

Professor Asimow wins Feynman Prize

KATIE NEITH
Science Writer

Paul D. Asimow, professor of geology and geochemistry at the California Institute of Technology (Caltech), has been awarded the Richard P. Feynman Prize for Excellence in Teaching—Caltech’s most prestigious teaching honor.

Asimow was selected for his “exceptional energy, originality, and ability to explain complicated concepts effectively,” according to the award citation.

The Feynman Prize was established in 1993 “to honor annually a professor who demonstrates, in the broadest sense, unusual ability, creativity, and innovation in undergraduate and graduate classroom or laboratory teaching.”

Any member of the Caltech community—including faculty, students, postdoctoral scholars, alumni, or staff—may nominate a faculty member for the award. A committee appointed by the provost selects the winner.

“I’m both utterly surprised and deeply gratified, as the classes I teach are pretty small and specialized,” says Asimow,

who teaches Introduction to Geology and Geochemistry, and Thermodynamics of Geological Systems, among other courses. “I never expected to be considered alongside the professors who shoulder the hard work of teaching

to acknowledge the legacies of both Feynman and Thompson.”

A member of the faculty since 1999, Asimow earned his MS and PhD at Caltech in 1993 and 1997, respectively. His research focuses on characterizing the mineralogy and

Geophysical Union. His work was supported by a National Science Foundation CAREER grant from 2003 to 2007.

In nomination letters written by students, Asimow was commended for his enthusiasm,

an advanced graduate class in petrology; in that class, he “invites his students to vote on the subject matter of the course on the first day of the term, laying the foundation for the extensive teacher-student interaction that forms a critical part of his teaching style.”

“He is as inspiring as he is informative, and a great role model for us aspiring professors,” said June Wicks, a graduate student in geochemistry, in her letter nominating Asimow for the prize.

“He pours his energy into describing concepts both precisely and thoroughly.”

Asimow says that the best thing about teaching at Caltech is its dynamic, engaged, talented, and curious student population.

“It makes all the difference to a teacher when the students are able and willing to interact, question, and even challenge the professor,” says Asimow. “With small class sizes and suitable encouragement, I often get a group of students that help me and help each other to explore a subject in a satisfying and complete



today.caltech.edu

the big classes. I’m inspired by this recognition to keep putting my efforts into improving and updating what and how I teach.”

Asimow says he credits his success in academia to a teacher he had as an undergrad at Harvard.

“My own career path was determined by one incredible professor, James B. Thompson, Jr., who recently passed away,” he notes. “I’d like

melting of the earth’s mantle, the formation of crust, and the nature of the core-mantle boundary.

Asimow is a member of the American Geophysical Union, the Mineralogical Society of America, the Geochemical Society, and the American Physical Society.

He is the winner of the 2003 F. W. Clarke Medal of the Geochemical Society, a 2003 Alfred P. Sloan Foundation Fellow, and the recipient the 2005 James B. Macelwane Medal of the American

clarity, and depth of knowledge. Several students described him as the professor to whom graduate students in the Division of Geological and Planetary Sciences turn when confused about a paper, when they can’t agree on the answer to a scientific question, or when they’re starting a new project or finishing a composition.

The award citation also highlighted what the committee called a “striking innovation” of Asimow’s curriculum for

way.

“That’s very rewarding.”

Previous winners of the Feynman Prize in the past four years are J. Morgan Kousser, professor of history and social science; Dennis Dougherty, George Grant Hoag Professor of Chemistry; Jehoshua (Shuki) Bruck, Gordon and Betty Moore Professor of Computation and Neural Systems and Electrical Engineering; and Zhen-Gang Wang, professor of chemical engineering.

