



Particle Physicist Douglas Grant Michael Dies

By CALTECH PR

Douglas Grant Michael, a senior research associate in physics [at Caltech] and a well-known experimental particle physicist, lost his long struggle with lymphoma on Christmas Day 2005. He was 45.

Michael grew up in Arizona. He earned his bachelor's degree at Stanford University in 1982, and his doctorate at Harvard University in 1990, both in physics. His thesis reported experimental work on deep inelastic muon scattering done on the Tevatron at Fermilab; his thesis adviser was Francis Pipkin. Although it is most unusual for an undergraduate to use a major particle accelerator for an independent experiment, in 1982 at Stanford, Doug and another senior conceived, built, and operated a NaI(Tl) and plastic scintillator experiment at SLAC's electron-positron collider to observe the low energy photon spectrum produced from the J/ψ , a particle discovered in 1974.

After completing his Ph.D., he joined the MACRO experiment at Caltech and spent several years engaged in the search for magnetic monopoles, hypothetical particles thought to mediate magnetism, and other rare phenomena at an underground laboratory near Gran Sasso, Italy. During this time, Doug was involved in many aspects of the construction and mounting of liquid scintillation counters for the experiment, and often acted as its "floor manager." Ultimately, no monopoles were found, but the experiment set the world's

Continued on Page 8, Column 1

Caltech Cuber Sets World Record

By MARISSA CEVALLOS

Leyan Lo, Caltech junior, raised the bar in the Rubik's cubing community on Saturday by solving the 3x3x3 cube in 11.13 seconds. The previous world record for the 3x3x3 speedsolve was 11.75 seconds, held by Jean Pons of France in the Dutch Open 2005.

The competition was held in the Exploratorium in San Francisco--after the Caltech Rubik's Cube Club hosted a hit competition there last year, the museum was eager to invite Caltech back. Tyson Mao, a cuber and Caltech student, has been organizing Rubik's Cube Competitions for the past two years all over the United States.

Though Leyan's world record was a highlight of the competition, Caltech boasted a handful of other talented cubers. The Caltech Crew consisted of Fleming senior Tyson Mao, Fleming senior Mark Polinkovsky, Blacker junior Leyan Lo, Page junior Shelley Chang, Lloyd freshman Daniel Lo, and Blacker sophomore Michael Inadomi.

"The really unusual thing about the competition was the amount of media," says Dan Lo. "The fact that the world record was broken usually isn't too big of a deal. This one hit the news instantly," said Dan Lo. About 200 people watched the tournament.

For winning first in the blindfolded 3x3x3, Leyan Lo wasn't awarded a trophy, medal, or even a plaque. Instead, Tyson--the competition's organizer--bestowed a vegetable sandwich unto his friend.

"It wasn't very good," said Leyan Lo.



Tyson awards Leyan with a vegetable sandwich for his record-breaking win. Photo by Dan Lo

Later prizes for Leyan included another sandwich, and a box--for his sandwiches.

Says Dan Lo, "We didn't do anything special after the competition. We went to dinner--we were really hungry."

After eating, the Caltech Crew returned to Tyson's house in Hill-sboro, where they watched the casting call for *Beauty and the Geek*, with sneak peeks of Tyson in season two.

During the competition, a film crew from Arcadia followed the

Caltech students around. The film crew has been gathering footage of the Caltech Crew for the past two years for their film *Cube Freak*. The film is expected to come out in the fall.

Daniel Lo placed 19th in the 3x3x3 speedsolve with a 28.10 second average. Shelley Chang placed 25th in the 3x3x3 speedsolve with a 36.12 second average, and 4th place in the 3x3x3 blindfolded with a 2:59.17 second best attempt. Shelley Chang is the world's top female blind-folded

champion in the 3x3x3. Tyson Mao placed 3rd in the 3x3x3 blindfolded, with a 2:45.03 seconds best attempt. Leyan Lo placed 2nd in the 3x3x3 speedsolve, with a 15.17 second average; 2nd in 4x4x4 speedsolve, with a 1:20.29 second average; 1st place in the 3x3x3 one-handed with a 34.60 second average; 1st place in the 3x3x3 blindfolded with a 2:09.99 best attempt. Full results can be found online at www.speedcubing.com

High-Achieving High-Schoolers Rush in Where Normal Students Fear to Tread

By DAVID CHEN

Sometimes, after slaving away for a few nights on various problem sets, you can't help wonder how many more people would be crazy enough to apply here. Apparently, enough people still want to come to Caltech that our Early Action pool grew 36%.

The increase follows an effort by the admissions office to promote the school to more students. For example, admissions would previously purchase names from students who took the PSAT and marked an interest in math, science, or engineering, but the admissions office realized that there might be some students who do well on the math section and don't yet realize their interest in these fields. Thus, they now purchase the names of those students who do well on the math portion.

This increase in the number of

targeted students also had raised the number of students who had expressed interest in Caltech. Previously, about 18000 high school students would have taken the initiative to ask the admissions office for more information, but this year 30000 students asked for more information.

Along with the increased pool, fewer spots are available this year since a larger than expected number of students enrolled the previous year. Aiming for 215 spots, 234 students matriculated, representing an increase in yield to 43% from 37% the year before. 133 students were admitted during EA this year compared to 154 last year.

In addition, the Admissions Office expects that the Regular Decision pool will also increase in size, so they wanted to leave

enough slots during the regular round.

Along with the increased number of students that Caltech is targeting, more material has been sent to the students. For example, the admissions office has more actively used emails and also started producing podcasts. The first podcast talked about Feynman and a second discussed the DARPA Grand Challenge. These podcasts, and a third that will be out shortly, are free to download from iTunes.

Rich Bischoff said that they can make guesses for the increase in yield, but it's hard to definitively pinpoint the causes. The popularity of *Numb3rs* and the buzz appeal it creates around Caltech certainly doesn't hurt us. He mentions that bringing more people to realize what it's like on

this campus has helped. People are surprised to see the students and realize that they're normal.

In addition, while there are schools that routinely send students here, there are some misconceptions that hurt us. For example, only 100 applicants from the entire state of New York applied here last year. "If we're out on the East Coast, people are surprised at how few students we have," emphasizing that the vague understanding of Caltech that most students have tends to hurt our image. "It's pretty stunning the number of people that you meet who that know very little or nothing [about Caltech], even high school counselors." But after bringing these counselors out to visit campus and having them meet Caltech students, the goal is for them to think, "Oh,

Continued on Page 8, Column 2

Chowdhury Chats About the Chatter of the Choo-Choo

By CALTECH PR

Navigating Los Angeles' sometimes confusing public transportation system has now gotten a lot easier for members of the Caltech community, thanks to the new Caltech Transit Guide (available online at transitguide.caltech.edu; a downloadable PDF is also available), created by former Caltech student Ameera Chowdhury ('04). Chowdhury spoke with Caltech Today about the guide.

Why did you write the Caltech Transit Guide?

When the Gold Line opened in the summer of 2003, Pasadena became a lot more connected to Los Angeles and the Metro transit system. I wanted to help the Caltech community take advantage of their new transit options.

How long did it take you to compile all the information?

The Caltech Transit Guide is a work-in-progress. I've been compiling the information since the summer of 2003.

What feedback have you gotten on it?

When the Caltech Transit Guide first appeared in the little undergraduate handbook and other student guides, readers urged me to make the guide into its own publication. With Irma Cruz's help, the Caltech Rideshare Office printed the Caltech Transit Guide as a booklet for the 2004-2005 school year. Now, Gail Anderson and her team at Public Relations have helped me put the guide on

the web.

