in exchange for exclusive or partial ownership of the intellectual property that comes out of student and faculty research.

This process can be readlily observed at UCSC. The Chemistry Department, for example, is proud of promoting the research done in the Crews labs. They are more hesitant, however, to share the details of the deal between Crews and Novartis, one of the world's largest pharmaceutical corporations. As Ike Solem, an ex-PhD student and the recipient of an NSF Graduate Student Fellowship in Microbiology, explains it, "Sygenta [a subsidiary of Novartis] has control of any intellectual property that comes out of the Crews lab". [29] The most UCSC will say about the deal between this corporation and the Chemistry Department is that "Novartis' Institute for Biomedical Research...[is] involved in [an] ongoing partnership with Crews, screening his library to find drug leads". [30]

> "The university is a delicate organism. When its mission and orientation are compromised, it dies."

This relationship seems to be mutually-beneficial or, at the very least, innocuous: corporations help fund university science departments in order to ensure the public quick access to new technologies. Students that bring in funding get helpful research experience that will help prepare them for careers in return. The way things have actually played out on UC campuses, however, is miles away from the idealistic picture so often presented.

In 1997, UC Berkeley announced a five year $50,000,000 grant from Novartis for research and campus improvements.[31] Novartis is a multinational pharmaceutical and Biotechnology corporation that has been heavily involved in pesticide production and GMO crops. A year later, having already dropped the entire campus improvements part of the deal, Novartis was receiving "first dibs on a third of the department's research". [33]

While those researchers who

were following Novartis' orders were receiving the benefits of the grant, Professor of Microbiology Ignacio Chapela was in danger of losing his job. Years before, Chapela had worked for a subsidiary of the Biotech giant Novartis, but after spending time in Mexico became skeptical of the industry's agricultural practices. Chapela was the first person to expose the accidental cross-pollination of GMO corn with indigenous strands by writing an article for Nature magazine.

When UC Berkeley unexpectedly announced its $50,000,000 grant from Novartis, Chapela was a vocal critic. He expressed concern over prospects that the agreement would diminish academic objectivity and continue research in GMO crops that Novartis refused to acknowledge as dangerous. Soon after, a secret committee of pro-industry faculty refused his request for tenure. When his original contract expired, he was immediately fired. "I am living proof of what happens when biotech buys a university," Chapela said in an interview with John Ross. [34] "The first thing that goes is independent research. The university is a delicate organism. When its mission and orientation are compromised, it dies. Corporate biotechnology is killing this university." To quell international outcry against the unpopular decision, Berkeley eventually re-hired Professor Chapela.

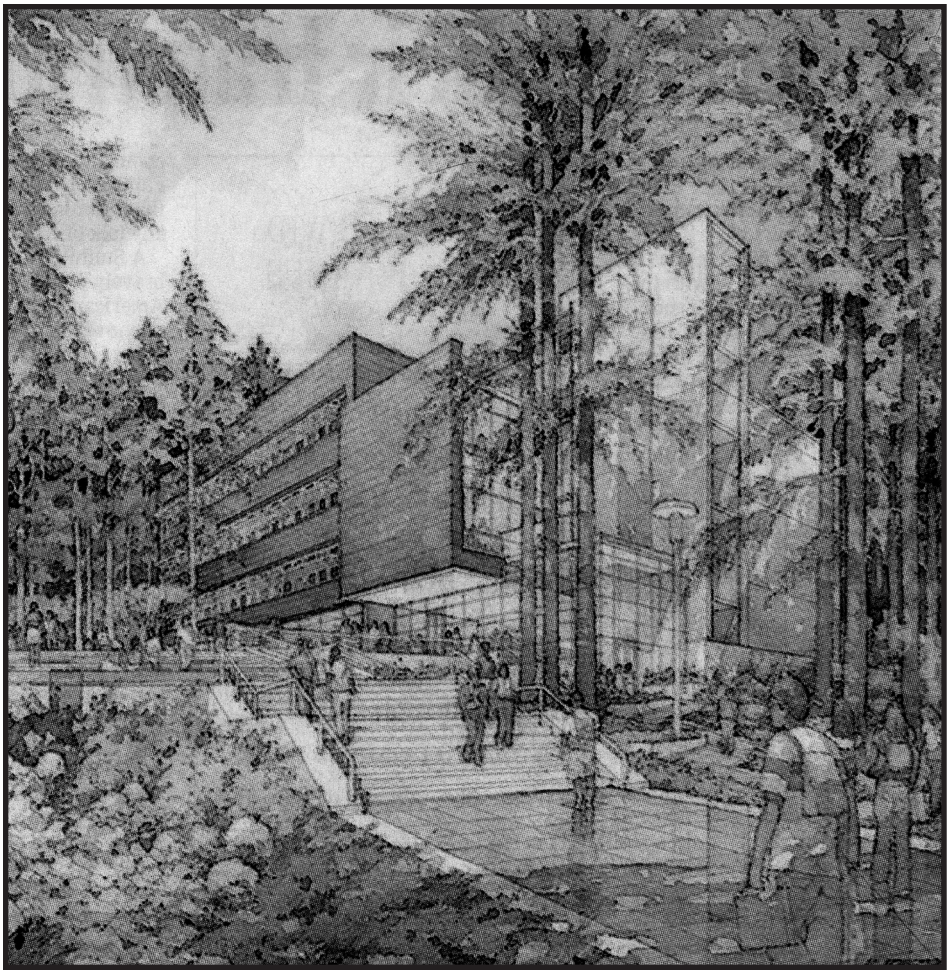
As we can see from the example above, the influence of corporate sponsorship often extends far beyond the laboratory. As Leslie Glick, founder of Genex Corporation explains it, "Not only will commercial considerations influence decisions about thesis topics and research proposals, but they will likely influence the employment and promotion of professors". [35] We can see this at work locally.

