



Caltech chemists devise novel reaction for heterocycles

KIMM FESENMAIER
Science Writer

PASADENA, Calif.—A team of researchers at the California Institute of Technology (Caltech) has devised a new method for making complex molecules. The reaction they have come up with should enable chemists to synthesize new varieties of a whole subclass of organic compounds called nitrogen-containing heterocycles, thus opening up new avenues for the development of novel pharmaceuticals and natural products ranging from chemotherapeutic compounds to bioactive plant materials such as morphine.

The team—led by Brian Stoltz, the Ethel Wilson Bowles and Robert Bowles Professor of Chemistry, and Doug Behenna, a scientific researcher—used a suite of specialized robotic tools in the Caltech Center for Catalysis and Chemical Synthesis to find the optimal conditions and an appropriate catalyst to drive this particular type of reaction, known as an alkylation, because it adds an alkyl group (a group of carbon and hydrogen atoms) to the compound. The researchers describe the reaction in a recent advance online publication of a paper in *Nature Chemistry*. “We think it’s going to be a highly enabling reaction, not only for preparing complex natural products, but also for making pharmaceutical substances

that include components that were previously very challenging to make,” Stoltz says. “This has suddenly made them quite easy

form carbon-carbon bonds at sites where some of the carbon atoms are essentially hidden, or blocked, by larger nearby components.

but because they have been so difficult to make. “But now,” he says, “we’ve made it very easy to make those very hindered centers,

mirror images of each other. One version can be thought of as right-handed, the other as left-handed.

The problem is that there is often a lock-and-key interaction between our bodies and the compounds that act upon them—only one of the two possible hands of a compound can “shake hands” and fit appropriately. In fact, one version will often have a beneficial effect on the body while the other will have a completely different and sometimes detrimental effect. Therefore, it is important to be able to selectively produce the compound with the desired handedness. For this reason, the FDA has increasingly required that the molecules in a particular drug be present in just one form.

“Not only are we making tricky carbon-carbon bonds, we’re also making them such that the resulting products have a particular, desired handedness,” Stoltz says. “This was the culmination of six years of work. There was essentially no way to make these compounds before, so to all of a sudden be able to do it and with perfect selectivity... that’s pretty awesome.” In addition to Stoltz and Behenna, other authors on the paper, “Enantioselective construction of quaternary N-heterocycles by palladium-catalysed decarboxylative allylic alkylation of lactams,” include Yiyang Liu, Jimin Kim, David White, and Scott Virgil of Caltech, and Taiga Yurino, who visited the Stoltz lab on a fellowship supported by the Japan Society for the Promotion of Science. The work was supported by the King Abdullah University of Science and Technology, the NIH-NIGMS, the Gordon and Betty Moore Foundation, Amgen, Abbott, and Boehringer Ingelheim.



Robotic tools in the Caltech Center for Catalysis and Chemical Synthesis allowed the Stoltz lab to discover the new alkylation reaction.

- Caltech

to make, and it should allow medicinal chemists to access levels of complexity they couldn’t previously access.”

The reaction creates compounds called heterocycles, which involve cyclic groups of carbon and nitrogen atoms. Such nitrogen-containing heterocycles are found in many natural products and pharmaceuticals, as well as in many synthetic polymers. In addition, the reaction manages to

“Making carbon-carbon bonds is hard, but that’s what we need to make the complicated structures we’re after,” Stoltz says. “We’re taking that up another notch by making carbon-carbon bonds in really challenging scenarios. We’re making carbon centers that have four other carbon groups around them, and that’s very hard to do.” The vast majority of pharmaceuticals being made today do not include such congested carbon centers, Stoltz says—not so much because they would not be effective compounds,

even in compounds that contain nitrogen. And that should give pharmaceutical companies new possibilities that they previously couldn’t consider.” Perhaps the most important feature of the reaction is that it yields almost 100 percent of just one version of its product. This is significant because many organic compounds exist in two distinct versions, or enantiomers, each having the same chemical formula and bond structure as the other, but with functional groups in opposite positions in space, making them

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Helping readers burst out of the Caltech bubble

Need to know

< **100** words about the world this week – topics sorted from good to bad

by Sam Barnett – links to full stories available at barnett.caltech.edu/news

SOPA protests successful **2** days after website blackouts – SOPA, PIPA postponed indefinitely [WPOST]

EU set to ban Iranian oil **20%** of Iran’s oil exports is bought by EU – new sanctions impending [BBC]

Croatians vote to join EU **66%** votes in favor, but only 47% of eligible voters participated [AP]

Greek debt talks stalled € **30 billion** (~\$39 billion) for country to avoid bankruptcy [NYTIMES]

Devastating Nevada fire **3,117** acres burned – 29 homes destroyed – fire contained now [CNN]

Bird flu in China **2** recent deaths – 343 of 582 infected around the world have died [NYTIMES]

Terrorism in Nigeria **157** people killed in bombings by radical Islamist group [CNN]

Food with Mannion!

Do you like eating food?

How about free food at nice restaurants?

Ever want to tell the world exactly what you think of said food?

