Robot Runs Amok!

By ADAM CRAIG

Primm, Nevada, October 8, 2005, around 11:30AM Alice, the 2005 Sportsmobile 4WD success­ sor to last year’s Bob, had com­ pleted 8.3 miles of grueling desert driving, easily avoiding obstacles and handily navigating the tor­ ous course. Team Caltech’s dedi­ cated Dr. David Britton, a Berry-chinned CS­ ME, EE, and CDS students had taken great pains to strengthen and refine Alice’s path-following module in order to avoid a repeat of last year’s mishap, in which Bob strayed off course, plowed through a barbed wire fence, then strained his rear axle in another segment of the barbed wire fence upon reentry. But tragedy struck when, a mere 124 miles from vic­ tory, Alice passed under a power­ line, which interfered with the GPS reception. Coming from the mangled signal that she had great assay, Alice veered to the right, heighting at full speed for the edge of the corridor. If the obsta­ cle avoidance software detected the concrete barriers lining the road, it was to little avail, as the high-priority directive to return to what Alice had erroneously computed to be the track sent her crashing through the barricade, crushing concrete blocks under her robust Feel E530 frame and swiftly mounting the sand berm beyond them. For a few breath­ less moments, it looked as if the reporters gathered in the press stands would be next to share the concrete blocks’ fate, as the wayward robot truck barreled to­ ward the huddled media masses. But the quick reflexes of the staff at the DARPA command center averted catastrophe by guiding their fingers to the emergency remote disable switch, bringing Alice to a grinding halt before she could plow through the stamp of crowd. Even though the DARPA Grand Challenge is over, Alice, the product of two-and-a-half years of data gathering, algorithm and circuit design, coding, debug­ ging, soldering, wire crimping, drilling, bolting, welding, and other things that routinely ran an hour or so late, will continue her service to Caltech as a testbed for future robotics research.

Japanese Scientists Shoot Giant Squid

By AMY HASS

Deep beneath the ocean’s surface lurks a skinny, tentacled beast, a monster known to old­ timers as the giant squid, or architeuthis. Their trap was elegantly sim­ plified to become a lucky accident.

In spite of this prevailing non­ chalance, several small groups of researchers embarked on their own expeditions, hoping to catch architeuthis, the giant squid, in action. Tsunetomi Kubohara of the Natural Science Museum in Tokyo and Kyoichi Mori of the Ogasawara Whale Watch­ ing Association headed one such group, and, one cold morning in the North Pacific Ocean, their ef­ forts paid off when a squid took the bait. Their trap was elegantly sim­ ple. A long-line dangling be­ low the boat held the necessary equipment. A depth recorder and camera hung above a weighted jig, a nest of hooks and weights to steady the line, and below that drifted the bait, a common Japa­ nese squid and some chopped shrimp.

Baltimore to Retire as Caltech President

By JILL PERRY

David Baltimore, the seventh president of the California In­ stitute of Technology, will retire on June 30, 2006, after nearly nine years in the post. He will remain at the Institute, where he intends to focus on his scientific work and teaching.

“This is not a decision that I have made easily,” Baltimore announced to the Caltech trustee­ s, faculty, staff, and students, “but I am convinced that the interests of the Institute will be best served by a presiden­ tial transition at this particu­ lar time in its history. By next summer we will be well along in the process of implement­ ing our plans to strengthen the financial foundation of the In­ stitute. Although our $1.4 bil­ lion campaign is not scheduled for completion until the end of 2007, we have made remarkable progress, and successful attain­ ment of its audacious goals will remain my highest priority. As these important endeavors near their final stages, it will be time for the Institute to once again turn to the future, guided most effectively by the revitalizing vision and leadership of a new president.”

He agreed to remain in the position until a successor is named.

“David Baltimore’s articulate advocacy of the Institute’s mis­ sion has played a huge role in raising the public’s awareness of Caltech as a unique national treasure. Our task ahead is to have made easily,” Baltimore said. “I will remain in the post until a successor is named.

“Achieving the Institute’s vision requires the continued dedica­ tion and support of all our friends and supporters. The Institute’s future is bright, and I am confi­ dent that we will continue to make progress toward the vision set forth in our Strategic Plan.

I look forward to working with the new president and the Board of Trustees to ensure a smooth transition.”

Continued on Page 8, Column 1
He may have only been drawn once, but David Baltimore appeared in more Crippling Depression comics than any other real person, save the authors. The comic's portrayal of Baltimore as the evil mastermind of the administration represented the underlying student need to put a single face behind the looming concerns over shrinking freedoms and increasing costs.