What was your major here at Caltech, and what are you doing now?

I majored in mathematics at



Photo courtesy of pr.caltech.edu

Caltech. I received my Masters in combinatorics and optimization from the University of Waterloo last June, and I am currently a visiting student at McGill University in Montreal.

Do you have an opinion of any other transit systems outside of the L.A. area?

I loved riding the tube in London because it's fast!

What do you think could be done to tempt more Los Angeles residents onto public transit?

The Metro system needs to improve its speed. Metro has made progress in this area by expanding its rail system and launching the Metro Rapid program, but more should be done.

Doctors Discover DNA's Defenses Against Dangerous Discombobulations

By CALTECH PR

To preserve the integrity of their genomes, cells employ an enormous crew of maintenance genes to repair genetic damage. In a landmark study featured on the cover of the December issue of the open-access journal PLoS Genetics, Caltech professor of chemistry and biology Judith L. Campbell and her colleagues and collaborators in the laboratory of Charles Boone at the University of Toronto, reveal for the first time all of the 322 genes that make up that work force in yeast.

The genes, Campbell says, "define the circuits that protect your genome from the types of gross rearrangements that are hallmarks of cancer cells."

Campbell and her team uncovered the genes, which comprise a complex interconnected network consisting of more than 800 genetic interactions, using a synthetic genetic array that allowed them to perform 5,000 simultaneous experiments, each exploring the relationship between an individual gene and a pro-

tein called Dna2p. Dna2p, discovered a decade ago at Caltech, is essential for the replication of genes across the entire genome.

Martin Budd, the lead author on the study, says that unveiling the entire "cast of characters" involving in preserving the stability of the genome has "important implications for tailoring drugs designed to inhibit specific pathways and point out their potential side effects and perhaps how to avoid them."

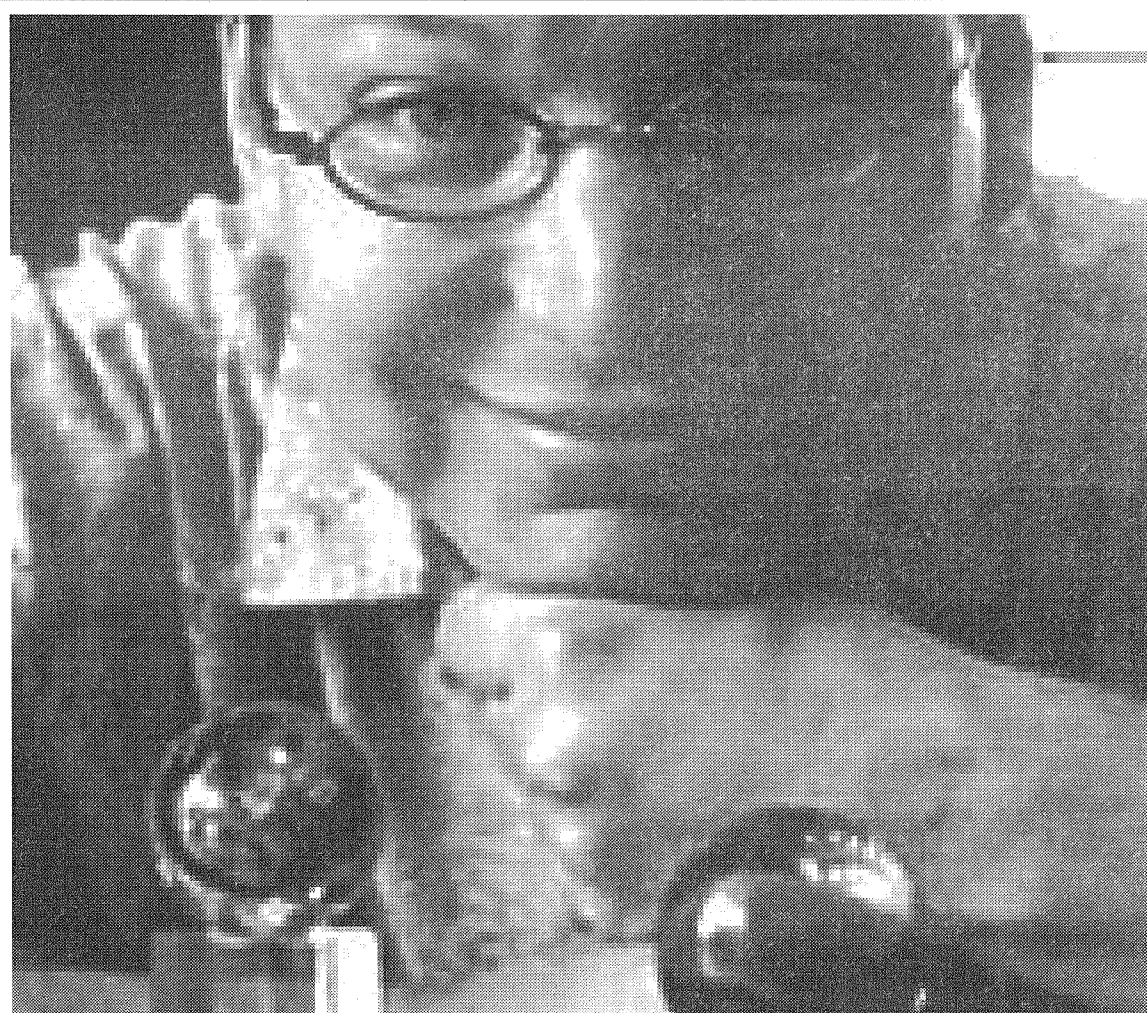


Photo courtesy of pr.caltech.edu

Mike Brown loves the camera, and the camera loves him.

10th Planet Ready for its Close-Up, Mr. DeMille

By CALTECH PR

On Tuesday, January 17, NASA's New Horizons mission to Pluto and the Kuiper Belt will launch from the Kennedy Space Center. The mission and the spate of new objects now routinely being discovered in this frigid outer fringe of the solar system, including 2003 UB313, aka "Xena," the presumptive planet recently discovered by Caltech's Professor of

Planetary Astronomy Mike Brown and colleagues--are the subject of "Passport to Pluto," airing this Sunday, January 15, at 9 p.m. on the Science Channel. In the special, which will be rebroadcast throughout January on the Science Channel and NASA-TV, Brown will discuss the discovery of Xena and what else remains to be found in the distant solar system.