The Tech will be beginning a new column to chronicle the foodie experiences of new writers every other week... The Catch: They'll be going head-to-head with Tom Mannion who will be reviewing the same restaurant. If you have ever thought you were more of a gourmand than our resident master chef, now's your chance to prove it!

Email us for a spot on the list at tech@caltech.edu

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ASCIT Minutes

Officer's present: Chris Hallacy, Margaret Chiu, Laura Conwill, Diego Caporale, Mario Zubia, Michelle Tang, Laura Santoso

President's Report

1. Bechtel Residence: Almost completely open about what this residence will be like. A committee with Anneila is currently being formed to talk through all the options.
2. Alumni board meeting: Went well.
3. Hazing committee: Rescheduled talks to students. Dean Nye will hopefully be at all meetings, will happen this week or next week. Policy should be made public sometime this week.

Officer's Reports

1. ARC (Margaret)
 - a. ARC chair: Margaret is graduating early, will need to find a replacement for third term
 - b. Humanities: the faculty board is debating whether there should be 11 vs. 12 required HSS courses.
 - c. Core/Requirements: Core math and physics will likely be one year in the future. Officially right now though, students have to take the core of the year that they came in but can take the option core of any year following their arrival.
 - d. Uniform placement: Currently, if you place out of some classes you have to take a more advanced course whereas in others you don't have to take the course at all. Are discussing making a more uniform placement policy.
 - e. TQFR: Thinking about changing rewards and getting more professors on board.
 - f. Omsbud: Trying to push for omsbuds meetings to start earlier in the term so that input can be implemented faster.
 - g. Course complaints: New system finally established.
 - h. Options fair: Hoping to have it March 2, with representatives from each major at booths so that people (especially frosh who don't know what major to choose) can talk to them.
 - i. ASCIT Teaching Awards/Prof of the Month: Currently 4 ASCIT teaching awards given to profs and 4 to TAs, may reduce this to 3 because we recognize more people with prof of the month.
2. IHC (LC)
 - a. New Blacker President: Is now Chris Varnerin.
 - b. Rotation: Dean Kiewiet would like to move rotation out of academic school year and consider developing a new system for rotating frosh.
3. Director of Operations (Diego)
 - a. Big T: new editors are being selected soon.
4. Treasurer (Mario)
 - a. Yearly ASCIT budget: IRS form has been reviewed, should change soon
 - b. Club funding: The old allowance for clubs will be extended until the end of the school year to match up to the new change in the fiscal year.
5. Social Representative (Michelle)
 - a. Ice event: We will have an ice skating event in the parking lot north of Broad and will have a skating rink and rentals brought onto campus! It will be from 9pm-2am with lights, music, and hot chocolate. Will be free for all students.
 - b. Concert-party: still working on it.
6. Secretary (Laura)
 - a. Big T Editor: Scheduled interviews.
 - b. SFC committees: Scheduling meetings with them.

Administration continues to consider alcohol policy

LIZ DECOLVENAERE
Contributing Writer

October 6, 2011, was an unusually silent Thursday night in Blacker Hovse. The courtyard was quiet, devoid of the loud music usually played by Ricketts Hovse on such a night. The crowd usually attracted by Thursday Night Drinking, or TND, in Ricketts, was suspiciously absent. The evening was disturbingly calm.

Calm, until Priyam Patel ran into an otherwise placid Blacker lounge and yelled:

“Alcohol has been banned on campus!”

Caltech, like many private colleges across the nation, is a “wet” school. Students of-age (over 21) are allowed to possess and consume alcohol in private. According to the previous alcohol policy, officially registered student parties could serve alcohol via bartenders with relatively little hassle or approval required. Major campus parties such as Big Interhouse (Big I), as well as smaller parties such as Apache or Page Interhouse, have historically had free-flowing booze available through the alcohol policy. The primary requirements of the old policy were the existence of an “Event Host” to organize the paperwork, “professional bartenders” to serve the alcohol, and permission from three organizations, including the Undergraduate Deans. But this may no longer be the case.

Anastasios Dimitriadis (known as “Taso” by students), the Area Coordinator for Residential Life for the South Hovses, met with students the same night Patel shouted his announcement. He presented an email from the deans putting a temporary ban on alcohol at student related events. An email then went out from Chris Hallacy, ASCIT president, stating that the ban was in place for legal reasons relating to allocation of financial aid, and “should be resolved soon.”

The problem with financial aid versus alcohol is not a new one, according to alumnus Craig Montuori. The incident arose in the summer of 2007, when Montuori served as IHC (Interhouse Committee) chair. Montuori recalled that Caltech Legal had grown concerned that student spending on alcohol was a potential problem because of complications involving financial aid. Federal money can be cut off if the school knowingly violates underage drinking laws, according to the Drug Free Schools and Communities act of 1989.

Legal would not agree to comment, but according to Montuori, legal’s concern was that house fees (which can be covered by financial aid) were being spent on alcohol, which could contribute to underage drinking. According to Montuori, Legal’s estimate for Page’s budget on alcohol was 50% of the total budget. Margo Marshak, Vice President of Student Affairs,

was able to convince Legal that the issue required “more research”. The issue went ignored until recently.