It is follows naturally that Baltimore's retirement has elicited cries of joy from the student body. Still, few students could name a reason to dislike him, save the fact that he holds very large bags of money or maybe that he looks like the bad guy from X-Men 2.

One of the most influential biologists alive today had to put up with being called "D-Balls" or screams of "NERD!" when he rode his Segway around campus. To remind our readers of the humor and absurdity of the situation, I have reprinted the Crippling Depressions that featured our soon-to-be-former President, save for one, which required context.

The wicked witch is dead. Quick, someone get his shoes! Those look expensive.
Beck: Guero (2005)

By CINDY KO

Beck Hansen has outdone himself. After starting a family and a three-year gap since his last album, he has come out with one of his most poignant records to date. Many critics had their beef with Sea Change (2002) being too depressing and melancholy for his techno-pop reputation. Fans and critics hoped that he would stop being so depressed, but it didn’t seem to make any difference. Beck showed up at Coachella Music Festival 2004 as a surprise guest, playing an all-acoustic set with none of his signature jangly, hyper tunes. Around the same time, he recorded the despondent track, “Everybody’s Gotta Learn Sometime” for the film Eternal Sunshine of the Spotless Mind (2004). By this time, most people had figured that the days of Mellow Gold and Midnight Vultures were long gone and Sad Beck was here to stay. But then again, how easy is it to pin down Beck Hansen? He has the extraordinary talent of being able to experiment with new ideas and motifs, changing his style considerably from album to album. And he has proven so. Since the days of Sea Change, Beck has morphed into a new beast—wild and energetic, sounding better than ever. Guero, which is a slang term in Spanish that refers to a blonde or fair-haired person, is upbeat and exciting, with catchy radio singles like, “E-Pro.” Truth be told, any one of the tracks could easily be a hit single or a dance club staple. Beck returns to his techno dance roots and playfully raps in Spanish while keeping his beats steady and true. Guero is a crowd pleaser from beginning to end, making it clear that Beck is a magician, doing what he does best. A tour of the US followed the release of this album this summer, and I was lucky enough to see him in concert with tourmates, Le Tigre. I was blown away by his performance; if there’s anything better than listening to Guero, it’s listening to Beck perform it live. Despite his guero exterior, the man has moves. He never quit through an hour and a half long set, keeping the crowd excited and engaged. At one point, his band had their dinner out onstage while Beck played a short acoustic set. Immediately afterward, his band joined him on the next song, playing percussion and rhythm on their utensils and dinnerware. It was pretty amazing. By far, one of the most memorable performances I have ever seen. Beck’s wealth of talent and ongoing creativity is what makes him an already legendary musician of his time. The only thing I have left to say about Beck can be summed up in two words—“Hell, yes.”

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3
Adjective Noun  By Asian Student X

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Across
1. Tide
5. Segment of a play
8. A laundry cycle
9. Famous Armstrong
11. Boy Scouts do this on the left
13. Vigor's cousin
14. With NaCl
15. Begged
17. ___ polloi
18. Record
20. CIT courtship ritual
23. Machine with 2 pulleys
26. Aisle saying
27. An experienced car?
29. Look, in Seville
30. Borscht base
31. Mogul Turner
32. Purple root

Down
1. Cicero's nothing
2. Porcelain china alternative
3. Question
4. Goes number 1
5. Not digital
6. 10 cc
7. Big name in detergent
8. Invitation acronym
10. Trip-giver
12. A sound of scoffing
16. Thingamajig
19. Obtained
21. Shelley's "___ the West Wind"
22. Trailer park?
23. Equip
24. Spring 2005 RF victim
25. Owing money (with ln)
28. Red or Black

Answers on facing page

We Like Coquettish

Kalitech Bread Life

by Adam Craig
ASKING THE FOLKS FOR MONEY.
THEY WANT TO GIVE. YOU JUST HAVE TO HELP THEM REALIZE IT.

Always a delicate conversation; it's usually best to hit them up before grades come out. Regardless be prepared by observations like "It's so cold in here I can see my breath" and "Wow, I'm just waiting away from hunger."

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Yes, you.

It isn’t always clear to people at first that they’re right for the D. E. Shaw group. Like the poet we hired to head an automated block trading unit. Or the woman who designs solar-powered race cars; we hired her to help launch a new venture in computational chemistry. They didn’t think of themselves as “financial types,” and neither did we. We thought of them as people with extraordinary talent.

