Science fiction author Michael Crichton presents his talk entitled “Do Aliens Cause Global Warming?” at Beckman Auditorium last Friday night.

Crichton Criticizes Scientific Process for Misrepresentations

By ADAM SEARS

Science has served humanity well for many generations, rising star and popular fiction writer Michael Crichton reminded a packed Beckman Auditorium as the sun went down Friday night.

Speaking as part of Caltech’s Michelin Distinguished Speaker Series, Crichton asserted nevertheless that in many cases the scientific process was being hijacked by activists who grossly misrepresented the certainty of findings, often taking advantage of the media and citing popular “consensus.”

“Consensus is the business of politics,” he said. “In science, consensus is irrelevant.” He continued, citing examples such as global warming and nuclear winter, where bad or inconclusive science was leveraged to create policy.

One topic that drew a lot of heat from the audience was the nuclear winter scenario. Cited by prominent climatologist Carl Sagan and another scientist in the early ‘80s, With the threat of war and the fear of possible nuclear attacks, no one wanted to take a soft stance on the subject. But Sagan contended that multiple warhead exchanges would launch a cloud of dust into the air, paralyzing the Earth’s photosynthetic processes.

In a series of press releases, often weeks before real scientific papers were published, the two gained enormous publicity for their theories. This, Crichton said, was simply not how the scientific timeline should run. “This is how products are sold,” he explained. In addition, Crichton pointed out the absurdity of an equation used to describe the total effect of nuclear winter, which simply multiplied a large number of variables—none of which could actually be determined.

A similar formula, the Drake Equation, existed in the search for extraterrestrial life and the SETI project. According to Crichton, the Drake equation could have any value from “billions and billions” to zero, depending on personal bias. “SETI is a religion,” he concluded. He tied the title of the talk, “Do Aliens Cause Global Warming?,” to this particular misrepresented campaign. After detecting a falsely positive signal from aliens in 1960, the search for other worlds grew in publicity and power, but lost no credibility. Today, Crichton said, a willingness to settle for the baseless claims of SETI science has allowed other crusades, such as that against second-hand smoke, to proceed to eliminate threats posed by rogue states.

As a White House statement declares, “we must be prepared to defeat our enemies’ plans, using the best intelligence and proceeding with determination.” The government’s commitment appears to be leaving no possibility unexamined.

“Even our liberty-loving American people will sacrifice their freedom and their democratic principles,” observed American journalist Agnes Meyer, “if their security and their very lives are threatened.”

Already, protests against the unlawful arrests of thousands have broken out across the country. Accusations of torture and mistreatment of war prisoners have been rampant. Still, it is not clear how long the government will hold many detainees and their prospects of a fair trial seem to diminish by the day.

The White House has also proclaimed that “the greatest danger our Nation faces lies at the crossroads of radicalism and technology.” The peril of weapons of mass destruction is too large to ignore. With rumors of “suitcase nukes” having escaped from the former Soviet Union and the threat of biological agents deepen, technology is a scary subject for many people.

The possibility of Caltech’s own research being leaked to America’s enemies has many people terrified. A logical security measure would increase screening of researchers and restrict access in American laboratories. The status of many prestigious research institutions as universities causes a conflict of interest. Most universities have a strict benefit in the spread of knowledge, so many are reluctant to adopt restrictions of any kind from the government.

Two main types of restrictions have been requested by the government of universities conducting research.

Continued on Page 3, Column 1

Army, U.S. Security Concerns Zero In on Caltech Research

By MATTHEW WALKER

In the past year, national security awareness has been heightened by the stunning events of September 11, 2001. More than ever before, the need to protect Americans from a diverse set of threats is more apparent. In the past America has been threatened by only the strongest of industrial and military powers. Today, the threat posed by the historically weak is finally, momentarily recognized — perhaps most prominently at Caltech.

Increased security precautions across the country have been adopted in an attempt to disarm any potential threat. New airport security measures prevent a repeat of the September 11 events, tighter border control keeps terrorists from successfully infiltrating the country and missile defense research hopes...