Rod Kiewiet, Dean of Undergraduate Students, offered this explanation for why the issue had resurfaced.

“Actually, I ran into a friend of mine from MIT, ... and found out that at MIT there’s no [school funding for] alcohol at students events. So, I thought, what do they know that we don’t know? And that’s what’s prompted me to better see what we’re doing.”

The most well-known “wet” party planned was Page Interhouse.

Part of the problem is that the system varies from house to house. Some houses, such as Ricketts, have a “brute squad” of students who wander through parties to keep an eye on the rowdiness and the health and safety of students attending. Other houses, such as Dabney and Avery, solve the problem by keeping the party entirely dry.

A school like MIT solves the problem by requiring that there be a host for all events with alcohol. That person must be 21, and sober and present for the entire event. While the Caltech alcohol policy is similar, Dean Kiewiet expressed

member of Fleming’s social team. He estimated that between 200 and 250 dollars were spent on alcohol at the party.

Menezes recalled trying to obtain permission from Dean Kiewiet for the alcohol. “He told us that we could have the party, and he talked to us about how he would like to change alcohol policy here,” Menezes said. “...he agreed to approve our alcohol sheet if we reduced the hard alcohol in favor of beer and wine.”

Lesley Nye, the Associate Dean of Undergraduate Students, said the administration is working to

soon. The policy will be mostly the same. While concerns still exist over federal funding versus alcohol spending, Dean Nye assured that the issues would be handled further up the chain. The funding problems wouldn’t be allowed to affect the students.

Major changes include a requirement of two “Social Hosts” at least 21 years in age for every registered event. These Social Hosts will receive special training that is to be determined, but will include instructions on how to deal with medical emergencies arising from drinking, and management of the party area. If an event is planned for more than 50 students, wristbands will be required for anyone over 21 who wishes to drink.

Not everything will be back to normal, though. Thursday Night Drinking still remains a casualty of policy change.

TND has been an on-again off-again Ricketts Hovse tradition since 1998. Over the course of five years, TND went from a group of friends to a substantial portion of the 21+ crowd in the hovse. The event was officially registered as a recurring party in spring of 2003. A typical Thursday night in Ricketts Hovse would be full of loud music, jolly students, and free-flowing alcohol (for students of-age).

The lounge would be crowded and dim, and the courtyard would echo with snatches of conversation and laughter. A plethora of students from multiple hovses (and houses) attended TND to relax, socialize, and enjoy a good drink in celebration of the not-quite-end of the week.

Unlike Fleming’s Masquerade party, TND failed to find approval in the interim. When asked why, Dean Kiewiet took a different stance.

“We don’t do school night drinking events; we have school. I explicitly said I won’t sign and grant [event registration forms] for Thursdays. As the dean, I cannot sanction drinking on Thursdays when there’s school on Friday.”

Galen Loram, a Ricketts alum from 2001-2005 who held several student government positions, including ASCIT president his last year, recalled the last time TND fell out of style. “...there was an uptick in people drinking alone in their rooms, which resulted in two people ending up in the hospital for alcohol poisoning. ...when it’s in a social situation, with a responsible bartender, [students] can be cut off before there is a problem.”

Asked about the alcohol poisonings associated with a lack of TND, Dean Kiewiet replied, “But you have to understand, you can always make that kind of argument. No matter what policy you come up with, somebody will make some kind of connection or correlation, and that’s not totally invalid. No matter what your party policy is, a student can go to their room, get a bottle of alcohol, and blow their brains out.”



When asked about the possibility of a dry party, Dean Kiewiet replied “That was never in the cards.” He went on to explain that the concern was less with funding, and more about the “social host” portion.

Dean Kiewiet expressed concern that the current system of responsibilities regarding alcohol at student events – who arranges the drinks, who ensures that students don’t over-drink, who takes care of drunk students – was insufficient. “If you say the sophomore health ad is supposed to be in charge, and there’s some senior that’s [really] drunk, is that sophomore really going to be able to tell him to stop?” he asked.

concern that the system may still be inadequate.

“My own personal preference is that parties that are more beer and wine oriented are a better idea,” Said Dean Kiewiet, though he added that a policy change to beer-and-wine only was unlikely. “Hard liquor is where people get in trouble.”

This preference was observed during the recent Fleming Masquerade party. The open bar came as a surprise to some students; at the time alcohol was still an unsolved problem. The party had a “keg of beer, and just a couple of handles of hard liquor,” according to Alan Menezes, a

ensure that any new policy fits the needs of the school. “[We are] seeing policies at other schools, talking to other schools, comparing to other schools, talking to students, making sure that all of our ducks are in a row so that we have an iron-clad alcohol policy, so that we don’t lose our federal financial aid, or that the university doesn’t get in trouble, or an individual student doesn’t get in trouble,” Dean Nye said.

When asked about the legal status of the current situation, the Caltech Office of the General Counsel declined to comment.

In a follow-up interview, Dean Kiewiet stated that a revised final alcohol policy would be announced

\$25 million on a new House? Come on, Caltech, you can do better

NEHA SAMDARIA
Staff Writer

So, here's the thing. Bechtel house: great idea on paper, but not at all what is needed right now to improve campus life. I'd like to ask every Caltech undergrad what he or she thinks is more important –

to call in for reinforcements, or bringing back the women's center, which used to help countless Caltech women find a support system on campus?

