Avatar Director Discusses Pandora with Caltech Scientists and Community

By Tina Ding
Editor-In-Chief

James Cameron, director of the highly-anticipated movie set for release in 2010, Avatar, spoke to the Caltech community at two different Beckman Auditorium panel discussions about the science, technology, and environmental messages behind Pandora world. The talks on April 27 and May 4, titled "Is Pandora Possible?", was co-sponsored by an 18-member panel from Caltech Geology and Planetary Professoress Jees Adkins, John Grotzinger, and Jared R. L. Leadbetter.

According to undergraduate senior Anthony Chong who attended the packed April 27th session, Cameron was very knowledgeable and commanding of every aspect of the biological diversity behind the world Pandora. "The amount of details was remarkable," said Chong, "For every animal, he could explain how its features came to be." When audience asked about functionalities and biological whereabouts of specific organisms, Cameron’s responses demonstrated prior investment and thought on the topic, according to Chong. When asked why there was no volcanism in the movie despite the presence of sulfates, Cameron replied that the dilemma was considered and will be placed in the sequel. "The amount of thought he and the production put into the movie was really impressive," said Chong.

The event was co-sponsored by Twentieth Century Fox Home Entertainment and Caltech. Avatar is revolutionary visual effects created specifically for Cameron, who is well known for his scientific curiosity and cutting-edge technology. Cameron received international honors and nominations for his 2009. Said LA Times film review critic Kenneth Turan, "Think of Avatar as the Jazz Singer of 3-D filmmaking. Think of it as the most expensive and accomplished Saturday matinee movie ever made. Think of it as the ultimate James Cameron production."

Cameron also directed the Terminator and the Titanic. Before Avatar, the Titanic was the highest grossing movie of all time.

Graduate attrition rate in U.S. needs work, says new report

By Evans Boney
Staff Writer

A new report by the Educational Testing Service (ETS) and Council of Graduate Schools (CGS) indicates that there are widespread national roadblocks to graduate education in the United States.

The report, “The Path Forward: The Future of Graduate Education In The United States”, was compiled by an 18-member panel from the ETS and CGS, and is a follow-up to their 2005 report which made a successful case for spending more funds on graduate education.

Science reports this week that the new report “urges the US Government to spend billions more on education while scolding universities for not doing enough to attract and mentor the students who would earn those degrees...”.

The report indicates that US production of PhD’s and Masters students is lagging Europe and is increasingly threatened by growing numbers in India and China. Some of the lag is attributed to the high school dropout problem, but a large portion of the report focuses on PhD attrition rates. It reads in part:

Even students who are awarded prestigious fellowships with relatively higher paying stipends still have an attrition rate of roughly 25%.

“The number of doctorates awarded in the US would be greatly increased simply by ensuring that most of the students who enter a doctoral program complete it,” the report states.

It goes on to review data showing that the doctoral attrition rate is 45-50%, and that even students who are awarded prestigious fellowships with relatively higher paying stipends still have an attrition rate of roughly 25%. Grad Student pay could be taken as a relative indication for this trend, indicating that one reason attrition is so high is not a lack of funds, but a lack of interest in the work that is being done. The amount of time and effort that is put into this work is so great that many of the students who enter these programs have given up on their initial aspirations of earning these degrees."

By Edward Chen
Staff Writer

For the past few weeks, the Tech Express has been using email notices rather than blue and yellow slips as the notification system for delivered packages. The main motivation behind this new system is to decrease the number of unclaimed packages.

According to Joe DeVito of the Tech Express, “There have been no complaints, and probably 80% of the students asked [have said that] there’s no problem [with this new system]. Most likely, this will be in effect starting next fall.”

For students who don’t live near campus, this will be a much-needed upgrade. For those students on-campus who only check email as part of their daily routines, this will hopefully mean less unclaimed packages as well.

Other advantages include saving paper and improving the processing efficiency of the mail room, according to DeVito.

Just like any other old system, there will be things that will all miss about it. Undergraduate Natalie Kostandova commented, “People like [the blue] things. It makes them feel special but it’s more practical in terms of email.”