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News briefs from around the globe

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

Protection for satellites	\$ 3 million system warns of solar storms – could save billions	[REUTERS]
US Navy rescues Iranian	1 survivor of Iranian shipwreck was recovered by American sailors	[CNN]
AIG to repay bail-out	\$ 6 billion in Asia subsidiary will be sold to repay US government	[REUTERS]
Majority elects Putin	63% of votes give Vladimir Putin a third term as Russia’s president	[AP]
Nationwide poll in Iran	290 parliamentary seats at stake – first national election since 2009	[CNN]
China cuts growth target	7.5% for 2012 – investor concerns cause Asian stocks to fall	[REUTERS]
Devastating storms	39 deaths – 42 tornados confirmed across 10 states	[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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The Tech is published weekly except during vacation and examination periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and advertisers.

Letters and submissions are welcome; e-mail submissions to tech@caltech.edu as plain-text attachments, including the author's name, by Friday of the week before publication. The Tech does accept anonymous contributions under special circumstances. The editors reserve the right to edit and abridge all submissions for any reason. All written work remains property of its author.

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ASCIT Minutes

February 26, 2012 by Laura Santoso

Officers present: Chris Hallacy, Mario Zubia, Michelle Tang, Laura Santoso

Late: Margaret Chiu, Diego Caporale

Absent: Laura Conwill

Guests: Arman, Maysam (from the Friends of Iranian Culture at CIT)

Funding Requests

1. Nowruz Celebration 2012-Iranian New Year (FICCIT): Will celebrate Saturday, March 24 in Ramo Auditorium and Dabney Lounge.
– VOTE PASSED: will pay \$25 for each undergrad that shows up.

SFC Reports

1. Commencement Committee (Hallacy): Reviewing the Fleming red robes, because they've considered it an issue in the past. Are okay with people wearing house stoles, but they don't like the robes. Talking to current Fleming seniors about it.

President's Report

1. North House AC: Meg, is leaving next Wednesday (she's taking another job). Dustin Summy, the Ruddock RA, will move into her apartment in Page and help out there.
2. ACs in general: Dean's office is trying to redefine the AC position. Will be hiring a new AC to replace Meg, with a committee with students.

Officer's Reports

1. IHC (Laura Conwill)
 - a. New Ricketts President: is Sebastian Rojas (Seabass).
 - b. Rotation: Both the old and new IHC met today (Sunday, 2/26) discussing options on what to do. Recall that they are considering a four-day rotation.
2. Director of Operations (Diego)
 - a. SAC rooms: cleared up the miscommunication regarding the alumni phone room.
 - b. Yearbook committee: trying to revive the yearbook culture at Caltech. They had a dinner the other day for people interested in working on yearbook. Figuring out if we can get past financial issues to designate a SAC room to Big T.
 - c. Club mailing lists: trying to update the big club mailing list so that only presently active clubs are on it.
3. Social Representative (Michelle)
 - a. Intercollegiate party: shooting for April 21. Will be spread on the RF courtyard, Olive Walk, and south end outside Winnett. Looks like it might just be Harvey Mudd and Caltech.
4. Secretary (Laura)
 - a. Olive walk board: getting pictures of the new presidents for the board.

Changes made to TQFRs increase accessibility

The Caltech Teaching Quality Feedback Report (TQFR) is integral to making intelligent changes to courses. Students are highly encouraged to fill out these surveys on REGIS during the final weeks of term so that professors have official, written documentation of feedback from their students and can use the critique to improve courses in subsequent years.

This year, several changes have been implemented to the TQFRs to make them more applicable to students and relevant courses. Perhaps the most major alteration to the TQFR form is the student comment box that allows students to write comments that are only visible to other students. This is to help underclassmen make more educated decisions when it comes to choosing classes that suit their interests. Other tweaks to the form are mentioned below.

1. Students now have the option to select which TAs they would like to review so that feedback is more personalized and meaningful.
2. Performing Arts (PA) and Physical Education (PE) classes have more tailored forms that target aspects unique to them, rather than asking generic academic questions.
3. A 'search' function on the TQFRs now works to allow students to look at old TQFR reports as well (MAJOR CHANGE: student-to-student comment box).
4. The questions have been consolidated onto fewer pages to alleviate the somewhat tedious nature of flipping through multiple pages in the survey.
5. An 'autosave' feature saves the form as the students fills it out, for convenience.