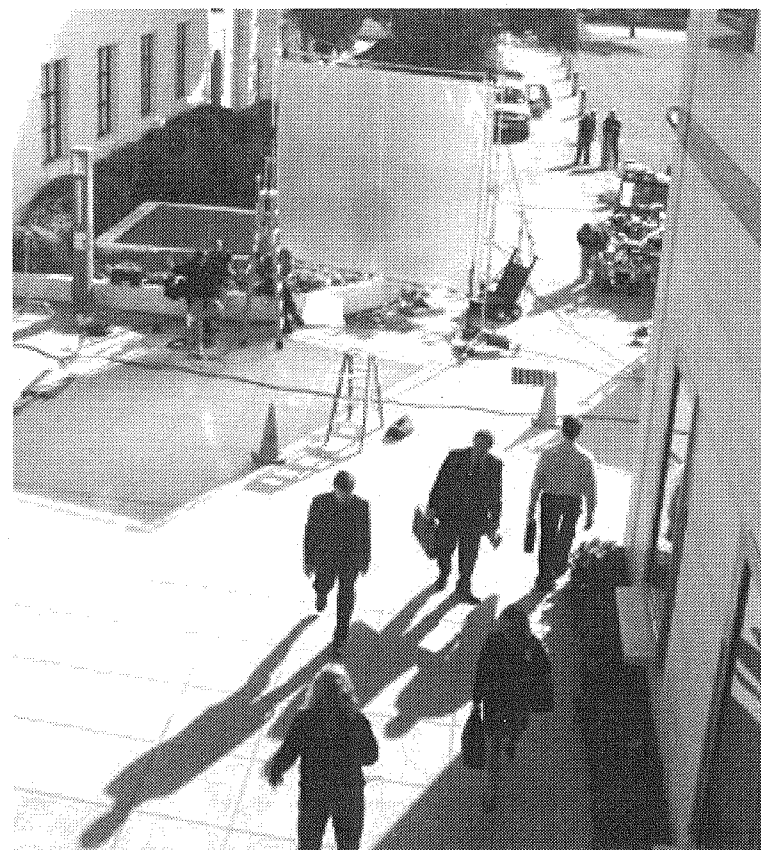


Photo courtesy of pr.caltech.edu

No, Caltech hasn't been overrun by accountants and attorneys--yet. The suits outside the Broad Center on Wednesday were making a TV commercial for Qwest, a large communications company headquartered in Denver. The ad will be shown in the 14 western and midwestern states served by Qwest, but not, alas, here.

The California Tech

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Don't hide your head in the sand...

Highway Robbery

By JEFFREY PHILLIPS

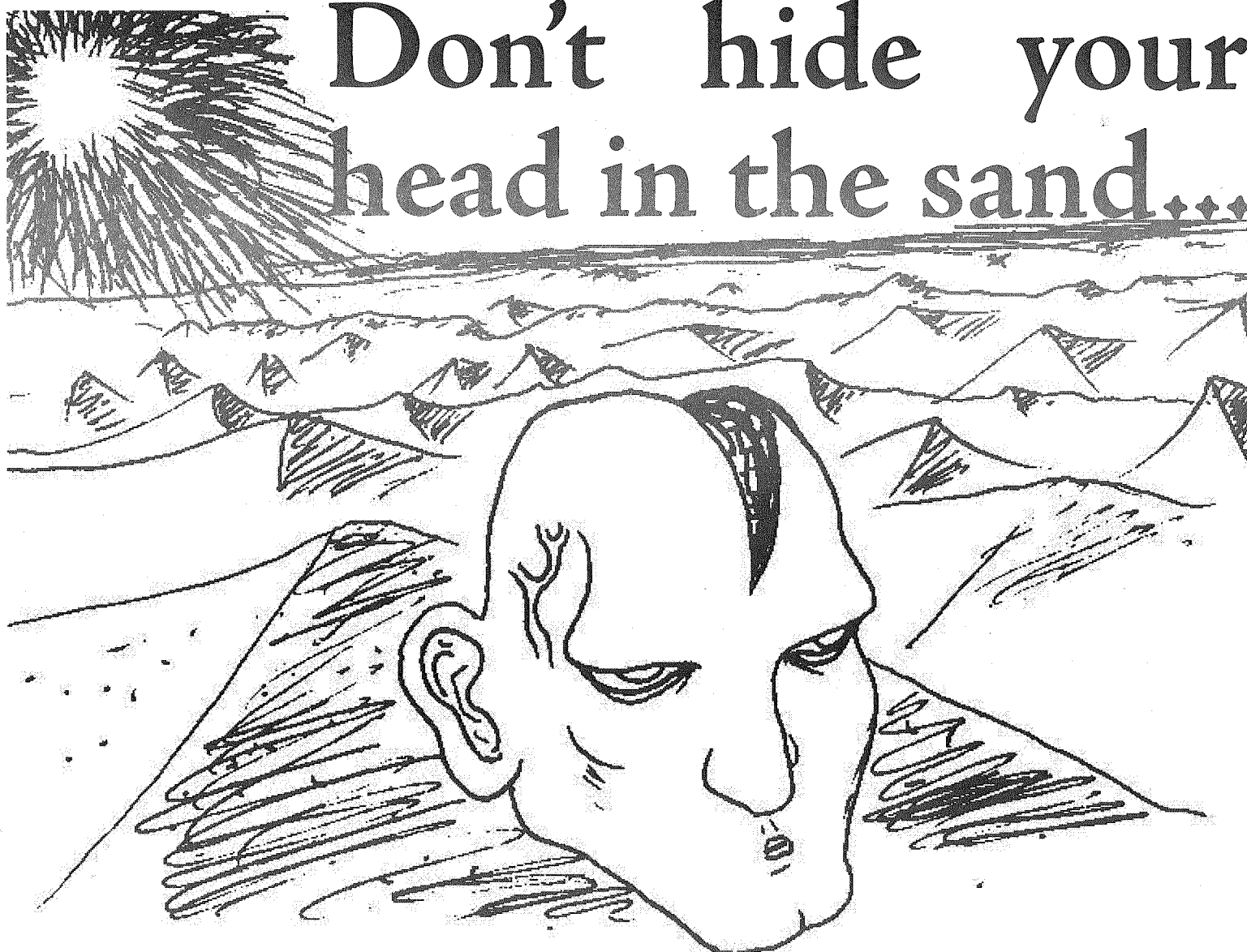
The origins of the freedoms for which Caltech has become famous are shrouded in myth and legend, far beyond the reaches of collective undergraduate memory. In a place where four years can turn a novelty into a time honored tradition, we take so many of our institution's quirks for granted; things have been like they are, and will continue unless the administration deems them unfit for the modern world. Nevertheless, I am willing to bet that people fought for each and every perk we now enjoy, and for many more that have fallen away.

Someone determined when Caltech first began issuing parking passes that they should be free to students. Someone convinced the administration that a pit of flame would be a fine courtyard decoration, and it was awesome. Someone made a case for student access to buildings, and someone decided that access extended from below the ground to the sky above. Someone decided four Hovses washing their sheets on a semi-regular basis would mean chaos and graft in the laundry room, and Housing shouldered that burden until this year. Someone argued that Caltech students could be trusted to supervise their own tests. Someone ruled pets and girls should be allowed to live in the Hovses, provided they are registered.

But where is that someone today, pushing the bounds of student privilege and enhancing the quality of student life? I see hand-outs and appeasement, free lunches and admittedly good concerts. But among neither the administration nor the student elect do I hear a single voice fighting directly against the fear of lawsuits and tightening of budgets that annually curtail the rights and privileges of the undergraduates.

No one today seems to have the time or the inclination to try getting away with outrageous defiance, and, if no one will do it, then we are each responsible, so we need to act decisively. I challenge each reader to try to get away with something this week.

Fight the system, damn the man, etc. Prank an administrator who made life uncomfortable for someone you know. Perform a dangerous stunt. Throw dirty underwear in the trees when Caltech brings alumni pockets to drain. Freedom is granted in response to unrest, and a docile student body begs no favors. Rather than sit around like a kid with suspenders and glasses, waiting for Caltech to take our lunch money, I say we go out and see exactly where the limits are. Let's get away with highway robbery.