Continued on Page 3, Column 3

ITS UPGRADES STUDENT WEB CONNECTIONS

ETHERNET FROM FAST TO FASTER

Internal Backbone Linking Houses Improved

By ROBERT LI

Amounting to a ten-fold Internet speed boost, Information Technology Services completed long-awaited upgrades to networks in the north and south houses and to the intra-campus backbone of Caltech’s internal network.

ITS’s upgraded infrastructure in the seven houses from a 10-megabit per-second shared network to roughly 1.3 megabytes per second — to a 100-Mbps, fully...

Continued on Page 3, Column 3

Advisory Committee Puts Health to Heart

By KAYTE FISCHER

Once a month, a group of students gathers in the SAC to discuss issues relevant to campus health and well-being. The recently founded Health Education Student Advisory Committee, also called the SAC, is a focus group designed to give feedback and ideas for potential programs to Jane Curtis, the campus health educator.

“To me, the SAC was formed to help students have an awareness of health issues and get them to eat their vegetables,” said committee member Alice Lin ’05.

Dr. Curtis gleams opinions on such health matters both from the committee itself and from students who stop by during drop-in counseling hours, who write on the bulletin board outside her office or who speak casually with her at various campus events.

She also works with Student Affairs administrators such as Dr. Kevin Austin, director of the Counseling Center, and Marcha Marhask, vice president of Student Affairs, to create what she termed a beneficial atmosphere for the students.

“People ask me ‘What do students think about this or that idea?’ and I need focused student opinions, so I founded the SAC.”

The SAC looks at various health issues including nutrition, exercise, stress management, student loneliness and sleep deprivation. It is developing ways to make the rest available to students on campus and promoting awareness of health-related issues.

Most recently, the topic of conversation has been nutrition. Students are concerned about the freshness

Continued on Page 7, Column 3
SURF Year Ends With Perpall Speaking Finals

By TAMMY MA

The 2002 SURF year was brought to a close on Thursday with the final round of the 2002 Doris S. Perpall Speaking Contest. The first place winner was Kristin Shantz ’04, second and third places were won by Rachel Theslin ’03 and Hermes Huang ’04, respectively. These awards were the culmination of months of hard work for these winners. Each started out participating in the Summer Undergraduate Research Fellowship or SURF program. For ten weeks during the summer, they and over 300 other undergraduates from Caltech and other universities performed research under the guidance of mentors here and at JPL.

The SURFers then presented their research on SURF Seminar Day, which took place on October 19, 2002. The session chairs and judges identified the best speaker in each session and these students were invited to the semifinal round. In three rounds of competition, the number of students that advanced to the next round was cut from 200 to 30 to the eight in the final round. These eight gave their presentations again to a panel of four judges, who then picked the top three prize winners.

Each student had a presentation time of 15 minutes, with an additional three minutes for questions and discussion. Prizes were awarded for presentation skill and not for research results. The first place winner receives $500; second, $300; and third, $200.

The Doris S. Perpall Speaking competition was begun in 1993 in memory of a distinguished student, Doris Perpall in honor of her late husband, Doris. It was her desire to have students...communicate their research experience. Good communication skills are important in the jobs and professions that students enter and SURF provides students the opportunity to begin to develop those skills,” added Carolyn Merkel, director of the Student-Faculty Programs at Caltech.

The Perpall Speaking Contest has now become an integral part of the SURF program. Students, mentors and spectators agree that the presentations and the Perpall Competition serve as excellent opportunities for young researchers to highlight the work they have done and to learn to give technical talks.

This year marked the tenth year the Perpall Speaking Contest has been held. Stated Robb Perpall, “Each year, the presentations are getting better. Before starting the competition, there was not much interest among students to present their research. However, it is necessary to understand its importance in academic, industrial and even financial situations. The ability to communicate ideas is paramount.

The competition was originally set up with first, second and third places. But in some years it has been so difficult to distinguish winners that ties for third place have been given. Students are judged on the basis of the introduction and organization of their talk, the technical content and their presentation skills.

Mr. Perpall also commented on how tough the competition was. “The quality of these talks are all excellent. Everyone wins because they get the chance to improve their presentations and gain presentation experience. It is also very difficult to judge because no one person can listen to all the presentations [during SURF Seminar Day]. Let alone have a firm understanding in all the different topics students present.”