TQFRs are not only important for professors to gauge the efficacy of their own teaching, but also allow the Institute to better organize course instruction across the divisions.

While TQFRs are set up on a termly basis, these reports are by no means the only way to voice concerns about courses. The Academics and Research Committee, which consists of undergraduates, including representatives from each house, is always open to hearing your comments regarding the academic aspects of Caltech education. Feedback can be submitted year round on the Caltech Donut website.

This term, the registrar plans to award a cash prize to the house with the highest TQFR response rate. So, fill them out and earn some money to splurge with during spring break!

Join the BigT Yearbook!

Want to get your yearbook on time?

Want more of you in your yearbook?

We're still looking for more writers and photographers!

No Yearbook Experience Necessary!

Contact the cltch.bigT@gmail.com



IHC Chair (1 candidate)

CHRISTIAN RIVAS
IHC Chair candidate

The duties of the IHC are numerous and varied. The IHC is comprised of ten able student leaders, each of whom possesses a differing combination of experiences, values, and motivations. Primarily, each year's IHC is tasked with the challenge of orchestrating and overseeing Rotation in order to ensure it runs efficiently while maintaining the integrity of its philosophical significance. Additionally, the IHC interacts with administrators as negotiators for a variety of topics concerning housing and student life, and must therefore function as a competent communicator of the thoughts and desires of the student body as a whole while simultaneously addressing concerns the administration may possess. The IHC is also required to assist managing Prefrosh Weekend and conduct student-faculty committee appointments. With these duties in mind, I am

confident that I am qualified to serve as your IHC Chair.

As a member of the last IHC, I have obtained valuable experience in implementing Rotation smoothly and effectively: this last Rotation was the most successful in years, with each House avoiding Ecorotation and the vast majority of freshmen being placed in one of their top three Houses. I will utilize my experience when collaborating with our House presidents to guarantee yet another sound Rotation.

Through my experience as IHC Secretary as well as serving on other committees, such as the Hazing Committee, I have established a strong communicative foundation between myself and the deans, Tom Mannion, and various administrators, and I will convey student concerns to them effectively as Chair.

I have also become intimately familiar with the dynamics of discussion and debate that occur at IHC meetings and will facilitate meaningful communication



amongst our presidents so that we may best enforce our values.

Honestly, one of my favorite aspects about Caltech is that students have a voice in matters that affect us.

Though we occasionally doubt it, our administration wishes to hear our opinions; I have witnessed it firsthand.

I will fulfill my responsibilities as IHC Chair, but I will require your thoughts and support to do so meaningfully. Just as I look forward to working further with our presidents and administrators, so do I look forward to hearing from you.

Tech Editor (2 candidates)

JONATHAN SCHOR
STANFORD SCHOR
Tech E-in-C candidates

SANDHYA CHANDRASEKARAN
Tech News Editor
candidate

AMOL KAMAT
Tech Sports Editor
candidate

In the year since we became editors, *The Tech* has experienced a resurgence of quality. We have consolidated gocaltech.com, Caltech Today, and *The Tech* to provide an integrated source of news for students and community members.

We gave the front page a new, fresh look. We renovated tech.caltech.edu and began to update it regularly, giving alums and parents access to campus news.

We ensured that the paper always had at least 8 pages worth of material, and sacrificed our own paychecks in order to pay for color on 4 of those pages.

And to supplement our funds we redoubled our advertising efforts, gaining the attention of customers as far away as Saudi Arabia and engaging in unique partnerships with groups such

as The PhenomList to highlight our talented undergraduate community.

Nonetheless, there is still a lot to be done. In our next term, we plan to bolster student interest in the paper through *Tech* open houses.