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Read

The Grand Unified Theory of Physics

by

Joseph M. Brown

Discover the mechanism controlling the speed of light

- The *Grand Unified Theory of Physics* is based on an ether gas of hard, smooth, elastic spheres with a mean speed v_m ten times the speed of light.
- Nothing but these ether particles are in the universe. In order for observables to occur in such a universe there must be stable states of these particles.
- The only way discovered for such a stable state is to have a dynamic state contained within a mean free path sized-volume where a portion of the gas is completely condensed.
- Such a condensation is envisioned when ether particles become aligned and flow into a sink at flow velocity equal to v_m .
- After alignment the ether particles are squeezed together and by requiring energy to be constant the flow velocity jumps from the mean speed v_m to the root mean square speed v_r .
- The velocity jump propels the condensed assemblage at the speed $(v_r - v_m)$.
- The condensed assembly is identified as the neutrino so that the speed of light c is $(v_r - v_m)$.

For more information and to access the book, visit www.physicsunifiedtheory.com

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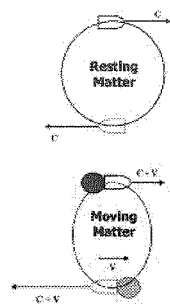
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The Grand Unified Theory of Physics



Joseph M. Brown

There's No Action

By CINDY KO

To my loyal readers—

Recently, I have been le busy because my computer's hard drive broke. So uh... no music review this week. Sorry! Here's something that might cheer you up:

<http://video.google.com/videoplay?docid=-4435593179243241083&q=mathas>

This is what made my day after I learned that my hard disk was slowly grinding itself into oblivion. Enjoy.

Love, Cindy

PS: Next week, I will do my best to review the Strokes' third full length LP, *First Impressions of Earth*. For now, just go to their website to watch their video, "Juicebox," and dream about next week's article.

Tired of CDS lunches and dinners?

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EVERYDAY

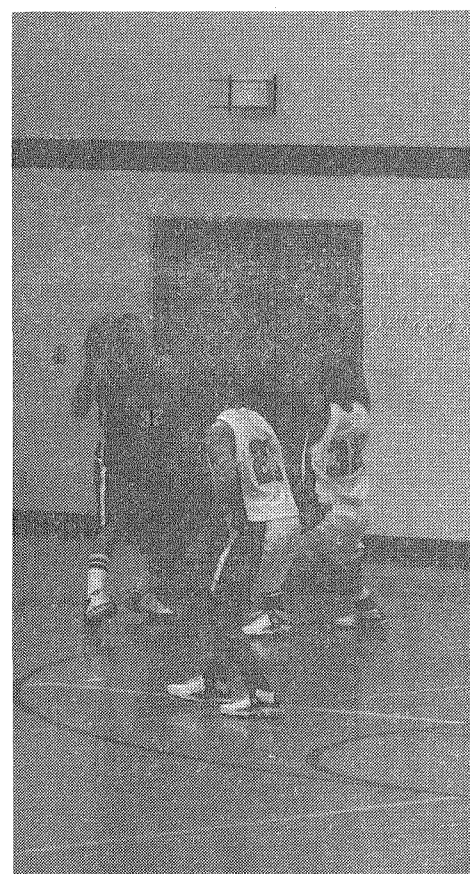
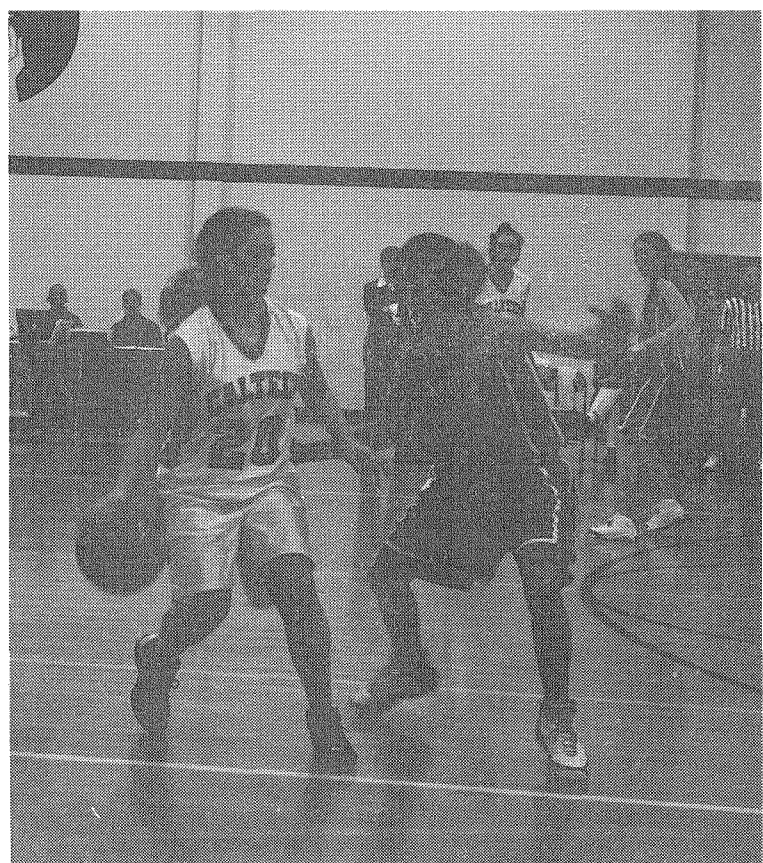
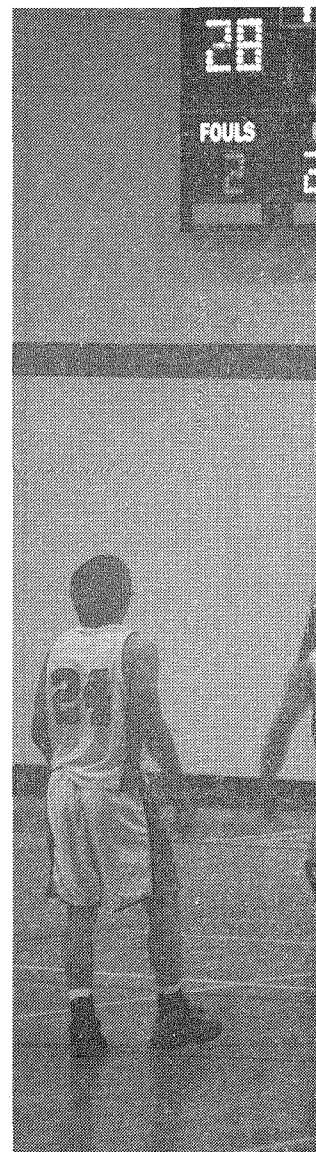
for all Caltech students, staff, and faculty