The project of this year’s competition winner, Kristin Shantz, was entitled “Microfluidic Single-Cell Gene Amplification for Termite Gut Bacterial Analysis.” To prepare for her presentation, Kristin said she simply “practiced and practiced.” She was surprised when she made it to the semifinals and even more so when she won the final round! “It’s exciting to be able to present. Any area of science requires communication skills. We have to be able to effectively share our research if we want to get funding.”

Second place winner Rachel Theslin gave her talk on “Bringing Phase to Quadrature Phase Interferometry.”

Preparation and practice for a talk are necessary to understand its importance in all the different topics presented in.

“Microfluidic Single-Cell Gene Amplification for Termite Gut Bacterial Analysis.” To prepare for her presentation, Kristin said she simply “practiced and practiced.” She was surprised when she made it to the semifinals and even more so when she won the final round! “It’s exciting to be able to present. Any area of science requires communication skills. We have to be able to effectively share our research if we want to get funding.”

Second place winner Rachel Theslin gave her talk on “Bringing Phase to Quadrature Phase Interferometry.” And third prize Hermes Huang’s presentation was “First Principles Distributions Properties in MgO From Molecular Dynamics.”

The other free finals, Safia Abidi ’03, Serina Dinigea ’03, Stepankovich ’03, Nitza Roth ’03 and Justin White ’04 were awarded honorable mentions. Their SURF projects were spanned the scientific spectrum, ranging from neurobiology to physics to social science.

The Perpall Speaking Contest has now become an integral part of the SURF program. Students, mentors and spectators agree that the presentations and the Perpall Competition serve as excellent opportunities for young researchers to highlight the work they have done and to learn to give technical talks. Notes Norma Davolos of the SURF office, “When a student addresses his project in a way I can understand, science doesn’t seem so exclusive for someone as myself.”

“The Perpall contest supports Caltech’s efforts to help students develop good communication skills. SURF has always had the requirement that students report on their research through written technical papers and oral presentation. Since science not communication is essentially science not done, communication is a critical component of the research experience. Good communication skills are important in the jobs and professions that students enter and SURF provides students the opportunity to begin to develop those skills,” added Carolyn Merkel, director of the Student-Faculty Programs at Caltech.

The winners of the 2002 Doris S. Perpall Speaking Contest pose with Mr. and Mrs. Perpall. From left to right are Hermes Huang ’04, Kristin Shantz ’04, Mr. Perpall, Mrs. Perpall and Rachel Theslin ’03.

search for them, according to Director of Sponsored Research Richard Seligman. The government agencies, typically military agencies, ask for essentially, our state, and even foreign nationalities, not to be allowed to work on their projects and stated that the government reserves the right to review all reports before publication.

Universities have generally been rejecting such conditions. Caltech has a kind of compromise policy of “simultaneous submission”—that is, “you write the paper and then submit to a journal and simultaneously submit to your contract monitor,” according to Associate Provost Dan Meiron.

Last year, though, Dr. Meiron’s research group accepted a contract from the Army Research Lab that forced them to submit to the contract monitor before publication. The contract was made just weeks after September 11, 2001 and ARL was unwilling to negotiate on the position. According to Dr. Meiron and Dr. Seligman, when the office of Sponsored Research was finally able to convince the Army of removing the restriction, the financial year had ended for the Army, putting funds at risk if the contract had to be re-negotiated.

Ultimately, [Caltech] decided to accept the language because I was not really bothered and I didn’t think it would hold up our work at all,” explained Dr. Meiron. Dr. Seligman and Dr. Meiron both emphasize that the decision does not reflect a policy change on Caltech’s part, saying that the acceptance had been done in such a way not to cede. Were the funding for the project to be renewed, the restriction would not be accepted, added Dr. Meiron.

One reason that the language was accepted was that since September 11, there has been “many people anxious to find a way to help,” said Provost Steven Koonin. And Caltech happened to be well equipped to carry out the project, an analysis of the effects of blast on structures. There is a strong sentiment not to work on classified projects. But in some cases, in the end, not to work on classified projects. Dr. Seligman, “Classified work should not be done at Caltech.”