The D. E. Shaw group is a highly successful investment and technology development firm with an international reputation for financial innovation and technological leadership. Since 1988 we’ve grown into a number of closely related entities with approximately US $17 billion in aggregate capital by hiring unusually smart people from a wide range of backgrounds. A robotics guru. A nationally ranked blackjack player. An operatic mezzo-soprano. And a lot of people who are just exceptionally strong in CS, EE, math, and finance.

The firm currently has openings in quantitative analysis, software development, information technology, computer architecture, business development, computational chemistry, accounting, finance, and trading. We’re looking for creative but pragmatic people: articulate, curious, and driven. Our working environment is intense but surprisingly casual. We provide unusual opportunities for growth. And we compensate extraordinary people extraordinarily well.

The D. E. Shaw group will be attending the CalTech Career Fair October 12 from 10:30 am to 2:30 pm on Bechtel Mall. Please stop by our booth.

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jobs@deshaw.com
Irrational Exuberance

There's a mouse in my room.

We'll make a mousetrap with duct tape!

Duct tape? Nothing resists the power of duct tape!

You're weird. Behold my fleece creation—duct cheese!

Today's Irrational Exuberance was inspired by actual events.

The mouse was not harmed and eventually left the room.

We think.

The resident cat seemed pretty happy though.

Tragic Relief #5: Friendship

We ate at Catuch and the cat became our friend.

Friends help each other whenever possible.

In good projects, all work is fun.

Sometimes, we collaborate on projects.

If we fail, then at least we have someone to commiserate with.

The mouse was free, but a duck with vegetables and rice.

"I'm Operation Election!"

by Dean Zhang

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One year ago on September 30 a giant squid caught sight of the long-line and snatched at the bait, but instead of a meal it got a surprise when one of its two eighteen-foot tentacles caught on the jig. The giant squid remained still to the line for a surprising four hours, allowing Kubodera and Mori to take over five hundred and fifty pictures of the uncommon animal, but the squid finally managed to free itself when its tentacle snapped in two. The giant squid escaped into the ocean, leaving behind both physical and photographic evidence of its visit.

The severed tentacle was still whipping around when Mori and Kubodera hauled it on board the deck of their boat. In its last moments, the suckers grasped the ship's deck and Kubodera's lap. "It wasn't as strong as I expected. It felt sticky," he told a BBC source.

On news sites across the web, the pictures of the giant squid delighted squad fans and casual nature enthusiasts everywhere. Jules Verne's 20,000 Leagues Under the Sea and perhaps David Attenborough's Life of Marine Biology think of them.

"I think it's wonderful that we've finally got a picture of a living giant squid. I thought it would only be a matter of time before someone got pictures of a deep-sea giant squid," Richard Ellis, a research associate at the American Museum of Natural History, told National Geographic. Many others share Ellis' opinion.

The roughly fifty sightings of the giant squid and handful of bodies that have washed up on beaches around the world this century lead most scientists to assume photographic evidence of a living squid to be inevitable. Nevertheless, for scientists who have spent nearly a decade searching for Architeuthis, the news is a relief.

But these pictures do not close the mysteries of the giant squid, spolia, ocean-going predators, for the colossal squid, still to be found in the murky depths, awaiting photography. Whereas the largest giant squid measures about fifty-five feet, nobody knows how large the colossal squid can grow, although estimates range from fifty to seventy feet long. Whatever the length, scientists believe that the giant squid, as incredible as its body is to many others, the giant squid, as incredible as its body is to

By this next year, we may be watching "Beak" instead of "Jaws." [editor's note: a Jaws-style movie about a giant squid, called the Beast, does already exist.

**For more information about giant squid, please see the following resources:**
- http://www.es.ucar.org/5004/5004-06-03bmc-092623.htm

**The California Tech**

**NCAA Athletics**

**Bring the Action Close to Home**

The following athletic events will take place at Caltech's facilities this week. Come out and support your Beavers!

**Men's Water Polo vs. Whittier** Fri. 10/15 @ 11am

**Men's Soccer vs. Pomona-Pitzer** Wed. 10/12 @ 4pm

**Women's Volleyball vs. La Sierra** Tue. 10/11 @ 7:30pm

For more information, go to www.athletics.caltech.edu

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**Caltech**

**October 10, 2005**

**Did You See that Squid? Yeah, it was pretty big...**

Continued from Page 1

**Baltimore Steps Down**

Continued from Page 1

Cobb, Fred for the Broad Center, Thom Mayne of Morphosis for the new Cahill Center for Astronomy and Astrophysics, and Peter Zumthor and Rem Koolhaas for the new Center for Information Science and Technology. The new buildings are still in the design phase. Baltimore worked toward building a better Caltech, particularly by bringing more women into administrative roles. He was also concerned about the quality of undergraduate life, appointing the Caltech's provost. In a written announcement to the campus, he said, "Throughout my years as a Caltech trustee, I have repeatedly been impressed by David's skill at communicating the importance of Caltech to a range of constituencies, from the scientific community to potential donors to readers of daily newspapers," said Kresa, the chairman of the Caltech Board of Trustees.