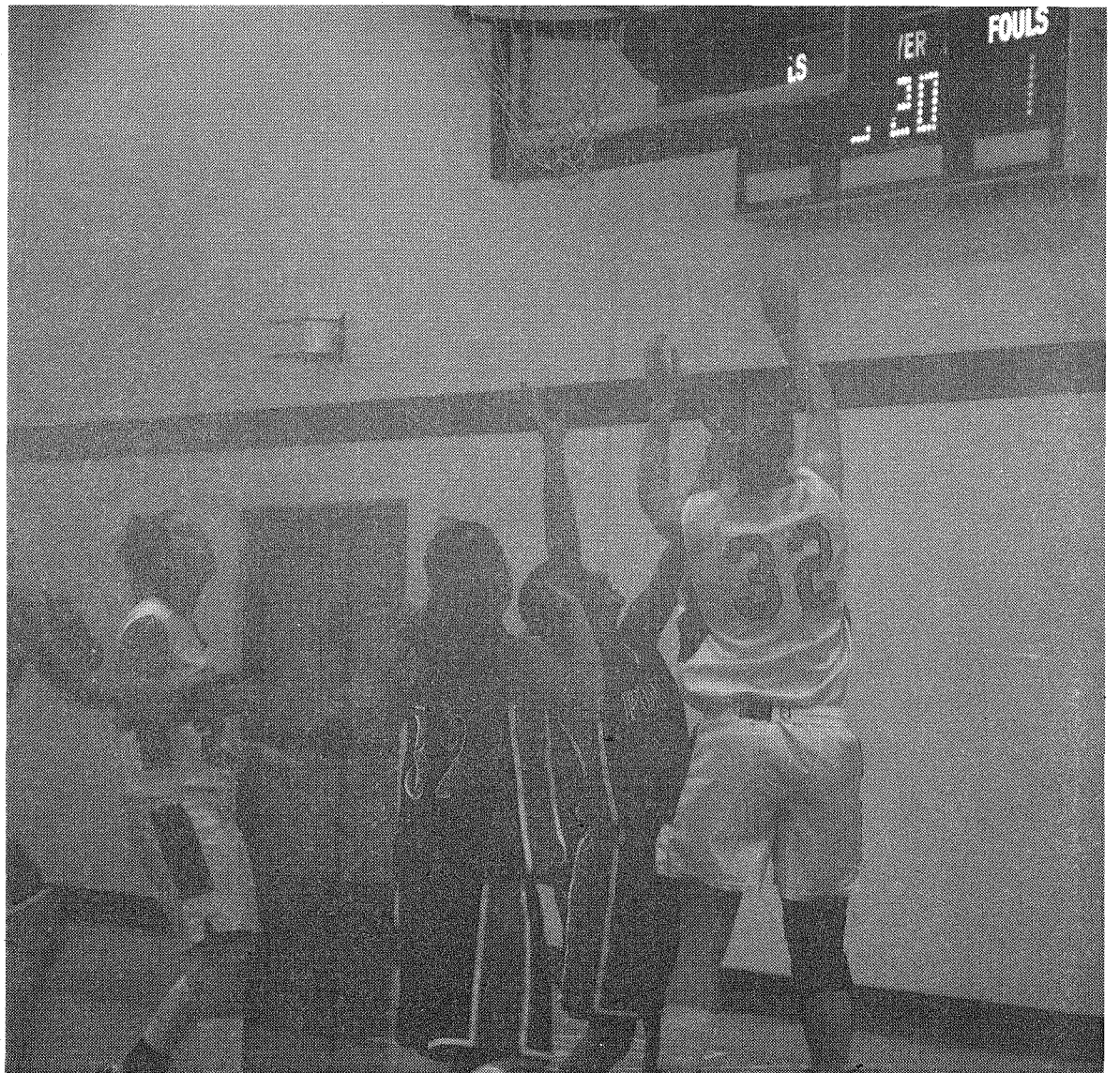
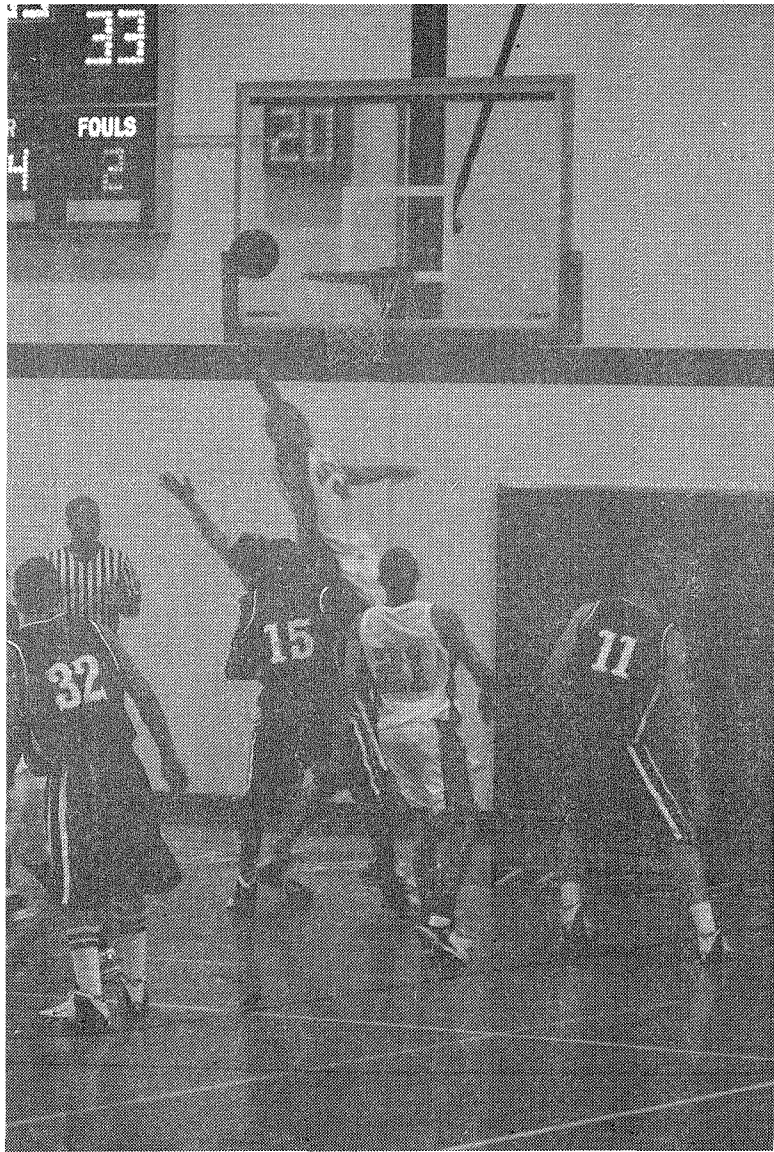
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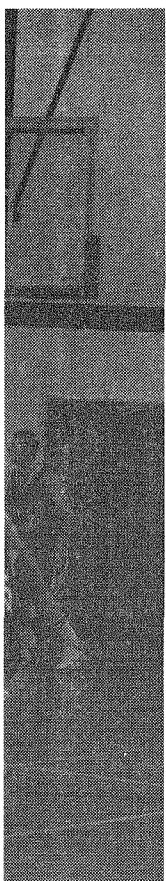
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Caltech Beavers vs. Pomona-Pitzer 29-69



G.L.O.M. - Greg's Life of Misery

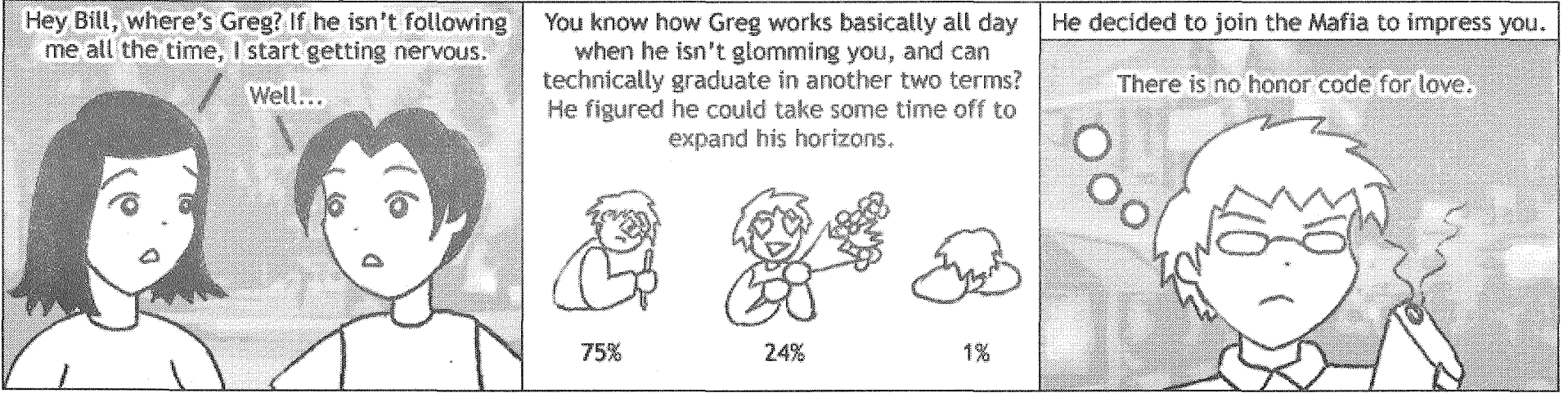
Hey Bill, where's Greg? If he isn't following me all the time, I start getting nervous.