Last year UCSC announced Phillip Berman as the new head of the Biomolecular Engineering Department. Berman spent the past 15 years working for Genentech, one of the world's largest industrial Biotechnology companies. [36] He will be receiving an annual salary of $156,000. [37]

Such an addition to the UCSC faculty may become more frequent. The 2007 Draft Strategic Academic Plan suggests that in the wake of rapidly decreasing state funding UCSC should hire faculty that can attract external funding. Berman is the physical manifestation of George Blumenthal's "entrepreneurial spirit"-- the scientist/business man who will run his department like a corporate enterprise. "I will work to develop a first-rate biotechnology program at UCSC that takes advantage of the

George Blumenthal, the recently inaugurated Chancellor of UCSC, was welcomed at a reception in the elegant San Jose Museum of Art last September. A crowd of about 100 members of Silicon Valley's elite tech companies, joined by civic leaders and federal officials, welcomed the 61-year-old astrophysicist with enthusiastic applause. The Monte Sereno resident has spent much of the past year off campus, building close ties with influential high-tech leaders who help make UCSC part of the Silicon Valley. Blumenthal's own words spell out that vision. He calls his campus "the UC of Silicon Valley." His goal is to change UCSC's reputation from a counter-cultural, liberal arts university into a high-tech research institution. Blumenthal is the sole academic member of the Silicon Valley Network, a group of corporate executives and elected officials who are anticipating something they like to call the "bio-info-nano-tech revolution." "The market potential of these converging technologies is substantial," they say. The cumulative market for converging bio-, info- and nanotechnologies could top $1 trillion in about a decade. "Congratulations to the top banana slug!" said Carl Guardino, president of the Silicon Valley Leadership Group in a toast.

Source:
Krieger, Lisa M. "Think of UCSC as UC-Silicon Valley, new Chancellor says." Mercury News, 30 September 2007.
The Next Silicon Valley Initiative. "Preparing for the Next Silicon Valley: Opportunities and Choices." June 2002.



A rendering of the planned Biomedical Sciences Facility (source: SC Sentinel)

campus's proximity to the Bay Area biotech community," Berman said recently in an interview. [38] Professors like Berman will make sure corporate representatives are lining up outside the new Biomedical Sciences Facility with pens at the ready.

There are other issues involved with the corporate sponsorship of universities. There are accounts of corporations stealing and patenting research that universities do not want to give. Genetech, for example, Phillip Berman's previous employer, was sued by UCSF. This $400 million lawsuit was filed by UCSF for the alleged theft of a drug that the university developed and patented. Protropin was a huge success on the market, making $2 billion in sales for Genentech. The $200 million that Genentech had to give UCSF under the terms of the settlement functioned as little more than an investment for the company. [39] Despite Genentech's obviously unethical behavior, this corporation and the UC remain cozy.

Corporate funding—like that which will certainly be brought in by the new Biomedical Sciences Facility here—can help under-funded public universities, but at what expense? The line between corporate sponsorship and corporate control has grown increasingly thin. As labs make deals giving corporations exclusive ownership of student and faculty research, the number of professors with corporate ties increases, and those who object are effectively silenced. The central issue, then, is not simply that these unethical Biotech companies are making deals with UC campuses; the issue is that these deals are made at the expense of the faculty, the quality of education, and those who are supposed to benefit the most: students.

> Corporate sponsorship threatens to change the character of the Sciences in ways that limit intellectual freedom, the culture of openness and the tradition of sharing results.

Life on campus

Last year UCSC researchers brought in $111 million in external grants and contracts. [40] This money supposedly went to help with decreasing state funding, but who is really seeing the benefit of it? Though the sciences continue to be highly funded, not even science undergraduates are seeing the benefits of corporate investment.