The National Academy of Sciences recently discussed the issue of classified work and issued a statement saying that it recognizes a need to achieve an appropriate balance between scientific openness and restrictions on public information.” Dr. Koonin, who every summer works with a group of academics from across the nation to tackle classified problems for the government, explains, however, that some groups have it easier than others.

Physicists, for example, are more familiar with security issues and are more likely to work in classified research. "Physicists, for example, are more familiar with security issues and are more likely to work in classified research.

Since September 11, 2001, Caltech has certainly felt and understood the need for increased secrecy, but university policy of academic openness has not allowed the principle of academic research to be compromised by unnecessary security restrictions.

Should Caltech compromise more for the cause of national security? What, if any, obligation do we have as students and researchers to our nation?
Ensminger Plots Econ. Presentation  

By ROBERT TINDOL  

U.S. Congressmen Adam Schiff and Judy Chu host a forum for technologists and science students and their teachers on the Caltech campus during the first week of the semester, with a focus on “Experimental Economics in the Bush: From Africa to Small-Town America,” which focuses on Dr. Ensminger’s expertise in experimental economics. Dr. Ensminger, who is also chair of Caltech’s humanities and social sciences department, conducts her research by running experiments to investigate how economic decisions making can vary across cultures.

In the forum, Ensminger carried on her research with students and teachers from the Bush Institute for Science and Technology, as well as other institutions. She also discussed her work with a group of students from the Caltech undergraduate program.

Sagan, Media, Warming Top Author’s Hit List  

By JILL PERRY  

Los Angeles Dodgers senior vice president and all-around baseball legend Tommy Lasorda will be honored as “An Evening with Tommy Lasorda” at eight p.m. on February 7 in Beckman Auditorium. It is free, open to the public and reservations are not required.

Tommy Hawkins, Dodgers vice president of external relations and former Lakers basketball player, will conduct the show onto the stage at Caltech and will interview him about his career. Special guests will include Bussi Buvais, the general manager who hired Lasorda into the Dodgers organization; Ron Dedeaux, the former USC baseball coach who played under Tommy; Don Newcomb, one of the prospects including Tom Seaver, Randy "The Big Unit" Johnson and home run king Mark McGwire; Peter O’Malley, former Dodgers president; and other constitutional officers, legislators, the Governors and California Institute of Technology professor of anthropology Jean Ensminger for the 4th Annual Congress on Science and Tech.

For more information, contact:
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Application Deadline: February 3, 2003

THE CALIFORNIA TECH  
NEWS  
JANUARY 20, 2003  
3

From Shared to Switched Net, ITS Makes Jump From 10 to 100 Mbps

By JILL PERRY  

The Internet Service Team at California Institute of Technology (Caltech) has upgraded the backbone network to 100 Mbps, which is over 10 times faster than the previous speed of 10 Mbps.

According to Megan Watanabe, manager of operations at ITS, the backbone network bandwidth has been increased from the old 10 Mbps to 100 Mbps, which is the fastest speed available. This is achieved through the use of so-called “hubs,” ported meaning that a node cannot both talk and listen at the same time.

Furthermore, the total network bandwidth, which is the maximum rate that data can be transmitted across the network, was limited by the 10 Mbps speed. This figure measures the total bandwidth available, split evenly among users.

As a consequence, the network slowed down drastically during times of peak usage. Technically, this stems from shared networks’ use of a single network port, which prevents from Internet access to a number of users, to connect the various nodes.

To solve such inherent problems of a shared network, ITS replaced the approximately eight hubs on each house with two Cisco switches so that the House networks would be fully switched. In a fully switched network, each node can talk to any other node at the same time and multiple nodes can talk to one another at the same time, although messages get “multiplexed” in the meantime.

Communication is done at “full duplex,” meaning that a node can both talk and listen at the same time, thus doubling the effective bandwidth. Most importantly, however, each computer gets the full 100 Mbps bandwidth so that the total network bandwidth is equal to the number of nodes times the speed of the switch.

For a typical switch of 24 ports running at 100 Mbps, this means the total network bandwidth of 2.4 Gbps. With the upgraded network, students should see better Internet performance and much better speeds to on-campus computers.

According to Watanabe, pings, a measure of latency or delay between sending a packet and receiving it—will be a little better but he stresses that pings are “not a good measurement of performance.”