Well...

You know how Greg works basically all day when he isn't glomming you, and can technically graduate in another two terms? He figured he could take some time off to expand his horizons.

He decided to join the Mafia to impress you.

There is no honor code for love.



Visit G.L.O.M. on the web at <http://www.its.caltech.edu/~citcappy/>

By Nathan Lau

Irrational Exuberance presents

The suspense...

The unveiling...

CTHULLU FHTAGN!



Zhiyun Guan

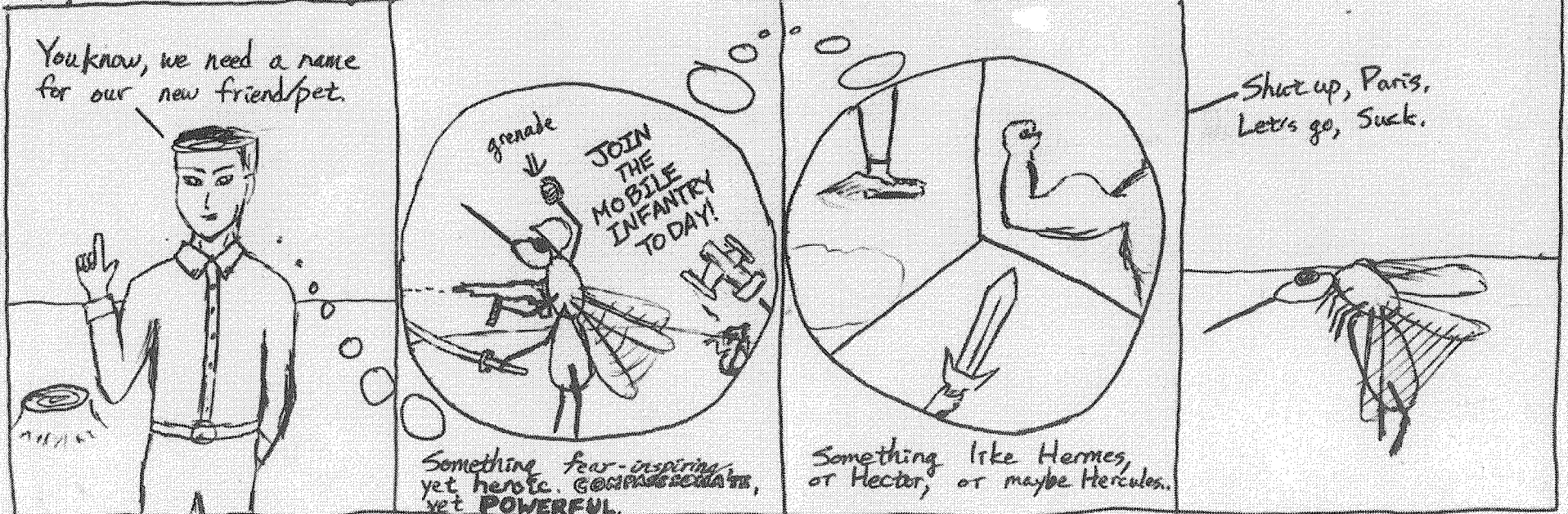
Tragic Relief #13: Obligatory Mascot's Name

You know, we need a name for our new friend/pet.

grenade
JOIN THE MOBILE INFANTRY TODAY!

Something like Hermes, or Hector, or maybe Hercules.

Shut up, Paris. Lets go, Suck.



by: Dave Zhang

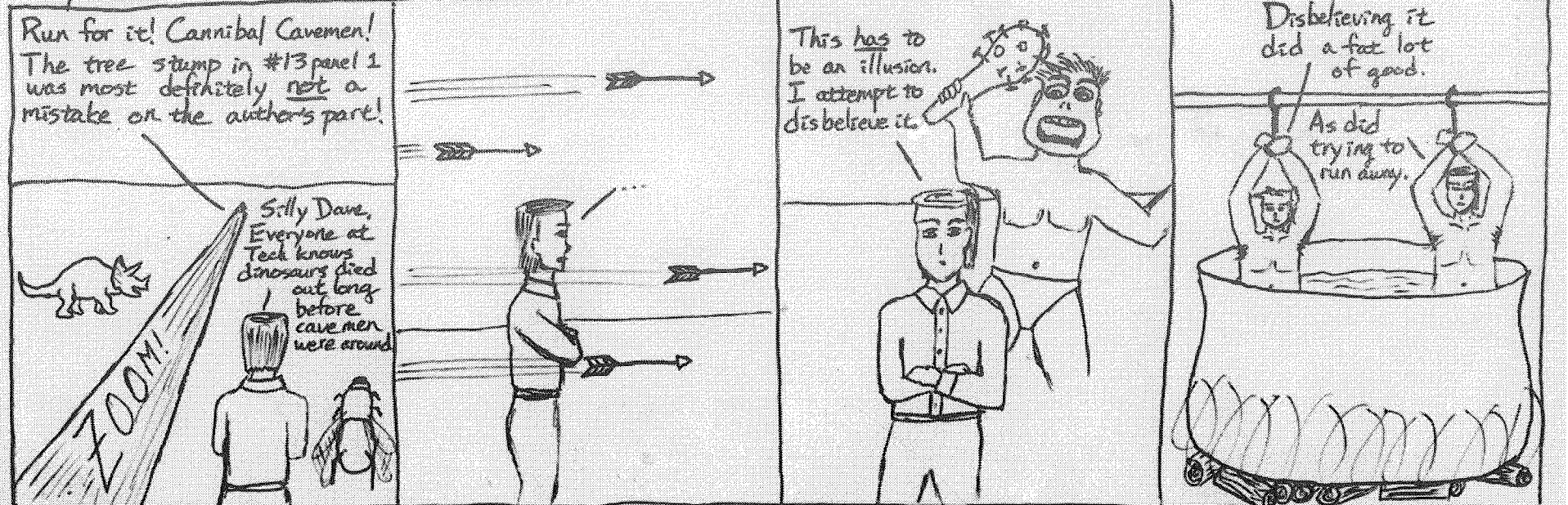
Tragic Relief #14: Insufficient Wisdom

Run for it! Cannibal Cavemen! The tree stump in #13 panel 1 was most definitely not a mistake on the author's part!

Silly Dave, Everyone at Tech knows dinosaurs died out long before cave men were around.

This has to be an illusion. I attempt to disbelieve it.