One area of student life that needs urgent attention is the Caltech Student Health Center. Every year, students are forced

another doctor just to get referred. Why don't we have a single doctor on-site and available? Other small-sized schools such as Rice University have three physicians that are always on site and are dedicated to helping only Rice students. If we really want to improve student life, why can't we hire a doctor to take care of the campus when and where it is needed?

Perhaps the most pressing issue on campus is student morale. How happy are the students? What really makes students happier? Let's be honest: Winnett is a joke. It's no more a student center than the Caltech Bookstore is a bookstore. What we need is a place where students can eat, drink, and socialize before heading to class or to their houses. Almost every teacher I know has been deeply unhappy with Caltech at some point during their time here, and while Caltech does a great job of dealing with mental health issues once they have risen (The Counseling Center, Area Co-ordinators etc.), very little is done to prevent these issues in the first place.

Why not use \$25 million to combat Caltech's biggest problem, mental health, in a proactive way?

I can think of dozens of great ways to spend this generous gift from the S.D. Bechtel Jr. Foundation, but none of them involves building a ninth house.

If the aim is really to 'strengthen Caltech's living and learning community', then let's pick an idea that's not just great on paper, but actually makes a difference in the students' lives.

“What contributes more to improving student life: a ninth house or a student center that encourages cross-house interaction and provides students with an opportunity to de-stress?”

having an extra house so everyone has the option of staying on campus (even though there are off-campus options available, and they are often unfilled) or having a qualified career center that helps students get interviews, internships and full-time positions at top companies and firms?

What contributes more to improving student life: a ninth house or a student center that encourages cross-house interaction and provides students with an opportunity to de-stress?

Would \$25 million not be better spent on improving the athletic fields and tennis courts, giving every student closet doors that shut comfortably without the need

to deal with frosh plague, flu, allergies and often more serious infections and injuries.

Yet, we don't have a single doctor on-site, 5 days a week, for more than a few hours a day. True, we have nurses that can deal with minor illnesses, but I have been advised by the nurses themselves to seek medical advice from a trained physician, on more than one occasion.

So what do I do? I call up doctors in the area, make an appointment, and pay to get seen. Even if the infection is small and easily treatable, I have to pay to find a solution. If I need a referral, the health center won't do it, so once again, I'm forced to pay and go see

Caltech's ponds have been severely neglected

MARGOT HOYT
Contributing Writer

Through the years many of us have enjoyed the beauty of the Caltech ponds – where frogs, crawdads, koi and red-eared sliders, the popular aquatic turtles, live. In addition, the ponds receive regular visits from egrets, the beautiful, white, long-legged freshwater birds, looking for a good meal amongst the variety and plentitude of the inhabitants of the ponds. There are even websites, news articles and YouTube videos that talk about our ponds.

The ponds have also been used for experiments, such as one noted on a Bi 1x syllabus (“The Great Ideas of Biology: an introduction through experimentation”): “Session 1: Process DNA from Caltech pond.”

The ponds are featured on artists' and photographers' websites, and are a special treat for the school children who visit them. Teachers bring entire classes to the pond to teach lessons in observation. On clear days, kids can see the

turtles basking on the rocks in the sunshine.

In the last several years, however, there has been a noticeable and steady decline in the appearance of the ponds, and the inhabitants are slowly disappearing. Thinning out the ponds near BBB and Baxter used to be a yearly undertaking for the gardening crew, which helped to control the overgrowth and strangulation of the lily pads and created more open space. Without this yearly thinning, the fish start to die and a layer of sediment, or pond “gunk”, begins to form, getting thicker with time. The ponds east of Milikan, on the other hand, could benefit from having a few plants.

According to GotAlgae.com, “Aquatic plants are essential to a healthy pond ecosystem. They can serve as a food course for organisms...and also provide oxygen... native plants can also grow rapidly if not monitored and held in check. Therefore, the key is balance and preventing one specific aquatic plant from overtaking your entire pond. A nice mix of species will provide a

healthy pond ecosystem and also a beautiful setting.”

I realize that it is not the job of Caltech to care for the inhabitants in the ponds, but in a good environment these creatures thrive without any care.

One of the few components for red-eared sliders to thrive is to simply have clean water. These days, frogs, crawdads and egrets are rarely to be seen at the ponds, and the turtles appear to be covered by the pond scum. A veterinarian examining one of the turtles who was in respiratory distress in the pond east of Milikan said it appeared that the turtle was covered by an “oil slick.” Sadly, I rarely see school children visit anymore.

The neglected appearance of the ponds themselves is completely different from the beauty of former years.

Pond scum is visibly noticeable and has grown almost to the top of the water in the two ponds near BBB and Baxter.

When polled, the general consensus on campus was that the ponds both look and smell awful.

“Watch the Throne” is a wild affair

CLEMENT LACROUTE
Staff Writer

When I entered the Staples Center on December 13th to see the “Watch the Throne” show, I was pretty sure who the King would be. Of the two moguls of hip-hop, Kanye West and Jay-Z, I figured one would have to wear the crown while the other helped him earn it.