In addition to the improved performance, the upgrade will also let ITS better manage the house network. Said Watanabe, “If a node, for instance, is causing problems, the owner may be identified and/or the port disabled.”

Braun and Marks are scheduled for upgrades this term but there is yet no set date for Avery. Regarding the delays, Watanabe said “It’s not on the calendar yet” but said that it will definitely be done in the future when both money time become available.

Sometimes in the future, students can also expect wireless access to be installed in the Houses—first in the common areas and followed by the dorm rooms.

A student uses an ITS computer in Steele Lab. The Caltech network was recently upgraded to a 100 Mbps fully switched network.


Died at age 71, with cancer.

Crichton critiqued many other practices that stemmed from this lack of responsibility of modern scientists. Calling peer review worthless, blasting the Scientific American for its untruthfulness and lambasting the “deterioration of the American media,” Crichton certainly had a bone to pick with certain institutions.

After rhapsodizing about realistic “phenomenal gift propagandist,” he was confronted by one supporter who had experienced his scientific objectivity personally. Other students pointed out in the question and answer period that he had a responsibility as a science writer to be realistically “certain” in his fiction, while others questioned the generally technophobic themes in his books.

Finally, as if testing his patience with “skeptic”—whose plight he supported in the talk—the last questioner proclaimed, “So the idea was to resolidify the polar ice caps. Crichton strained to find a reply, bit in the end, simply let the event close. We can only proceed he supports them enough to come back again.

Continued from Page 6, Column 1

Sagan, Media, Warming Top Author’s Hit List

Continued from Page 1, Column 3

Dr. Ensminger’s expertise in experimental economics is focused on understanding how economic decisions can vary across cultures. Dr. Ensminger’s research is conducted by running experiments to investigate how economic decisions making can vary across cultures.

In her research, Ensminger carries on her research with students and teachers from the Bush Institute for Science and Technology, as well as other institutions. She also discussed her work with a group of students from the Caltech undergraduate program.

For more information, contact:
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Application Deadline: February 3, 2003

Fellows work directly with state legislators, the Governor’s office and other constitutional officers, and the Supreme and Superior Courts, to develop public policies for the most challenging and diverse state in the nation. The programs offer a unique experience in policy-making and exciting opportunities to jump start careers in public service.

With no full disclosure of scientists’ reasonable certainty. Global Warming, as an example, was first popularized just as computers modeling began to take off. The consequence, says, was that the use of computers was more of an amazing “result” than the generation of a Global Warming prediction.

After running through a list of modern, revolutionary inventions, Crichton offered the accuracy of any statement about a society 100 years in the future. “Nobody believes a weather prediction 12 hours ahead.” Yet Global Warming is still being used to influence domestic policy.

During the remainder of the lecture, Crichton criticized many other practices that stemmed from this lack of responsibility of modern scientists. Calling peer review worthless, blasting the Scientific American for its untruthfulness and lambasting the “deterioration of the American media,” Crichton certainly had a bone to pick with certain institutions.

After rhapsodizing about a “phenomenal gift propagandist,” he was confronted by one supporter who had experienced his scientific objectivity personally. Other students pointed out in the question and answer period that he had a responsibility as a science writer to be realistically “certain” in his fiction, while others questioned the generally technophobic themes in his books.

Finally, as if testing his patience with “skeptic” — whose plight he supported in the talk — the last questioner proclaimed, “So the idea was to resolidify the polar ice caps. Crichton strained to find a reply, but in the end, simply let the event close. We can only proceed support them enough to come back again.
Old Traditions Die Hard at Tech
Dean Revel Examines the History Behind the Ricketts Fire Pot

BY JEAN-PAUL REVEL

In the opening soliloquy of a well-known 1960s musical, Tevish, husband of Golde—Do you love me?—and father of five daughters exclaims: "A fiddler on the roof. Sounds crazy, no? But in our little village of Anatevka, you might say every one of us is a fiddler on the roof, trying to scratch out a pleasant, simple tune without breaking his neck. It isn’t easy. You may ask, why do we stay here if it’s so dangerous? We stay because Anatevka is our home. And how do we keep our balance? That I can tell you in a word: tradition."