Joe DeVito (JDeVito@caltech.edu) openly welcomes any questions about this new system.

Special Report by ASCIT

ASCIT End-Of-Term Concert with Super Mash Bros in the works

By Adam Kahn
Contributor

I’d like to begin by presenting the results of our End of Year Event Survey sent out last week, which had 435 responses. 238 (54.71%) students said that they would attend an on-campus formal and 283 (65.06%) students said that they would attend an off-campus formal for free. But only 136 (31.36%) students would attend an off-campus formal if charged $50 a person. 297 (68.28%) students said that they would attend an on-campus concert and 247 (56.78%) students said that a concert would be an acceptable alternative to a formal. When put to head to head, ASCIT formal had 181 (41.61%) students pick it as their first choice and 88 (20.23%) students pick it as their second choice. An on-campus concert and ASCIT formal were favored over their off-campus counterparts, 132 (31.03%) pick it as their second choice. Whether or not this means Domenic D. needs to eat a hat, I’ll let you be the judge.

Of the 435 students who took the survey, 40% chose an End-of-Term concert as their first choice and 34% chose ASCIT Formal as their first choice.

Graduate attrition rate in U.S. needs work, says new report

By Evans Boney
Staff Writer

A new report by the Educational Testing Service (ETS) and Council of Graduate Schools (CGS) indicates that there are widespread national roadblocks to graduate education in the United States.

The report, “The Path Forward: The Future of Graduate Education In The United States”, was compiled by an 18-member panel from the ETS and CGS, and is a follow-up to their 2005 report which made a successful case for spending more funds on graduate education.

Science reports this week that the new report “urges the US Government to spend billions more on education while scolding universities for not doing enough to attract and mentor the students who would earn those degrees...”.

The report indicates that US production of PhD’s and Masters students is lagging Europe and is increasingly threatened by growing numbers in India and China. Some of the lag is attributed to the high school dropout problem, but a large portion of the report focuses on PhD attrition rates. It reads in part:

Even students who are awarded prestigious fellowships with relatively higher paying stipends still have an attrition rate of roughly 25%.

“The number of doctorates awarded in the US would be greatly increased simply by ensuring that most of the students who enter a doctoral program complete it,” the report states.

It goes on to review data showing that the doctoral attrition rate is 45-50%, and that even students who are awarded prestigious fellowships with relatively higher paying stipends still have an attrition rate of roughly 25%. Grad Student pay could be taken as a relative indication for this trend, indicating that one reason attrition is so high is not a lack of funds, but a lack of interest in the work that is being done. The amount of time and effort that is put into this work is so great that many of the students who enter these programs have given up on their initial aspirations of earning these degrees."

By Edward Chen
Staff Writer

For the past few weeks, the Tech Express has been using email notices rather than blue and yellow slips as the notification system for delivered packages. The main motivation behind this new system is to decrease the number of unclaimed packages.

According to Joe DeVito of the Tech Express, “There have been no complaints, and probably 80% of the students asked [have said that] there’s no problem [with this new system]. Most likely, this will be in effect starting next fall.”

For students who don’t live near campus, this will be a much-needed upgrade. For those students on-campus who only check email as part of their daily routines, this will hopefully mean less unclaimed packages as well.

Other advantages include saving paper and improving the processing efficiency of the mail room, according to DeVito.

Just like any other old system, there will be things that will all miss about it. Undergraduate Natalie Kostandova commented, “People like [the blue] things. It makes them feel special but it’s more practical in terms of email.”

Joe DeVito (JDeVito@caltech.edu) openly welcomes any questions about this new system.

Special Report by ASCIT

ASCIT End-Of-Term Concert with Super Mash Bros in the works

By Adam Kahn
Contributor

I’d like to begin by presenting the results of our End of Year Event Survey sent out last week, which had 435 responses. 238 (54.71%) students said that they would attend an on-campus formal and 283 (65.06%) students said that they would attend an off-campus formal for free. But only 136 (31.36%) students would attend an off-campus formal if charged $50 a person. 297 (68.28%) students said that they would attend an on-campus concert and 247 (56.78%) students said that a concert would be an acceptable alternative to a formal. When put to head to head, ASCIT formal had 181 (41.61%) students pick it as their first choice and 88 (20.23%) students pick it as their second choice. An on-campus concert and ASCIT formal were favored over their off-campus counterparts, 132 (31.03%) pick it as their second choice. Whether or not this means Domenic D. needs to eat a hat, I’ll let you be the judge.