Baltimore has several outstanding administrative and public achievements to his credit. In the mid-1970s, he played an important role in creating a consensus on national science policy regarding recombinant DNA research. He served as founding director of the Whitehead Institute for Biomedical Research at MIT from 1982 until 1990, and was president of Rockefeller University in 1990-91. An early advocate of federal AIDS research, he cochaired the 1986 National Academy of Sciences Committee on a National Strategy for AIDS and was appointed in 1996 to head the National Institutes of Health AIDS Vaccine Research Committee.

Feynman Professor and Professor of Theoretical Physics Kip Thorne, who chaired the faculty search committee that selected Baltimore, told Caltech faculty chair Henry Lester, the Bren Professor of Biology. "I know we've had the best searches in the physics faculty and vision have resulted in a highly effective university that has been substantially augmented by contributions from each and every one of us," said the chairman of the Caltech Board of Trustees.

"During his years of leadership at Caltech, David's leadership over the past ten years has significantly strengthened Caltech in many important ways. His impact will be felt for decades," Ben Rosen, also an alumnus and former trustee chairman, said. "During his years as a Caltech trustee, I have been repeatedly impressed by David's skill at communicating the importance of Caltech to a range of constituencies, from the scientific community to potential donors to readers of daily newspapers," said Kresa, the chairman of the Caltech Board of Trustees.

Baltimore will remain at Caltech as a professor of biology. In June he was awarded a $513 million grant from the National Institutes of Health to create new methods for researching cancer, AIDS, and the molecular basis of the immune response. He continues to operate his research lab while president and has announced important findings while at Caltech, including establishing a new methodology for detecting immune cells in the immune system, and creating a new methodology for producing transgenic mice.

"His membership on the Independent Citizens' Oversight Committee for the California stem cell initiative. "David Baltimore is an incisive and articulate leader who has strengthened Caltech's core research, research and teaching and has led several initiatives that have enhanced the quality of research. Research can be pursued at the Institute," said Paul Jennings, Caltech's provost. In a written announcement to the campus and its trustees, Baltimore said, "It has been a privilege to serve as president of Caltech and a pleasure to work with the dedicated faculty, staff, students, trustees, and alumni. The administration in the California Research Institute, and I will retire with full confidence in their abilities to effect a smooth transition. During my time in the president's office, I have worked to ensure that Caltech remain a highly effective university that was imagined into existence by Robert Millikan and the Independent Caltech's provost. In a written announcement to the campus and its trustees, Baltimore said, "It has been a privilege to serve as president of Caltech and a pleasure to work with the dedicated faculty, staff, students, trustees, and alumni. The administration in the California Research Institute, and I will retire with full confidence in their abilities to effect a smooth transition. During my time in the president's office, I have worked to ensure that Caltech remain a highly effective university that was imagined into existence by Robert Millikan and the Independent Caltech's provost. In a written announcement to the campus and its trustees, Baltimore said, "It has been a privilege to serve as president of Caltech and a pleasure to work with the dedicated faculty, staff, students, trustees, and alumni. The administration in the California Research Institute, and I will retire with full confidence in their abilities to effect a smooth transition. During my time in the president's office, I have worked to ensure that Caltech remain a highly effective university that was imagined into existence by Robert Millikan and the Independent Caltech's provost. In a written announcement to the campus and its trustees, Baltimore said, "It has been a privilege to serve as president of Caltech and a pleasure to work with the dedicated faculty, staff, students, trustees, and alumni. The administration in the California Research Institute, and I will retire with full confidence in their abilities to effect a smooth transition. During my time in the president's office, I have worked to ensure that Caltech remain a highly effective university that was imagined into existence by Robert Millikan and the Independent Caltech's provost. In a written announcement to the campus and its trustees, Baltimore said, "It has been a privilege to serve as president of Caltech and a pleasure to work with the dedicated faculty, staff, students, trustees, and alumni. The administration in the California Research Institute, and I will retire with full confidence in their abilities to effect a smooth transition. During my time in the president's office, I have worked to ensure that Caltech remain a highly effective university that was imagined into existence by Robert Millikan and the Independent