Disbelieving it did a fair lot of good. As did trying to run away.



by: Dave Zhang

Bitches is Hoes #4: Boss Hogg is Bitches

By JON SENN, DAN MCLAURY, JOSH GUTMAN, AND OTHERS HANGING OUT IN THE ROOM

"Welcome to Hazzard County. A little corner of the world where everyone knows everyone else, and people are never too busy to stop and say 'howdy.'" In the 2005 film, *The Dukes of Hazzard*, the sinister Boss Hogg implements a nefarious plan to turn the cozy Hazzard County into a strip mine. His only hurdle is that the county currently won't allow the mining. Boss Hogg arranges for a Town Hall meeting at the courthouse, but the Boss essentially owns the legal system in the county. As long as community reaction is not too severe, the judge will grant Hogg the rights to rape the county of its serene beauty, to destroy the Dukes' adored Southern Comfort. In order to ensure that the community fails to attend the Town Hall, Boss Hogg schedules the meeting at noon during the County's car race, an event that nearly every resident of Hazzard County typically attends.

The woes of Hazzard County sound increasingly familiar even to those of us who haven't seen it. By the way, we'd like to take this opportunity to remind you that Caltech administration is holding a January 25th Town Hall meeting to answer questions about campus budget cuts. Please attend and voice any concerns you might have, unless of course, you have a class during the meeting, such as ACM104, Ae121B, An101, APh105B, Bi/BMB251B, Ch/ChE140A, Ch003A, Ch004B, Ch021B, Ch024A, ChE/ESE158, ChE010, Ec011, EE/Ge157B, EE119B, En114B, Ge115B, H108A, HPS/PL124, L130B, Ma/ACM140B, Ma/CS006B,

Ma145A, Ma151B, Mu024, Ph001B, Ph002B, Ph129B, SS202B, or SS231B.

We're not sure who will attend this Town Hall, but we doubt any Caltech students will: any of them not currently flaming out will probably be doing work and/or drunk.

We admit that this aspect of the

ing a serious financial challenge: a structural deficit in the general budget that is on the order of \$28 million... This deficit, which concerns only the Institute's general budget (as opposed to the research budgets), is a longstanding problem that has been an inherent part of the Institute's operations for many decades." You can't solve

students account for much of the solution to the deficit. However, many of the cuts around campus seem extremely shortsighted. It appears that the budget cuts are being handled piecemeal rather than as a whole, resulting in a plethora of absurd and inefficient policies. For example, the operating budget of Caltech Dining



budget cuts isn't a significant issue, and certainly not a scandal of Boss Hogg proportions. Anyone who really wants to attend the meeting probably will have the opportunity. But we're funnier than a two-page request for more Tech writers. There are, however, substantial faults with the administration's plan to counter the so-called budget crisis.

As stated in a message from Dr. Baltimore, "Caltech is fac-

a budget problem without an actual income source, and it seems that cutting student programs is hardly an effective solution. In order to have undergraduates account for even an additional \$5 million per year, tuition would have to be raised not just \$5,000, but several times more since only students receiving no financial aid would actually pay an increased amount.

It is both necessary and fair that

Services has been reduced next year, and in response, undergraduates living on campus will be forced to purchase 4 additional mediocre and over priced meals per week. Students here already get off campus far too rarely, and having prepaid meals on campus will surely worsen this. I would be shocked if CDS makes more than 20% profit for each additional meal. Why charge each student for an additional \$1,320 worth of unwanted food, up to \$5,121 next year from \$3,801 this year, to earn at most \$264 of annual profit. The authors of this article and the vast majority of students we've polled, would certainly rather pay about \$250 than be forced to buy over \$1,300 of food we're sick of eating in a place we don't want to spend our weekends.

Our campus is fraught with poorly planned fixes such as this one, and a true budget solution seems to require a well-researched, big-picture solution, rather than a bureaucratic farce. The budget cuts seem to have been designed in large part by Dean Currie, Caltech VP for Business and Finance. That's his name; he's not a Dean. But the best solution to our budget problems is no less a business resolution than a bureaucratic one. Caltech is a closely-knit community and, as a community, it has different needs and goals than does a large business.

We wouldn't want you to worry about those sweet folks in Hazzard County, so we'll fill you in on the ending. Fortunately, the Duke boys are able to rally the citizens to the courthouse just in time to save the day: "Attention good people of Hazzard. Life as we know it is about to end. As we speak, dark forces are conspiring to strip mine our land. Follow me to the courthouse and we'll save you." Once again, if you have any concerns, please attend the budget Town Hall, it's on January 25th from noon to 1:30 in the Baxter lecture hall.

As always, send comments, suggestions, and hate mail to senn@caltech.edu.

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Bitches is Hoes is a collection of rants about the changes that are happening around Caltech. Many people complain that these changes cause this place to become less Caltechy. We have no idea what that means and we do not have any idea what those people are talking about. We are here to point fingers. We are identifying the obvious examples of idiocy that plague our community. These are the cowardly acts committed by the administration because they are afraid to get sued. These are the failings of different so-called campus services because they are afraid of budget cuts. These are the students who sycophantically adhere to the administration's weak excuses. And so we label them as "bitches." They are as effective as a blind, spayed dog with its teeth knocked out and a giant tumor coming out of its nose. They have sold out by sacrificing the efficiency and quality of the Caltech experience for an illusion of politically correctness and safety. Hence, bitches is hoes. We pull no punches when we comment on the shortcomings of this place. If you think we have punched below the belt, do not hesitate to contact the author of the article so we can make fun of you.



For nearly half a century the **Institute for Defense Analyses** has been successfully pursuing its mission to bring analytic objectivity and understanding to complex issues of national security. As a not-for-profit corporation operating three federally funded research and development centers that serve the Office of the Secretary of Defense, the Joint Chiefs of Staff, the Unified Commands and Defense Agencies, we provide a solid and exciting foundation for career growth and longevity. And through specialized analytic, technical and scientific talent, we are moving steadily forward, confidently increasing our capabilities to face the country's important security issues.

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We'll Be On Campus
January 25th

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IDA will be on campus interviewing qualified candidates on January 25th. For consideration, submit your resume by January 23rd through the Career Services Center/MonsterTRAK. You can also visit us at the upcoming Career Day on January 26th.

Visit our website for more information on our specialized opportunities.
EOE



INSTITUTE FOR
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Caltech Mourns Michael's Passing

Continued from Page 1

best limit on their density in our universe.

In 1991 other physicists reported anomalies in the ratio of electrons to muons originating from high-energy cosmic rays. The leading contender among various ideas for the underlying cause of the anomaly was that neutrinos oscillate from one type to another as they propagate through space. Doug immediately began thinking seriously about an experiment designed to optimally study such neutrino oscillations. By 1994, further experiments, including MACRO, produced strong evidence for the oscillation hypothesis and Doug's design studies became the basis for a proposal to Fermilab for a major experiment, now called MINOS (Main Injector Neutrino Oscillation Search). It is a collaborative effort consisting of about 150 physicists from institutions in many countries around the world. Since its inception, Michael played a key role in the design, construction, management, and scientific leadership of MINOS. At the time of his death, he was one of the two spokesmen for the experiment.

Doug had a broad and deep interest in the natural world and was always ready to explain to anyone, anywhere, what he was doing and why it was important. He was featured on Alan Alda's Scientific American Frontiers television program in January, 1995, leading Alda in an underground tour of the MACRO experiment; it is rumored that Alda still occasionally comments about the particularly maniacal scientist he met under a mountain in Italy. Doug was deeply knowledgeable and strongly passionate about each of his many interests. His well-developed sense of humor made it a pleasure to discuss anything with him, from physics, to the subtle flavor of a rare botanical, to music. He was an accomplished pianist, artist, gourmet cook, and wine connoisseur. His family, many friends, and scientists throughout the world loved and respected him. They will miss his wisdom, intelligence, and zest for life.