While Tevish’s solution to anti-gravity may be a bit surprising it is an equally curious twist of things when an institution such as ours is also revealed to rely on traditions. By the way, it might have been okay for Tevish to stand on his roof, but dear reader and friends, don’t you dare emblazon that esteemed character by standing on the roof of your house, to fiddle or to do anything else. Great for him to invoke Tradition in a supranational position but no place for you to do it.

But to get back to where I was going, it is not surprising that there would be such “conservative” undercurrents at Caltech? Aren’t we the folks at the cutting edge? Full speed ahead, not slowed down by the old ways or staid procedures, speed ahead, not slowed down by our balance? That I can tell you in a word: tradition.

As I reported in these pages before, some claim that the pot owed its existence to a gesture by Millikan, making it an object of historical significance. No wonder that such a precious thing would be familiar in a changing and sometimes scary environment, so I presume it will not find its way to just some other collection, but will stay here at the very spot where it was first placed.

What will happen now is not known to me as I write this. Whether there will be a new, legally acceptable, and familiar object will be—has been—deemed by the present members of the Executive Council.

Traditions provide us with a sense of stability and help us to change. But that may not be the case in this instance. The pot is not familiar in a changing and sometimes scary environment, so I presume it will not find its way to just some other collection, but will stay here at the very spot where it was first placed. If the pot returns, the students will probably want to change the plant, maybe put in a few shrubs or tulips to grace their courtyard about to disappear. The plant will likely be replaced with one that is more conducive to the present object in the Ricketts Court House. It is the end of an era, with the fire pot that has been gracing their courtyard about to disappear in a fashion much more dire than the one that the students used to keep in their own rooms for safety and comfort. The pot is now a thing of the past, a period that included the staid procedures and many of the ideas that have been abandoned in favor of more modern and efficient ways of doing things.

As reported in these pages before, some claim that the pot owed its existence to a gesture by Millikan, making it an object of historical significance. No wonder that such a precious thing would be familiar in a changing and sometimes scary environment, so I presume it will not find its way to just some other collection, but will stay here at the very spot where it was first placed.

Using a fire pot in a crowded urban environment may not be the thing to do. I have heard there is some interest in replacing the pot with a gas burner, which may certainly preserve some of the aspects of that handsome, possibly dangerous object. Trouble with that theory of course is that it would be just as difficult to find a suitable object, and that one would also have to consider the pot's appearance.

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The biggest problem center on the basis of our sexual orientation. Harry Potter is a very devoted and practicing homosexual, President and in the Student Pride Association, Caltech’s gay and lesbian club. I have the data to do this analysis or perhaps also by faculty. Here I wish I may, for the Subversion of Straight Sexuality...

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The Literature Faculty is pleased to announce the Annual CAN YOUR "FEDERAL FUND/E IN/ON FIRE. BEGIN? OUR TIDE CAN YOU SKILLED BY AN GOVERN-I HAVE TO SEMINAR ON SCIENCE YOU LOWEST, Dr. Harry Collins and Andrew W. Mellon, a Visiting Professor FOR AN HOUR OF FUN AS WE DISCOVER Rossini and his sparkling comic masterpiece. Please bring
entries will be returned. Each category will be judged by a committee from the Literature Faculty. Essays will be judged on the quality of thought and the effectiveness of the writing. Winners will be announced in May and the names of the winners will appear in the commencement program. The Committee may divide the award in each category in case of more than one outstanding submission. Previous winners in any one category are not eligible for the competition in that year. If you have any questions, contact Prof. La Belle, ext. 3605 or Barbara Estrada, extension 3609.

Caltech Opera Club Meeting, Wed., Jan. 29, 12-1 p.m. Chris Brennan Conference Room, 3rd Floor, Center for Student Services, Topic: Rossini's The Barber of Seville. Please join us for an hour of fun as we discover Rossini and his sparkling comic masterpiece. Please bring your lunch and friends. If you have any questions regarding the Caltech Opera Club or this event, please email Angela Wood at angewood@caltech.edu.