Well, I was wrong. There is only one Throne, only one King, and it's Kanye West AND Jay-Z. After collaborating for several years on each other's productions, they formed a duo that first materialized as the album “Watch the Throne”, on August 8th, 2011. The release of the album was closely followed by a sold-out tour, and the pair was forced to add two dates to their initial single night in LA at the Staples Center. I was lucky enough to attend the last one of them.

My first impression was that of two lions who broke off their cages simultaneously and decided to stick together instead of fighting for power. Here were two boxers in a ring, between the two of them ready to knock out any contender. They backed one another with obvious pleasure, seamlessly alternating between duets and solo performances. There were a few tracks from their respective solo work, but “Watch the Throne” was played almost in its entirety.

The Staples Center is very impressive when viewed from the very top row, though if you suffer from vertigo you should probably consider doubling the ticket price to get closer to the ground.

I was originally worried that I wouldn't actually see anything from up there and while I missed out on facial expressions, I got to enjoy everything BIG that the show had to offer.

Huge bursts of flames.

Giant screens.

A lift-up stage made of some more screens.

And, of course, plenty of lasers, which seemed to transform the stage into a nightclub during certain songs. Still, the pair's straightforward rapping and otherwise stripped-down stage provided a nice balance to the chaos of the special effects.

And when it comes to flow, a special note goes to Jay-Z. He delivers tricky, intricate, and fast lines with seemingly no effort and with a pleasure that's undeniable.

He most definitely got the skills to pay the bills.

And while Kanye is not as skilled as a rapper, he's the musician of the pair, dishing out a long vocoder improvisation during the song “Runaway” that was both funny and moving, sort of.

Continued on page 6



Caltech Floorball Club hosts US vs Canada game

ANDREW BEYER
Contributing Writer

Fast-paced, international floorball hits the Caltech campus on February 2 and February 3 in Braun Gymnasium, as the US and Canadian men's national teams clash at 8pm on consecutive nights. Both matches will be free to the general public.

Floorball is similar to floor hockey and was originally developed in Scandinavian countries in order to emphasize skill and speed over a hack-and-slash style of floor hockey. The Caltech Floorball Club and the US Floorball Association, along with the Athletics, Physical Education, and Recreation (APER) department at Caltech, are hosting the two-day event at Caltech in order to bring this exciting sport to the public at a grassroots level.

The two matches will allow the US and Canadian squads to test their readiness for the World Floorball Championship (WFC), which will take place in Bern and Zürich, Switzerland from December 1st to 9th.

The US team hopes to avenge losses to Canada during the 2010 American qualifying matches, which kept the US from earning a spot in the 2010 championship tournament. Meanwhile, Canada will test the effectiveness of a new squad and a new coach, as well as the reboot of its national development plan, against the US team. The two teams were to compete in an American Qualifier



Undergraduate Caleb Ziegler (5) in hot pursuit of Jonas Fornander (33) from LA Innebandy, as Professor Swaminathan Krishnan (21) guards the point. Caltech won the preseason matchup with LA Innebandy 6-5.

- Andrew Beyer

tournament with Brazil for two spots in the 2012 WFC prior to Brazil's withdrawal from the

tournament at Caltech due to financial constraints. Both teams will now qualify to the WFC.

Caltech enjoys a unique spot in the history of floorball in the United States, as it was the original seat of

emailing the group at bandy@caltech.edu or by visiting the club's website: floorball.caltech.edu

the US Floorball Association established in 1998 when the US joined the International Floorball Federation, the international governing body of floorball. By hosting the US versus Canada matchups, the Caltech club hopes to grow the sport locally.

Floorball continues to be played in Braun Gym on a weekly basis as an informal pickup game, and recent initiatives by the APER department led the club to develop the first-ever Southern California Floorball League.

The Caltech club defeated its local rivals, the Los Angeles Innebandy Club, 6-5 in a preseason competition and has started its league season with a record of 1-1, defeating Inland Empire FC 3-0 and falling to So. Cal. UFC 5-1.

The Caltech Floorball Club is open to anyone in the Caltech community, including people who have never played before. The club is led by Andrew Beyer, a post-doc in Physics, and coached by Jason Rabinovitch, a graduate student in Aeronautics.