Of the 435 students who took the survey, 40% chose an End-of-Term concert as their first choice and 34% chose ASCIT Formal as their first choice.
Caltech’s cuts in graduate student salaries and benefits are unacceptable

From page 1

“The personal and economic sacrifices associated with this extended training may be unattractive to many potential students.”

This can be seen in the recent unrest in the Caltech system, which have left graduate students there in an untenable position than we are here. But private universities like Caltech are bereft of public source of revenue for poor student treatment (state-wide government cuts).

Consider the revenue-generating and expense-savings that were decided without graduate student input at Caltech in 2008. Pay cuts for faculty, administrators and expenses (or at least the cut there) for cutting student services (more grad than undergrad), such as under-represented student support on campus, under-represented student recruitment, Grad Dean’s Office Subsidy, the Ombuds office, mental health, higher parking fees, increased healthcare payments for graduate programs which were already paid for by the GSC (and consequently all grad student clubs), and cutbacks at the gym. No area of graduate student life has been untouched by the blust student manipulation. Furthermore, this cut Accounting now takes precedence over graduate student happiness.

Caltech’s housing subsidy in the Con is not fixed to the external housing market, and it is another way management sends graduate students at the margins. The same is true for our healthcare. Where every 2 years is an attempt to get them not to cut our subsidy further. The private universities are announcing student salaries equal to roughly McDonald’s employee status. Check in can more and more of the intellects in our country from getting the education that we want to have.

Now Caltech, with the biggest recession since the Great Depression not yet a year removed, is playing Hide-the-Paycheck with all graduate students in June. How on earth do you need that 2% cut in salaries? Expecting that the cut the amounting account now takes precedence over graduate student happiness. Caltech’s housing subsidy in the Con is not fixed to the external housing market, and it is another way management sends graduate students at the margins.

Talk of a Student Services Center can’t be taken seriously (despite being ubiquitous at other universities, how could we possibly find the money to do something so extravagant here?). Talk of poor student treatment is clearly outweighed. The President has publicly undergraded the grad student representative body rather than take the results of their numerous polls at face value.

Any suggestion that this adverse climate has an affect on the happiness of graduate students is immediately dismissed by the administrative gaggle of Provosts, Vice Provosts, Presidents, Vice Presidents, and Deans, whose recollection of the exact numbers may be fixed that up the block stops with nobody and the right person to discuss the item you have to talk about is never available. You used to be able to find the Ombudsman to vent, but now it needs require that student representative support position (that is always at one other university).

Opinion

Letters to the Editor

Admissions still based on meritocracy

The article by Sarah Marzen in the May 3 issue reports that the increase in the percentage of admitted female students, while a cause of celebration for many, is leading some people to speculate that the admissions process might involve affirmative action. The article goes on to quote the director of admissions and members of the admissions committee who deny this allegation and offer various explanations for their decision to engage in racial profiling. Mr. Ramesh argues that under Section 11-1051, any law enforcement officer may engage in "lawful detentions" on the basis of "reasonable suspicion that the person is an alien and is unlawfully present in the United States." At first blush, this would seem to authorize racial profiling; however, Mr. Ramesh points out that under the Alien Registration Act of 1940 (a federal law), legal aliens are required to carry with them documentation proving that they are lawfully present in the United States. Therefore, I find it very hard to conclude from the language of the bill that the Arizona legislature intended this law to allow racial profiling of its citizenry. In addition, Mr. Ramesh argues that this bill puts an "unfair burden" on those of Latin-American descent, arguing that they are "now forced to prove themselves." As I described above, no citizen is going to be randomly taken off the streets and asked to provide documentation - immigration status can only be questioned during a routine law enforcement procedure - a traffic stop, for example. I would further like to point out that under the Alien Registration Act of 1940 (a federal law), legal aliens are required to carry with them documentation proving that they are lawfully present in the United States. Therefore, I am left to conclude that those who fail to produce documentation are either absent-minded US citizens, illegal aliens, or aliens breaking this federal law. As such, is there really an "unfair burden" on those of Latin-American descent? I do think those people who have the right to be in the US should be carrying some documentation anyway, meaning that there is no burden at all; rather, all one needs to do is follow the law. SB 1070 and HB 2616 contain further provisions strengthening the existing laws preventing the trafficking of illegal aliens, preventing the transportation of illegal aliens, and stopping employers from using illegal aliens as work...