A memorial service will be held in the Salvatori Room, S. Mudd building, at the California Institute of Technology at 2 p.m. on January 28, 2006. In lieu of flowers, donations in Doug Michael's memory may be made to the Lymphoma Research Foundation, 111 Broadway, 19th Floor, New York, New York, 10006.

Those Fools, Why Do They Want to Come here?

Continued from Page 1

I know students like that. It's not this obscure, strange place."

Of course, Prefrosh Weekend helps many students decide whether Caltech is right for them, and the Admissions Office has worked to make sure that this information comes to the accepted students at the same time as their acceptance letters. Prefrosh Weekend this year will be shortened to Thursday through Saturday because of the budgetary cuts. Noting the difficult situation this places both the Admissions Office and current students in, Mr. Bischoff explained, "I'm not happy, they're not happy, nobody's happy about having less time." One main concern is that the Prefrosh have enough oppor-

tunities to experience the variety of Houses.

Mr. Bischoff was very happy to announce that future prefrosh weekends will resume their normal lengths, from Thursday to Sunday, a task that will be easier in part because of the 7-day board plan next year.

Student Representatives from the houses will be meeting with the admissions office in the upcoming weeks to plan for prefrosh weekend. "I'm impressed by how much the students do," noting that all activities after 6 PM are student-led.

Also, there are two students who have already returned their acceptances and paid their deposits, ready for Caltech!

Beavers Duel Sagehens

By GUSTAVO OLM

On Saturday the Pomona Sagehens rode into town for a double-header. In the afternoon game, the Lady Beavers looked to earn their first win of the season. In an effort to push the pace early, Coach Marbut started Ryoko Amano. Tech took a quick 4-3 lead on drives to the hoop, but soon thereafter Pomona regained the advantage and would not relinquish it.

The Beavers wasted several fast break opportunities and were dominated on the glass despite solid efforts by Shelby Montague and René Davis. Davis was a monster on the boards in the first half, collecting 9 rebounds. She would finish with 13. Montague took over in the second half, picking up 7 to finish with 10 for the game. Compounding the Beavers frustrating day in the paint was the Pomona defense, which accounted for 5 blocked shots. Lindsay King was able to complete a 3-point play with 44 seconds remaining, but Pomona would win it, 69-29.

Top Techers

Davis: 5 pts, 13 rebs, 3 assists, Montague: 10 pts, 9 rebs, King: 9 pts, Kunesh: 7 pts

In the evening session, the men took on the two-time defending SCIAC champs. Both teams pounded the ball inside early, the Beavers going through Bryan Hires whose 3-point play 7 minutes into the half gave Tech a 9-6 lead. Hesitancy to shoot cost the Beavers several offensive possessions mid-way through the half. Ben Sexson hit from downtown with 1 minute left in the half, and the Beavers trailed 25-17 at the break.

Such a low-scoring, defensive battle perfectly suited Caltech's style. Jordan Carlson led an 11-3 Beaver run culminated by Chris Yu's 3-point basket that delighted the crowd and tied the game at 33 with 13 minutes to play. Pomona slowly built a 10-point cushion with 6 minutes remaining, but Caltech's 4-9 shooting from beyond the arc in the second half as well as 18 bench points kept the game close.

Scott Davies' clutch 20-footer with 4 minutes to go brought the Beavers within 4. However, a Carlson bucket with 2 minutes to play would be the final Beaver points. The Sagehens' All-SCIAC center poured in 20 points as Pomona pulled away 57-48.

Top Techers

Carlson: 15 pts, 7 rebs, 3 assists, Hires: 9 pts in 17 min, Ivy: 4 pts, 6 rebs, Davies: 7 pts, 3 assists, Haussler: 8 rebs

Beavers Open SCIAC Play Against Cal Lu

By GUSTAVO OLM

The Beavers hosted Cal Lutheran in their SCIAC opener last Wednesday, falling 66-46. The lead was exchanged several times in the early going. With 8:38 left in the half, Michael Underhill drove baseline, rebounded his own miss and sank the put-back, giving the Beavers a 16-12 lead. Caltech's solid first half defense limited Cal Lu to 33% from the floor. However, poor shooting and late-first-half turnovers cost the Beavers as they trailed 26-21 at the intermission.

Led by Jordan Carlson and Scott Davies, Caltech crept back. Davies connected from long range 2 minutes into the half to bring the Beavers within 2. As the intensity escalated, Cal Lu committed several early fouls, putting the Beavers in the bonus only 5 minutes into the half. Caltech then took the lead 31-30 on an Underhill free throw. However, the Beavers managed only 7 of 14 from the line in the second-half.

Caltech's outstanding boardwork kept them in the game. The Beavers out-rebounded Cal Lu 35-31, led by Carlson and Travis Haussler with 6 apiece. Carlson hit a 3-ball with 4 minutes remaining to bring the Beavers within 12, but that would be as close as it would get. Defensive breakdowns by the Beavers and powerful post play by Cal Lu put the visitors on the line 20 times in the half. Timely 3-pointers sealed the victory for Cal Lu. Cal Lu's last 8 points were recorded at the charity stripe.

Making his return from a prolonged illness was Bryan Hires, whose impressive work on the glass netted him 5 boards in 16 minutes of action.

Top Techers

Carlson: 21 pts, 6 rebs, 9-11 FTs, Underhill: 7 pts in 17 min, Delatorre: 6 pts, 4 rebs in 16 min

From Job Fair to Job Offer... How to Work Career Day for Results!

By JERRY HOUSER

**Career Day, Thursday
January 26, 10:30 – 2:30,
Brown Gym**

What comes to mind when you think of Career Day? Cool giveaways? Door Prizes? Hopefully you consider getting a full-time job, an internship, meeting specific employers, or just asking lots of questions to find out about an industry, organization, or future careers.

Who comes to Career Day? Companies that are actively hiring do. They know about the quality of Caltech students and academic programs. In fact, many of the recruiters are Caltech alumni.

These are some ways to plan ahead to get the most out of career day:

- 1) Bring your resume. Attend a resume writing workshop and get feedback from others. If you don't have a good resume yet, then collect business cards from the companies and send employers your resume as a follow up.
- 2) See who is coming – listed on the Career Development Center website career.caltech.edu - print out the company names, check their websites, and prioritize a list of the companies you most want to see. The list grows everyday until the event.
- 3) Make a business card. Caltech Graphic Resources has a special deal on them for Caltech students or make some your-self for Career Day, then go to Graphic Resources. If you don't use it now, you will in the future. It impresses employers and can be used

at many events, receptions, meetings, etc.

4) Dress nicely. Leave the holey t-shirt on your floor. Wear a pressed/ironed buttoned shirt/blouse, and pressed slacks/pants, not holey Levis. If you are serious at all about making career contacts, first impressions are key. Dressing nicely demonstrates respect and your seriousness about the company.

If you're looking at financial institutions, like investment banking, hedge funds, etc, then dress even better.

5) Prepare questions in advance, then step up and start asking. What do you want to know? Internships? Corporate culture? Career paths? Locations? Research projects? Skills most required? When the big day arrives, walk around the booths, pick up company literature and job listings, listen to other students as they speak with recruiters, and most importantly drop off your resume and ask intelligent questions. Once you have successfully navigated Career Day and made some great contacts, follow up: get business cards of the recruiters, and contact them, making sure to remind them who you are, as they may have seen hundreds of students during the course of the day. Only a few students take the time to thank them and express further interest. Be one of the few; it makes a big difference and sets you apart. And don't forget to pick up the cool giveaways.

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