Drills and pick-up games take place in Braun Gym on Mondays at 9pm and Wednesdays at 10pm. More info can be obtained by

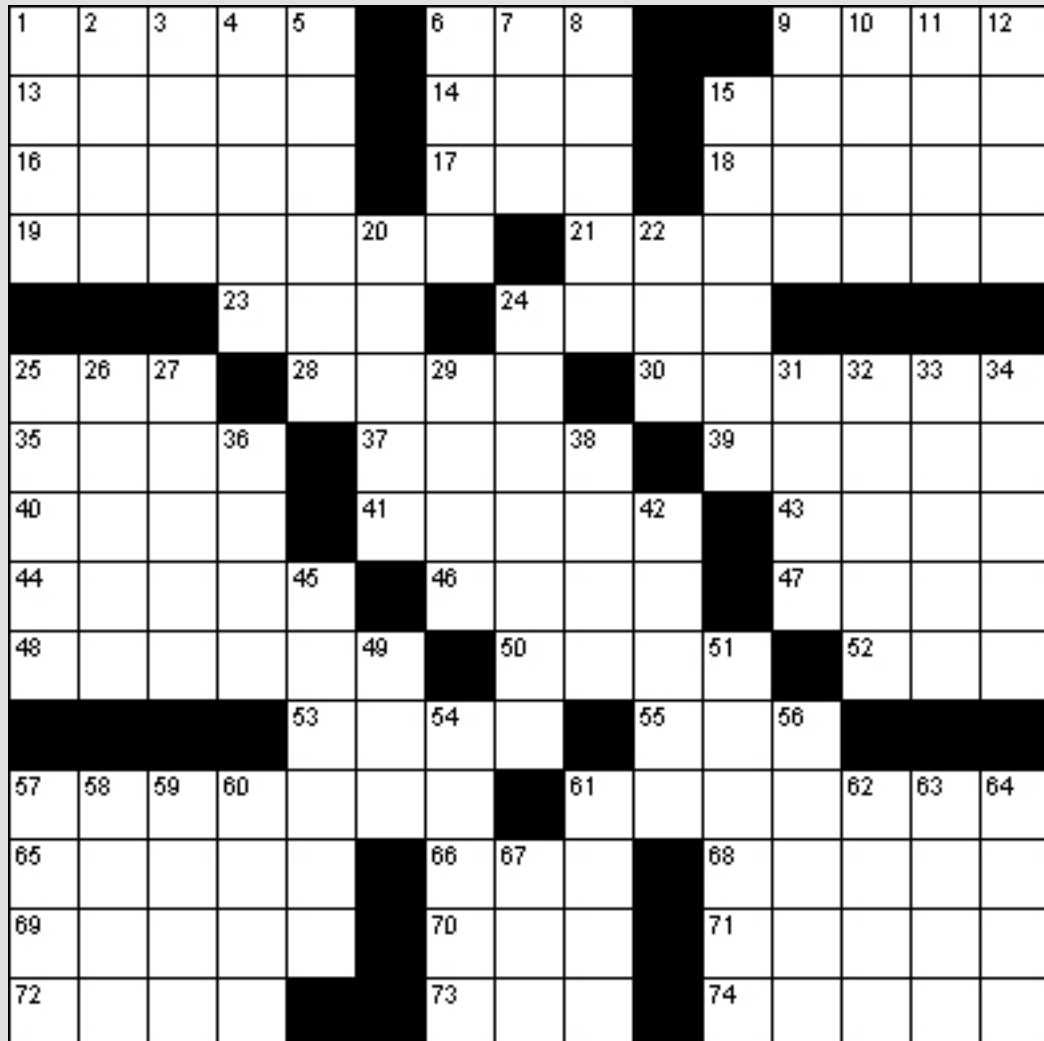
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Sign up at <https://www.cog-genomics.org/volunteer/>.

*: Okay, that was the price four years ago. Still, not a bad deal for a few minutes of your time.

Today's Puzzle: Crossword



Across

- 1. Lightweight wood
- 6. Decay
- 9. Domesticated
- 13. Angry
- 14. Female sheep
- 15. Danger
- 16. Performer
- 17. Tree
- 18. Used to control a horse
- 19. Law-enforcement officer
- 21. Simian
- 23. Spoil
- 24. Article
- 25. Lamentable
- 28. Prevaricator
- 30. Splash around
- 35. Homework, in short
- 37. Assist, usually in wrongdoing
- 39. Faithful
- 40. Gown
- 41. Souvenir
- 43. As well as
- 44. Accumulate
- 46. Female title
- 47. Coarse file
- 48. Clan cloth
- 50. Orderly
- 52. Miserly