Dear Christina

I agree with your general sentiment about the unhappy personal ads and treatment of sexuality in the humor column. What was most worrisome to me was that the personal ads were not that funny.

They did not make fun of the extremely predatory, criminal, and harmful qualities of the people, but merely depicted each one as a male rapist, female victim, etc., while it did make mention of some political statement that was made by this, or if there was eventually something to be learned from that.

But this column is just the equivalent of putting out disgust-inducing ideas for no apparent purpose. Personally, I disagree with even...
Weekly Meeting - Page 5 – May 6, 2010

Present: Tim Black (chair), DK Lim (Avery), Chris Whelan (Blacker), Andrew Price (Dabney), Alex Lapides (Fleming), Lucas Hartough (Lloyd), Paul Fleiner (Page), Will Ricketts (Ricketts), Dan Kolodributz (Raddock), Laura Conwill (secretary)

Guests: Chris Hallacy, Dan Thai

Health and Counseling: Tim met with Kevin Austin from the counseling center. The counseling center’s budget cuts resulted in the loss of 3/4 of a nurse, or 32 hours per week. There’s a health survey coming out soon, and they would really like people to take it. They use it for a lot of things. This is a different survey from the one that was out a couple of weeks ago. Kevin Austin noted that the health center isn’t able to provide all its services to people who have opted out of Caltech health insurance.

BoD Stuff: The ASCIT movie is tentatively May 14. It’s Iron Man II, and we’ll be going to Alhambra for it. The ASCIT formal/movie survey results are out. Andrew says that he voted against the formal just so Domenic would have to eat a hat. Not as many people would attend formal if it were off campus.

Interviws: We are interviewing people for committees from 4 pm to 9 pm tonight. If you would like to make interviews, you can send someone in your place. We’ll see about rescheduling admissions for the following weekend.

Frosh: We have 228 frosh, and we saved spots for 18 more than that! We can potentially give spots back to houses. Everyone thinks it’s a good idea to save some rooms for transfer students; we’ll let presidents talk to their houses about what they want to do.

Summer Students: Tim would like everyone to send out an email to their houses to gauge how many people will be staying in the houses this summer. Lucas recommends repeating the numbers from last year; overall, we need to save about 200 spots.

Orientation: Tim is meeting with the deans soon to discuss how orientation will run this year. Everyone suggests having presentations more to the point.

Marks/Braun board: Tim is planning to talk to Peter Daily about the decision to put Marks and Braun on board.

Affirmative action: There’s been a lot of concern from students that the admissions office might be practicing affirmative action; Laura and Tim will bring this up at their meeting with him next week.

LN2: Liquid nitrogen training will be soon.

Submitted by Laura Conwill
IHC Secretary

The ASCIT Board of Directors Meeting – Minutes
April 19, 2010

Officers Present: Adam Khan, Tim Black, Brian Merlob, Addie Rice, Prakriti Gaba, Kartik Sarma

Guests Present: Anthony Chong, Brock Jones

Call to order: 2:12 pm

President’s report:
- Coffeeshouse: Adam is putting together a committee to appoint two managers out of the four that applied.
- ASCIT movie: will be Iron Man 2 on May 14.
- Alumni Career Summit: Adam will be sending out a survey for interest in this program. Its aim is to provide to provide advising to students from alumni in a variety of fields.