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They are ads that are part of the floor, Metropolitan, Music on a Mission," Baxter, Room 25, Fri., Jan. 24, 2002, 4 p.m. Seminars are open to students, staff, and faculty every Monday at noon in the Holliston parking structure. If you are interested in a Y activity or have questions about the Y, please stop by, or send an email to the Vice President (y-veep@ugcs).
The Changing Bylaws: Voices Faced With Four-Pack

Director-at-Large, Proposal, Top to Bottom

By TED JOU

The Director at Large amendment is definitely the longest and probably the most confusing of the four proposed bylaw amendments. When I first read it, I thought I would try to explain this complex proposal. However, since I am not a lawyer or at Large, I would not have the luxury of guaranteed rumbling noise, so why should the ASCIT secretary? And yet this bylaw mandates just that: everything said, written, or distributed by ASCIT we as students and we as members of the ASCIT Corporation will be forever a part of the minutes.

By GUNNAR RISTROPI

If the members of ASCIT vote to pass only the first or second proposed four-pack of amendments, ASCIT, Bysts, freshman representative on Future and Upperclass Directors at Large, have as much importance as the bylaw amendment is a necessary addition.

Kevin Burr '05

The ASCIT Board of Directors has proposed four amendments to the bylaws to be voted on by all members on Wednesday. The first proposed amendment creates a much-needed process for dealing with appointments to outside committees with an office of “Director at Large” to oversee the appointments. The second amendment creates a new office on the BoD, the Upperclass Director at Large. While both of these purposes are good and valuable, in my opinion, these solutions have an unacceptable side effect: they remove guaranteed freshman representation on the BoD.

No one has argued that the ARC is not the most important part of the ASCIT Corporation. However, when we look at what has actually happened over the past two years, we’ll see that the ARC has not had very good contact with the committee representatives at all. The truth is, the ARC has too many of its own members, especially freshmen, who are not very familiar with, much less interested in, student body issues. The Board of Directors appointed the ARC to be the representative of the women’s dorm in the student body. Some of the most important: Freshmen representatives, and in the future, representatives of Health and Welfare. These women are not the ones who will have to talk with these representatives.

A quick review of the little 1994-1995 minutes shows that there are no positions now available, but there is no one that keeps up with what the ARC is doing and makes it appear in the minutes on the Board of Directors.

The proposal comes with the statement, “a VOlce on those issues.” It’s also a VOlce on whether a VOlce on those issues are represented by the ARC.

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Letter: Class Offers ‘Tool Acquisition’

Continued from Page 4,.Column 5

benefit analysis if they spend too much time on the last, most difficult aspect of the homework set.

If a student spends, say, four hours on doing 10% of the homework and then spends another four hours on the remaining 90%, especially if the second part is difficult, is this a good use of time? Sometimes yes, but often no. There might be merit to getting up and attending lecture rather than struggling over the last bit.

The second point is more substantial but less easily quantified. It has to do with what one should seek from an education. A Caltech education can be compared to the training of a craft. Tools include things such as Fourier analysis or organic synthesis. The goal is to teach you to develop an ability to use these tools. However, knowing a technique is not the same as knowing which things to hit. Homework typically does not teach the broader context of science that enables you to decide which things are worth spending time and energy on and which are not.

The emphasis in the course is on the context in which the skills are applied. I would suggest that a student should be exposed to more of these contexts in lectures than some students are. Many students have admitted to me that they did not immediately notice this because they are defining what they want to get out of the class or work together with other students in defining their goals. It is in the best interests of the student to change the pay-off matrix so as to be more realistic— with pop-quizzes, for instance. Does the student possess the information necessary to answer questions correctly? Does the student possess the information to answer the right thing for the professor to probe? Probably not. It may be unproductive but that’s irrelevant; teaching should never be a popularity contest.

I think the biggest problem with teaching at Caltech is that we are making the assumption that students are merely teaching the same stuff you get in at a public school, but at a faster pace and with a greater volume of homework, then we are failing to face a real challenge for the faculty, but the students can help by recognizing that context and cost-benefit analysis might require a rethinking of the behavior of some students.