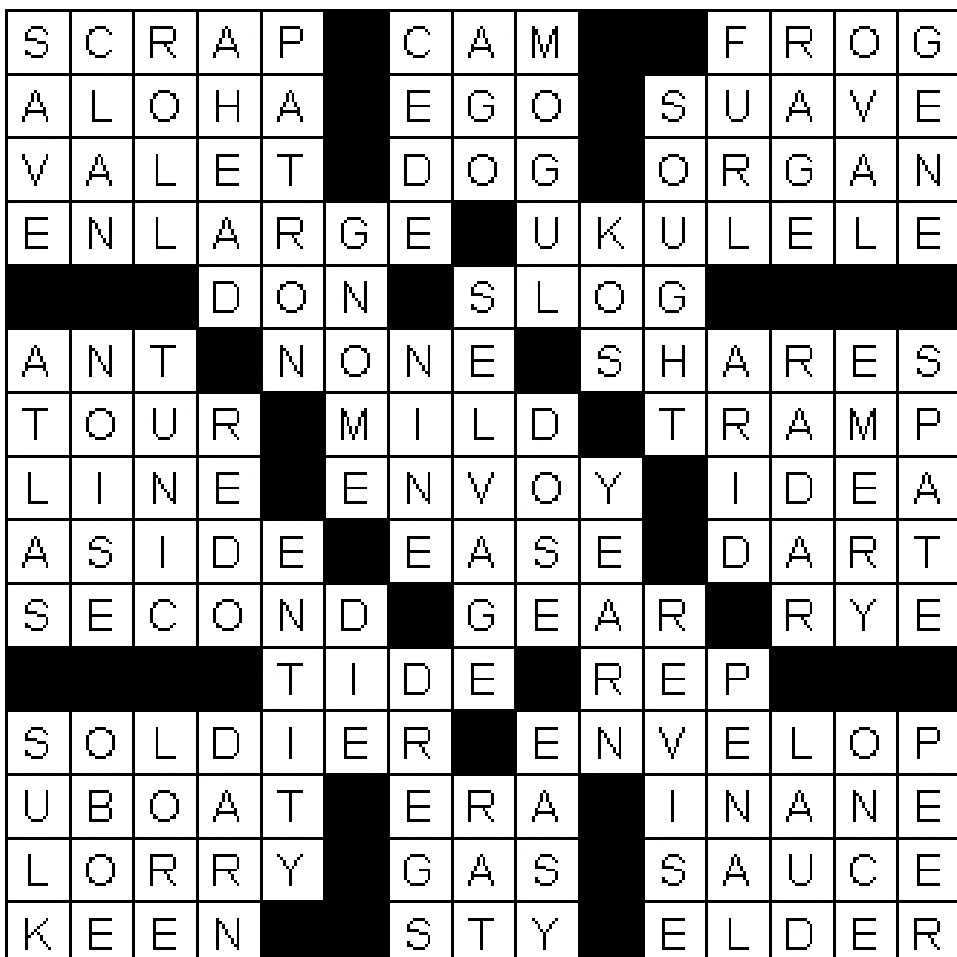
Down

- 53. Quarrel
- 55. Part of a plant
- 57. Time period
- 61. Valiance
- 65. Imbecile
- 66. Consumed
- 68. Zest
- 69. Contrite
- 70. Roman counterpart of Helios
- 71. Acclaim
- 72. Toboggan
- 73. Conclusion
- 74. In that place

- 22. Danger signal
- 24. The 'Emerald Isle'
- 25. Small fish
- 26. Fragrance
- 27. Suspend
- 29. Not up and about
- 31. Male hog
- 32. Local rule
- 33. Lariat
- 34. Run away together to marry
- 36. Nuisance
- 38. Prison term
- 42. Stop
- 45. Security
- 49. Indicating maiden name
- 51. Goal
- 54. Tsarist decree
- 56. Baglike container
- 57. Failure to hit
- 58. Object of worship
- 59. Desperate
- 60. Unit of language
- 61. Restrained
- 62. Small island
- 63. Celebrity
- 64. Particle
- 67. Unit of weight

[<http://www.puzzlechoice.com/>]

Answers to last week's crossword from puzzlechoice.com



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“Watch the Throne”

Continued from page 4

After a good two and a half hours of uninterrupted concert, there was only one song left that I wanted to hear: my favorite one on the album. And this is when things got crazy.

And then things got a little weird.

When the introduction to Ni**as in Paris started, I figured they were just about ready to play the song.

So when they played that into a second time, I was both pleased and surprised.

But when they played it again, I found myself wondering, “Is

this really happening?” After the sixth time, Jay-Z explained that the current record was 9, established in Chicago, and that they were shooting a video for the song here at the Staples Center.

It then became very clear that the crowd wouldn't let them go before they hit 10 times, which they did, setting a record that still holds to this day (that is, according to Wikipedia).

Ni**as in Paris has been rated the #12 best track of 2011 by Pitchfork, #2 by Rolling Stone, and the “Watch the Throne” album was the #4 top-selling album on iTunes last year.



-rapdose.com

Caltech women's basketball team loses big to first place Redlands

AMOL KAMAT
Sports Editor

The stadium was nearly empty. The home fans were few. The pep band was...peppy. The stage was certainly set for a Caltech home basketball game. This time, the Beavers took on the first-place Redlands Bulldogs in a Saturday afternoon matchup that would feature drama on the court, comedy in the stands (actually just jokes at the expense of the pep band), and romance between the referees and calling questionable fouls.

The Bulldogs jumped out to a quick lead, leading 21-4 after just ten minutes. The Beavers eventually settled down, keeping the deficit to under 17 for the next five minutes. But, the powerful Bulldog offense would not be silenced, leading 36-10 by halftime. Hoping to spark a comeback, the Caltech pep band played the Caltech fight song during halftime, but it was less inspirational than expected.

The second half saw the Beavers jump-start their offense, matching their first half point total in only 11

minutes. Alas, the Beaver defense could not keep up, allowing the Redlands offense to take a commanding lead that hovered around 40 points for the remainder of the game. The final result was a 34-76 loss for the Beavers. Even the pep band couldn't stop that score from stinging, although their performance of Journey's "Don't Stop Believing" helped a little.

Bright points in the game included Teri Juarez's team high 10 points and game high seven rebounds. Caltech junior Sarah Wright added nine points of her own.