Officer Reports:
- V.P. of Academic Affairs (ARC Chair): Teaching awards are coming up in four and a half weeks approximately; Student-faculty conference will be held on Wednesday April 6, 2011. ARC is adopting new by-laws.
- V.P. of Nonacademic Affairs (IHC Chair): The IHC met with Annella last week to talk about details involving Rotation and next week they will be meeting with housing to discuss procedural issues.
- Operations Director: Club funding emails have been finalized and emails sent out. Merlob also notes that the ASCIT movies were returned to the library last week.
- Treasurer: Hallacy still needs pre-frosh weekend checks from some houses. He has emailed all house presidents about this. Club funding will begin soon. Hallacy is also working on re-issuing checks that weren’t given last year.
- Social director: Addie is trying to contact a theater for the ASCIT movie and still looking for a second DJ for alternate prom.

Discussion:
ASCIT formal/End-of-term Concert: survey was sent out this week to determine which event people would prefer.

Meeting adjourned: 2:39 pm
Submitted by Prakriti Gaba
ASCIT Secretary

The 30th annual
BANDORAMA
Directed by William Bing
"A Tribute to our Alumni"
Monday Jazz Band
Thursday Jazz Band
Caltech – Occidental Concert Band

featuring
Paul Asimow
Kjerstin Williams
Melson Varsovia

performing music from
Broadway, the Count Basie Band, and Percy Grainger

Join The Tech
and fight for a better America

The California Tech
Professor Tony Readhead

by Sandhya Chandrasekaran

Tony Readhead

What initially brought you to Caltech? It was the astronomy. I think it’s the best place in the world if you want to do observational astronomy because of its facilities and its “can do” attitude. In Andrew Lange’s words, it is the “best scientific playground in the world”.

Do you teach any undergraduate classes?

Recently, all the classes I’ve been teaching are graduate classes, but I love teaching undergraduates and hope to do so in the future.

What does your research primarily entail?

It focuses on two things, primarily. Both of them are a combination of instrumentation and observation. I really like building instruments and using them to address fundamental questions. My entire career, I have been focusing on cosmology and active galaxies such as super massive black holes.

What’s the coolest piece of equipment you’ve been able to use?

Since coming to Caltech, I’ve always been fortunate to be working in something that’s sort of new and innovative instrumentally and addressing interesting questions. That’s what I love about it. In particular, with the cosmic background imager, we built an instrument here on campus and brought it to Chile. It was pretty interesting because there was nothing there, and so we had to be totally self-sufficient. We had to track our own water, generate our own power. I remember when I was walking back from the telescope once, I told my students, “Can you actually believe we’re being paid to do this?”

What do you think you weren’t an academic?

If I hadn’t been able to be a researcher at a university, I would have tried to be a researcher at a lab in either astronomy or archaeology. What are some of your hobbies? I like body surfing a lot. I don’t do a whole lot of it here, but I used to do it a lot when I was in South Africa. But I never mastered the surf board. I like windsurfing and enjoy sailing as well.

Do you believe in aliens?

It’s a good question. Well, I think that the search for extraterrestrial intelligence (SETI) is one of the most interesting questions that you can ask. Astronomers tend to break down into two groups: those that believe this is a complete garbage and utter waste of time, and those who think it is the most important thing you can do. I think it’s the most important thing you can do, although I wouldn’t spend all my research on that because the possibility of payoff is tiny. I was getting very involved with SETI back in the 90s when Congress killed the entire project, which was a great pity. Listening and trying to see if there are any signals in a systematic way, which is what SETI tries to do, is very worthwhile.

Who’s your favorite movie star?

I like a lot of movies. But if I had to pick my favorite actor it would have to be Kevin Spacey. I saw him acting in London four months ago in a reenactment of the Scopes trial, and he did a phenomenal job.

Have you read The Hitchhiker’s Guide to the Galaxy? Any thoughts or opinions?

I loved it. The author has such a fantastic sense of humor and was very imaginative. The characters are great. I’m not normally a fan of science fiction because most of it is incredibly badly written and often complete garbage. But this one was very creative.

What is a common misconception that people tend to have about the universe? Because people grow up in the city, they don’t realize how much you can do with a small pair of binoculars or telescope and how immediate the universe can be to our naked eye. I think there is this distance between what people think of as astronomy and how accessible it really is.