One way UCSC consistently uses this money is for new departments and buildings that will encourage more external funding, such as the proposed Biomedical Sciences Facility. There will be no classroom space in this new facility. It will be mostly used as a research magnet for Bay Area biotech giants. "This facility is unlikely to do much for undergraduate research, and represents a continuation of the ongoing corporatization of the University of California," explains former-Chemistry student Ike Solem. [41]

Corporate influence actually hinders the education of Science undergrads. The corporate funding of departments limits what type of research students are capable of pursuing. With companies buying out departments, students often have their research options already decided for them, or are limited to helping professors with their already corporate-sponsored projects. Professors themselves are stuck following the terms of giant grants and UC-sponsored fields. Everyone simply "works" on research, there is no room left for students to think critically, ask questions, or steer their own path. Martin Kenney explains the ways science departments are short-changed by corporate involvement in his book *Biotechnology: The University-Industrial*

Complex:

"As the university is bought and parceled out, basic science in the university will increasingly suffer. The speculative non-commercial scholar will be at a disadvantage, and the intellectual commons so important for producing a trained labor force and the birthplace of new ideas will be eroded and polluted".[42]

Besides limiting the focus of research, corporate sponsorship threatens to change the character of the Sciences in ways that limit intellectual freedom, the culture of openness and the tradition of sharing results. The obsession with patents encouraged by sponsors forces students to compete with one another instead of working together to reach a better understanding of their field.

There is also the issue of intellectual property—especially pertinent for biomedical research. First, there is the increased secrecy involved in corporate funded research. Corporate sponsors want to protect their investments by making research results confidential. Students and faculty researchers are required to sign a University Patent Acknowledgement where they agree to disclose promptly the conception of all potentially patentable inventions and assign all ownership rights to the university. [43] In the case where all funding was provided by one commercial sponsor, an exclusive license to patents is given to that sponsor. The researcher has no say in how her research is used, or not used--there is evidence of companies occasionally trying to suppress unfavorable findings.

Often corporate sponsors delay the publication of new research to ensure their sole ownership. In a study from the mid-1990s more than half of the corporate sponsors asked admitted to insisting regularly on delays of more than six months. [44] As Solem explains it, "This whole thing is just rotten. I've personally seen graduate students have their thesis and publications postponed until the patents are approved--just to make sure that the corporations don't have to worry about someone else getting those intellectual property rights. Is that 'the free exchange of ideas'? Hardly". [45]

While the Science departments are increasingly privatized--at the expense of science students--the departments that don't bring in corporate investments continue to be neglected. The administration plans to spend more than 80 million dollars on the Biomedical Sciences Facility despite severe under-funding in the Humanities. Literature classes are so over-crowded that discussion is compromised. Underpaid TAs are expected to take on an unmanageable number of students. A lack of funding in the Film and Photo departments makes it so students have to wait until they have almost graduated to begin working with equipment full-time. Programs like Rainbow Theatre

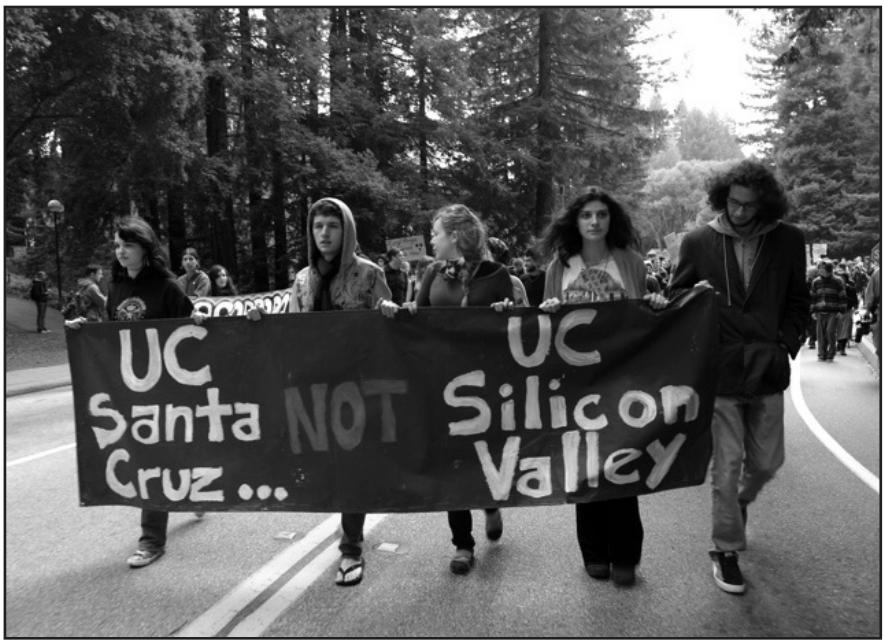
I am not a mechanism, an assembly of various sections.
And it is not because the mechanism is working wrongly that I am ill.
I am ill because of wounds to the soul, to the deep emotional self
and wounds to the soul take a long, long time, only time can help
and patience, and a certain difficult repentance
long difficult repentance, realization of life's mistake,
and the freeing of oneself
from the endless repetition of the mistake
which mankind at large has chosen to sanctify.