Some low points include the Beavers 31 turnovers (22 of which came in the first half) and the pep band's ill-advised rendition of Katy Perry's "Hot N Cold."

The Beavers, now 0-17 (0-6 SCIAC), travel to Cal Lu on Thursday evening.

To the pep band: I'm only joking. It was actually great to have you guys at the game, leading the cheers and making the game more fun. I hope to see you at future games!



Teri Juarez takes a shot against Redlands on Saturday afternoon. The blue shoes on the Redlands player were blinding, which is probably the only reason the game was such a blowout

- Amol Kamat



Last week, I implied that swimming in competition, left, would likely cause me to drown and win no prizes. This week, I have determined that diving, left, would not only win me no prizes, but would probably also terrify me to the point of defecating in the pool. And we all know that won't end well.

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Weekly Scoreboard

JANUARY 21, 2012

MEN'S BASKETBALL
VS. REDLANDS
L, 74-41 FINAL

WOMEN'S BASKETBALL
VS. REDLANDS
L, 76-34 FINAL

JANUARY 19, 2012

WOMEN'S BASKETBALL
VS. LA VERNE
L, 92-47 FINAL

Divers sweep events; Beavers place well against Pomona-Pitzer

gocaltech.com

CLAREMONT, Calif. -- The Beaver swimmers and divers braved the early morning rains against SCIAC foe Pomona-Pitzer on Saturday.

The home team won both the team dual meets with the Sagehens scoring a 199-98 win in the men's meet while posting a 207-89 victory in the women's competition.

Justin Johnson posted wins for Caltech in the one- and three-meter diving competitions for the third time this season.

The senior started the day by scoring 248.45 points to outdistance himself from the second place finisher by over 50 points during the one-meter event.

Johnson concluded his solid day by tallying 216.95 points in the one-meter competition.

Peter Buhler posted a pair of first place finishes for Caltech to tie Johnson for top scoring honors. In the 50-yard freestyle swim Buhler out-touched Peter Ianelli 27.24 to 27.85 to capture the first place finish. He concluded the day by winning the 100 yard backstroke in 1:00.16.

During the women's meet Caitlin Regan continued her strong conference season by winning the 200 yard freestyle in 2:06.46. In a tight race Regan was able to out-touch Pomona-Pitzer's Brenda Iglesias by .19 to claim the victory.

Jacqueline Masehi-Lano won at least one event for the eighth

consecutive meet by claiming first place in the 100 yard freestyle (56.24).

The Beaver diving duo of Timi Kosztin and Jessica Swallow proved to be too much for the Sagehens. Kosztin nudged out Swallow in the one-meter event 164.45-148.30 in taking to honors in the opening event. Swallow returned the favor in the three-meter competition by scoring 149.75 points to top Kosztin's score of 145.80.

The Beavers continue SCIAC action as they host Occidental next Saturday at the Braun Pool. It is the final home swim meet of the season.

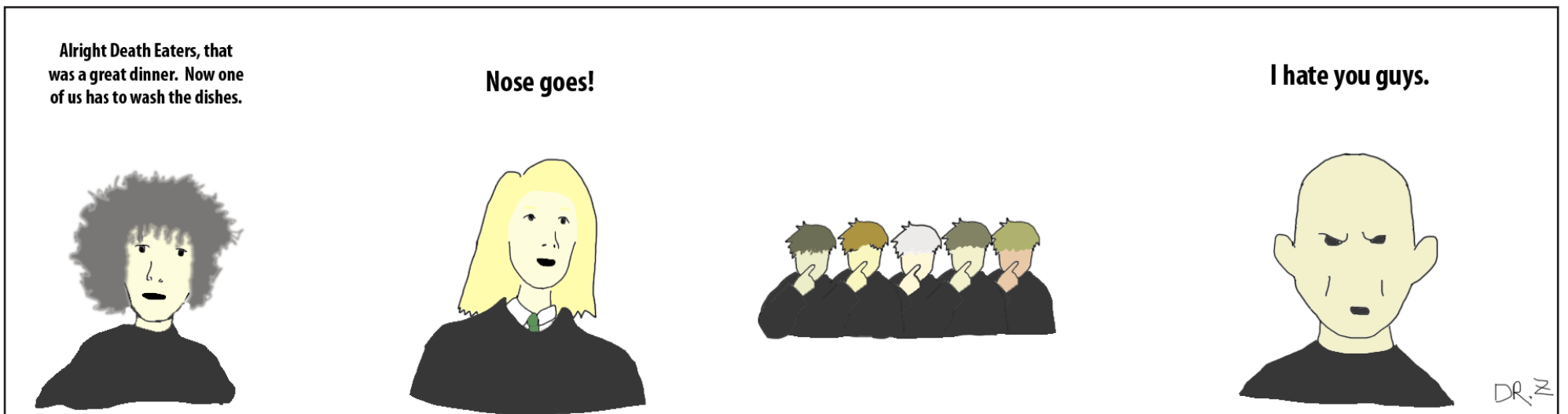
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REVENGE OF THE NERDS

BY MATT TORUSSANER



Acquired Taste



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videos, and archives
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