David Stevenson
Professor of Plant Science

Planetary Science Professor David Stevenson disputess the idea advanced by Caltech provost Robert Lee that performing a cost-benefit analysis of the advantages of lecture without attending

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ness of ingredients, the quality of food, and the food service itself. Though Caltech hires a registered dietitian part time, students worry about the levels of salt, grease and fat in the food. In addition, vegetar­ians are concerned about the availability of animal oils and fats and may be used in the preparation of their meals.

Dr. Margaret Curtis, seen working with Tom Mannion, director of Caltech’s Office for Student Affairs, Melissa Wettemeng, Student Board Program manager, as well as the house food representatives to try to reform parts of the menus.

Some students need to allow people on board to eat dinner at Avery once a week reflects concerns about decreasing choice in dining. Both graduate and undergraduate students dislike the lack of choice in kitchen space and food storage areas in the houses. Students wish that more fresh food was sold at the convenience store and that cafeteria food be modified to be more accessible to the on campus population. Additionally, four out of seven undergraduate houses have expressed concern with the food and the Graduate Student Council is already planning a set of lessons. Curtis expressed optimism. “The campus health education programs in an effort to prevent problems before they happen. Peer educators do.

Director of College could Reopen Communication

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they go to their meetings, not even anyone that makes sure we have the right number of representatives on each committee.

So is that a real problem? Consi­der some of the committees that have been formed in the past few years. There was a committee called the Task Force for Undergraduate Resi­dence Life Initiatives—a committee that had student representatives on it. It was supposed to help spark a student protest. There was a com­mittee called the Wild Oats Task Force, whose recommendations were largely ignored. There were also numerous committees that had no student representation that took away freshman parking spaces, eliminated the student bartender program and chose Richard Serra to design a sculpture. The three all three committees had in common is a lack of communication with the student government and the student body at large.

The proposed Director of College would serve as that point of commu­nication, placing students on committees where they are needed serving the needs of the student rep­resentatives and bringing important news to the student body. These committees are where the most im­pact can be made, but with the few years and where they will arise in the future.

Some people will try to frame this Bylaw in an ASCiT-versus-HCGer­manychoice. Students will be settled through compromise be­tween the current ASCiT BoD and faculty or student members of the new body.

Please talk with a BoD member or any of the other members of the new Bylaw Committee about strengthening our side on the stu­dent-versus-student conflicts, the stu­dents all lose.
'Alternative' Teams Break To Utah, San. Fran., Mexico

By SUSAN AYER and KATIE HOMANN

The Caltech Y is sponsoring Alternative Spring Break trips to Tecolote, Mexico from March 23 to 26, the Navajo Nation in Bluff, Utah from March 23 to 28, and San Francisco, from March 23 to 27. Y organizers call the trips a great chance to experience new places and cultures, meet new people and make a difference.

This is the fifth year of a trip to Tecolote, a town south of Tijuana, Mexico. In past years, volunteers stayed in a community center and did projects to help the surrounding area. Past projects have included tiling floors, clearing a vacant lot for gardening, planting trees at an orphanage, installing fences and teaching children.

On the trip there are opportunites to explore the local town, practice that high school Spanish and buy food from the local taco stands—which really beats out Taco Bell, many students say. There is also a trip to the border to hear about border issues from a Mexican perspective. It is not necessary to know Spanish to go on the trip.

For its second year, the Y is taking a trip to the Navajo Nation in Bluff, Utah. Volunteers for this trip will help the families of the Navajo Nation by painting and fixing up houses. While on the reservation, they will stay at a local school and have a chance to interact with the community. Volunteers will also have the opportunity to learn more about the Navajo culture by participating in a sweat lodge, witnessing a pow-wow and sampling some authentic Navajo cooking.

San Francisco is a new trip this year. It is a great opportunity to see the city and gain a new perspective. Volunteers on the trip will explore urban issues such as homelessness and AIDS by working with San Francisco organizations.

The trips are open to undergraduates, graduate students, faculty and staff. Signups start at a meeting next Wednesday evening at Beckman Auditorium. The trips are open to undergraduates and the city and gain a new perspective. The trips are open to undergraduates, graduate students, faculty and staff. Signups start at a meeting next Wednesday evening at Beckman Auditorium. The trips are open to undergraduates, graduate students, faculty and staff. Signups start at a meeting next Wednesday evening at Beckman Auditorium.

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