Are there any particularly memorable places you have visited while conducting your studies?

Well, I observe at all the Caltech observatories, Palomar, Hawaii, the Keck telescopes. I do travel quite a bit because I’m trying to bring about a Renaissance of activity in lower frequency radio astronomy. In March, I visited China, which was fascinating. And just last week, I was in Crete.

Who’s your favorite superhero?

I would have to say Charles Darwin and Isaac Newton because of the way they both changed out perception of nature. Newton’s idea that you could actually take physical laws and apply those angles to anywhere in the universe was astounding. When he applied his law of gravity to the motion on the moon and found that it fit pretty nearly, it was amazing step of the imagination. And although many people had been tackling the idea of evolution, Darwin was the one who figured out the mechanism of natural selection. It freed us from superstition, which has limited our species and tied us down. I was at a dinner at Hollywood one time, and one of the scientists at the dinner table asked me what was the most important contribution of science to our culture. They were expecting me to give them a very specific example, but I just answered “It frees us from superstition”, but I think that is what is most important for...

BE THE ENERGY THAT MAKES A TWO-YEAR-OLD TERRIBLE.

Within every one of us is the power to heal. It’s called marrow, and thousands of patients could potentially be saved by a marrow transplant.

Join the Be The Match® marrow registry and fight for those with life-threatening diseases. Who knows? You could be the one to save a life.

Take the first step at BeTheMatch.org.
First Caltech Musical in Fifteen Years Delivers Laughter at the Trials and Triumphs of Love

Caltech finally broke its fifteen year streak of no musicals this past weekend with the debut of I Love You, You’re Perfect, Now Change, a comedy musical by Joe DiPietro (music by Jimmy Roberts) famous for being the second longest running Off Broadway musical. In addition, this was the first time in five years since a student directed a Caltech production. Sophomore Christina Kondos, who is majoring in economics, took the lead in organizing and making the play a smashing success. The Ramo auditorium was packed full with an eager audience on the opening night this past Friday, and everyone was given a good dose of laughter.

I Love You, You’re Perfect, Now Change features a series of vignettes about love and relationships, developing its theme from dating and marriage to raising kids to quitting fighting. When performed onstage, these events bring a chuckle from the audience. I was surprised by how many people were interested in going to the show. Cast members used swivel chairs to represent seats in a car. Imagine ‘dad’ and ‘mom’ constantly yelling from the front seat at the kids to quit fighting. When performed onstage, these events bring a chuckle from the audience. I was surprised by how many people wanted to be involved simply because it was a musical. Lots of musicians such as trumpet players and others reached out. Also, I was surprised by how well so many students of the Caltech community could sing.

In combination, the series of vignettes well complemented one another and the musical was enjoyable from beginning to finish. It has definitely raised expectations on the quality of Caltech productions. Attending future productions is highly recommended.

Semana Latina 2010

Semana Latina is a yearly event which used to be thrown by Club Latino, with some help of the Caltech Latino Association of Students in Engineering and Science (CLASES). After these clubs died five years ago, the event was planned by administration from what used to be Minority Student Education, led by Luz Rivis. Before leaving, Luz planned one last Semana Latina with CLASES, passing the torch to the recently initiated club. This year, CLASES planned all of Semana Latina, with help of Salsa Club and sponsored by Caltech Y, ASCIT, CCD, GSC, and Graduate Office. This year was a huge hit with over 250 people attending each noon event. The Salsa Party drew not only students, but people from San Diego and L.A. Semana Latina was, for the first time in many year organized and run by only students, with some help of administration.

Will you do another musical in the near future?

This play was fairly difficult to put together, but a musical is an ambitious project. My producer Meg Rosenberg and I said there was a pretty steep learning curve. I put in around 24 hours a week during the normal rehearsal period and probably twice that during the final week.

Were you pleased, surprised, etc. by the involvement from the Caltech community?

I was surprised by how many people wanted to be involved simply because it was a musical. Lots of musicians such as trumpet players and others reached out. Also, I was surprised by how well so many members of the Caltech community could sing.