D.H Lawrence

and non-European Languages are threatened and UCSC still refuses to instate the popularly requested Journalism and Ethnic Studies departments. Tuition rises, the quality of education steadily declines.

It seems expansion projects like the Biomedical Sciences Facility are harmful to everyone involved. It is unlikely to do much for undergraduate education, and represents the ongoing corporatization of our university. [46] To humanities students it represents the on-going neglect of the arts, increasing class sizes, and decreasing budgets. To science students it means new, flashy facilities but a growing lack of agency and integrity in their educational experience. This facility will signal an increase in corporate-connected faculty and the silencing of professors like Ignacio Chapela who oppose it. The citizens of Santa Cruz voted overwhelmingly against the expansion of the university that would turn the city into an over-built suburb of the Silicon Valley. [47]

The Biomedical Sciences Facility can serve as a symbol of the poor planning and neglect for students that characterize the greater Long-Range Development Plan. In both cases the university is going ahead with their plans with regardless of the concerns of students, faculty, and community members. They follow the most profitable path without heeding the implications that their plans will have for the quality of education, the city of Santa Cruz, and the world at large. Truly, it is difficult to see who will benefit from this facility at all.



Endnotes

1. Of the first four projects, the Cowell Student 1) Of the Health Center addition, the McHenry Expansion, the Cooling towers, and the Biomedical Sciences Facility, UCSC is pushing hardest to begin construction on the Biomedical Sciences Facility

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3. Board of Directors. Silicon Joint Venture Initiative <http://www.jointventure.org/aboutus/boardofdirectors.html.> "Preparing for the Next Silicon Valley: Opportunites and Choices." The Next Silicon Valley Initiative. <http://www.jointventure.org/PDF/NS-Vchoices.pdf>

4. "Biomedical Sciences Facility: Final Initial Study/Mitigated Negative Declaration Study" <http://www.universityofcalifornia.edu/regents/regmeet/jan07/109attach2.pdf>

5. "Weird Science." Good Times Weekly, 24 January 2007

6. "UCSC's $80 milion lab facility gets go-ahead despite protest." Santa Cruz Sentinel, 17 January 2007.

7. See the LRDP

8. Biomedical research, by its very nature, produces dangerous, radioactive, and/or toxic wastes. The UCSC Environmental Health and Safety department handles biohazardous wastes including: "cultures and stocks of infectious agents from research laboratories,... animal parts, tissues, fluids, or carcasses suspected of being contaminated with infectious agents known to be contagious to humans." See the Biohazard and Medical Waste guide at http://ehs.ucsc.edu/waste_management/biohazard_and_medical.php

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11. Ibid.

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20. "FAQs about Genetic Engineering" Northwest Resistance Against Genetic Engineering

21. Wunder, Michael. "Biomedicine and Bioethics: The Human Being as Optimisation Project" <http://bidok.uibk.ac.at/library/wunder-bio-e.html>

22. For the text of the next two paragraphs see the Council for Responsible Genetic's "Position Paper on Human Germline Manipulation" at http://www.gene-watch.org/educational/germline_manipulationPP.pdf

23. "The End of Nature - From Banana Vaccines to Fast-Growing Fish: DNA Lets Scientists Play God"The Village Voice, 10 March 1998.

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25. Ibid. i.e reductionism

26. Bok, Derek (2003) Universities in the Marketplace: The Commercialization of Higher Education, Princeton University Press.

27. "UCSC posts record growth in research funding in 2005-06" UCSC Currents, 8 August 2006. <http://www.soe.ucsc.edu/news/2006/08/08/ucsc_posts_record_growth/index.html>

28. An example of UCSC's plans to foster these connections: "AIDS vaccine expert Phillip Berman to head UCSC Biomolecular Engineering Department" 3 August 2006:"I am most pleased to have Dr. Berman join our faculty to lead the Biomolecular Engineering Department at this critical juncture. With his deep knowledge of the biotechnology field and extensive experience in the industry, Dr. Berman will help realize the vision of the Baskin School of Engineering in pioneering biomolecular engineering and bioengineering programs, in particular in building strong links to the biotechnology industry in the Bay Area and globally." "AIDS vaccine expert Phillip Berman to head UCSC Biomolecular Engineering Department". UCSC Currents, 3 August 2006.

29. "6,154 UAW members publicly call on UC to bargain a fair contract by 9/30". See Public comments by Ike Solem at <http://www.indybay.org/newsitems/2007/09/18/18448288.php?show_comments=1>

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