Was it difficult trying to get funding?

We received funding from the MHF fund, and they were incredibly supportive. The Graduate Student Council also helped out. There are so many opportunities on campus. If you have an idea, people will help you put it in action.

Features May 11, 2010

Cue and A with Director Kondos

What motivated you to direct this play?

This play is funny and focuses on subjects that touch us all. Also, it was fairly easy to sing, only required a piano and violin, and we could cast as many people as we wanted.

How hard was it to get the entire play together?

This play was fairly difficult to put together, but a musical is an ambitious project. My producer Meg Rosenberg and I said there was a pretty steep learning curve. I put in around 24 hours a week during the normal rehearsal period and probably twice that during the final week.

Were you pleased, surprised, etc. by the involvement from the Caltech community?

I was surprised by how many people wanted to be involved simply because it was a musical. Lots of musicians such as trumpet players and others reached out. Also, I was surprised by how well so many members of the Caltech community could sing.

Was it difficult trying to get funding?

We received funding from the MHF fund, and they were incredibly supportive. The Graduate Student Council also helped out. There are so many opportunities on campus. If you have an idea, people will help you put it in action.

Will you do another play sometime soon?

I’m not sure if I will do another play anytime soon, but I tell people to ask me in a few months when I forget how time consuming it was.

Can you please explain the difference between Explicit and Tacit?

EXPLICIT differs from TACIT because it is student-run. We cobbled the group together to do this play, but we have been recognized as a club by ASCIT and hope to do more activities in the future. Another play or more social theater activities would be fantastic. TACIT is the official theater department on campus. Brian Brophy is its director, and students can receive Caltech credits for participating in TACIT classes or plays.

Anything you want us to know about putting on the play?

I’m extremely grateful for all the support we received and couldn’t be happier with the result.
Undergraduate senior awarded Fulbright scholarship to do research in Israel

By Amol Kamat
Contributor

Caltech senior Jonathan Tsai has been awarded a Fulbright Grant that will allow him to do research in Israel for one year. Starting next fall, he will attend Stanford’s MD/PhD program.

Tsai, who has lived overseas before, was undaunted by this change, “I wanted to live somewhere totally different and new. I lived in Brussels for three years in middle school, so I wasn’t really excited to go back to Europe. I thought the Middle East was intriguing,” said Tsai.

Fulbright Grants are awarded annually to 1500 graduating seniors, masters students, PhD students, and scientists who already have their degrees to do research in over 150 countries. Tsai competed with eighty-six other applicants for ten spots in Israel.

Tsai, who currently works in David Baltimore’s lab, will be working with Dr. Yosef Yarden, studying the feedback mechanisms of tumors, specifically those associated with pancreatic cancer. Tsai hopes this research will reveal the nature of resistant tumors. Such insight would hold the potential to save millions of lives.

The class of 2011 is now eligible to apply for Fulbrights. More information is available on the Fulbright website, or in the Fellowships Advising and Resources Office. As for the application itself, Tsai seemed to find it quite easy. “The application process wasn’t too difficult because I had just finished applying to MD/PhD programs. I already knew what country I wanted to go to, and [Caltech Fulbright Program Advisor] Lauren Stolper made everything a lot easier for me.”

News Brief

The California Institute of Technology (Caltech) is pleased to announce the appointment of Kristen Brown as the Institute’s new assistant vice president for marketing and communications, effective May 5.

Brown will direct and lead the Institute’s communications and marketing initiatives as well as create and lead a comprehensive program that will help define, emphasize, and enhance the Caltech brand. She will oversee the online communications, media relations, and editorial and content development departments and will report to Peter Hero, vice president for development and institute relations.

According to Hero, Brown’s mission is to integrate communication efforts across the Institute and elevate Caltech’s outreach to a new level. “We’re very fortunate to have Kristen joining us, with her exceptional skills and her background of academic and corporate responsibilities,” says Hero.

Brown brings a track record of innovative branding initiatives and integrated, multi-platform marketing programs at leading global organizations in higher education, entertainment, and consumer goods, including the American Film Institute, Warner Bros., Entertainment, and Nestle USA.

-- taken from Caltech Today
Excerpt from Mark Eichenlaub’s Blog: Physics of Pole Vaulting

Here is a physics problem from a book I was reading:

The year is 2100 and the pole vault record stands at 7.5m. Estimate the world record for the 100m sprint at this time.

This question is one of our favourites since it shows the power of physics to make the apparently most unlikely connections. Incidentally, both records would be held by women by this date, a phrase that makes them sound certain of it.

I’ve been around track and field for almost a decade. I can tell you, with utter assurance, that men are better at it than women, and they still will be in 2100. Men and women are physiologically different, and compared to an elite man, an elite woman, despite training with comparable intensity and dedication, is nowhere near as good. So what led the authors to be so confident that women will hold the world records by 2100? The Nature reference to “a fantastically stupid letter titled “Will women soon outrun men?”” which predicted that female marathoners might become as good as male marathoners by 1998. They didn’t.

The discrepancy came up because the authors made a prediction by drawing a curve through the data about the past, and assuming the curve would continue in the same way in the future. Women’s track and field, and especially women’s marathoning, is less mature than men’s. The women’s marathon was only added to the Olympics in 1984 (and steeplechasing in 2000). Few women were running marathons before then, and few were training for them seriously the way men do. Now, as more women join track and field and run professionally, the records can drop quickly. Men approached physiological barriers before women, so their improvement has been slower recently. This adds up so that when you draw a line through the times of the last 50 years for women and men, you predict that women will soon be faster.

If you are Jacob Bronowski then pole vaulting is what separates man from the animals.

This question is one of our favourites since it shows the power of physics to make the apparently most unlikely connections. Incidentally, both records would be held by women by this date, a phrase that makes them sound certain of it.
Types of Late Night People in the Library

By James Wu

1. The Corrector

They may only be a freshman, and the Professor may have over twenty papers and tenure, but that doesn’t stop this student from correcting the Professor over small mistakes, even those of no significance. He feels that the fact he’s read a slightly different definition in a textbook gives him the right to argue over the definition of a concept with the Prof. In the beginning, the Prof will try to be encouraging, but in the end he’ll finally snap and tell the student, “You’re wrong, shut up,” to loud applause from everyone else.

2. The Laptop

While supposedly typing notes, this student is more likely to be playing flash games or be on Facebook. Yeah, he might not be in his room, but that shouldn’t prevent him from doing what he does when he’s in his room right? This guy used to bring a pillow to class, but decided that a laptop might be more inconspicuous, and cause the Prof to think he’s working really hard at taking notes when he’s pounding the keyboard.

3. The Sleeper

This is a very common type of student, especially in morning classes. He climbed out of his warm cozy bed in order to go to class. The moment he got to class he promptly fell asleep again. He might try to hide it from the Professor, resting his head on one hand as if he’s thinking, but it’s obvious to everyone and the Professor he’s sleeping since he’s snoring like an elephant.

4. The Talker

Hey look, a bunch of friends are sitting next to each other! Great, now please shut up. They think they’re being discreet and soft spoken, but everyone in the entire room can hear them gossiping. Everyone glares at them, trying to mentally set them on fire. Sometimes the Talker will just be a lonely guy trying his hardest to make use of the time when he has a girl captive in her seat. In that case, everyone in the room feels too awkward to look in his direction.

5. The No Show

This is the most common type of student. This type of student used to be one of the other types, but evolved when they realized they weren’t paying attention in class anyways. They were doing the same thing in class they were doing back in their rooms, so they figured they might as well just stay in their rooms. They think it’s a great idea until exams come around and one of the questions references an “in class discussion.”

As reported by BBC...

South African MP Nhlanhla Nene was being interviewed live on a parliamentary review programme when a loud crack was heard; seconds later his chair collapsed. The South African Broadcasting Corporation has apologised to Mr Nene, and said that “all necessary precautions are being put in place to avoid a similar incident”.

-- taken from BBC One-Minute News

The California Tech
Caltech 40-58
Pasadena, CA 91125