These programs will outline ways in which students can get involved with *The Tech* without too much of a time commitment. Certainly, our biggest impediment to getting consistent writers is the fact that authoring an article is no simple task; however, we are currently working to divide journalistic responsibilities into more manageable pieces. In fact, one does not even have to be a writer to get published: we plan on seeking out photographers, artists, and other creative spirits in the coming term. We hope this will enable a greater portion of the student body to contribute regularly.

In keeping with our goal of maintaining student interest, we also plan to continue our more whimsical approach to sports and strive for a humor section worth laughing about.

Of course, running *The Tech* is neither easy nor stress-free, and requires a huge time commitment.

We have and are willing to continue to put forth the necessary effort to provide the student body with a reliable and high-quality source for news, and hope to motivate other members of the Caltech community to do the same. Our team of four has thoroughly enjoyed our first term as *Tech* editors, and is excited for the opportunity to further improve the paper in the coming year.

MOYA CHEN
Tech Editor-in-Chief
candidate

There are a lot of things happening on campus right now. Looking at the front page of the current *Tech*, it might not seem like it.

The new core, the (possible) new rotation—these are things that should be reported on right now.

Flip through this week's, or last week's, or the week before that's edition of the *California Tech*, however, and you will not find a single article about any of these things.

If elected Editor-in-Chief of *The Tech*, I will make sure that the news gets reported.

With student-administration relations as delicate as they are, it is more important than ever for campus to stay informed.

The Tech is the voice of the student body and it is the responsibility of the editor to make sure that this voice gets heard.

To meet this end, if elected *Tech* Editor, I promise to personally write at least one article in every edition of the *Tech* in the form of an Editor's Corner section.

This Editor's Corner will not only be used to report what I see going on around campus, but also

BOC Secretary (2)

ANNA ROSS
BOC Secretary candidate

The honor code was one of the things that drew me to Caltech in the first place, and I still consider it to be one of the best parts of life here. The level of trust that exists within the Caltech community is absolutely incredible. I cannot imagine any other place where I can take a final at four in the morning with no supervision and the entire internet at my fingertips, and I cannot imagine any other group of students that will give their exams and sets to their friends to turn in without hesitation.

Unfortunately, the honor code can easily be abused. It is the responsibility of the BoC to protect the community from these abuses. The consequences of violating the honor code go beyond the people directly involved; every time professors and other students see someone taking advantage of the freedoms offered by the honor code they become slightly more doubtful of its effectiveness. A well run



BoC can serve to reduce those doubts by ensuring that the unfair advantage is removed and by acting to prevent future violations.

As BoC secretary, I will dedicate myself to protecting the honor code. As a current BoC rep, I have the necessary experience with the cases the BoC must handle, and I know the level of commitment and dedication needed to ensure that every case is handled fairly and appropriately. I believe that the academic honor code, and its enforcement by fellow students, is an incredibly valuable part of Caltech, and a part that I would be pleased to have a part of as your BoC secretary.

JAMES CHANG
BOC Secretary candidate

My name is James Chang, and I am running for BoC Secretary. During my time on the BoC, I sat the most cases as a frosh rep and developed an understanding of the ethics revolving of the Honor Code. I type fast, organize well, and keep people from rambling. Being secretary, however, comes with a lot more responsibilities that I know I can fulfill and improve upon.

Having been both the representative and defendant, I know what usually goes on in the minds of the person testifying and listeners. I want to implement policy to the benefit of defendants, reducing their stress and the threat of a BoC error. The most visible difficulty for secretaries is figuring out a time seven board members can sit down and review a case. On the other hand, prelims, where defendants are initially questioned, have a history of happening after a large amount of time has passed since



the initial report. This could hurt the defendant because not everybody remembers what happened last month, term, or even year. My policy would be to schedule prelims within one week of a case report, allowing the defendant to more accurately describe what happened. This policy helps to prevent unfair rulings and is doable since only three people are present during a single prelim. I'm a CS major, and I know I will have enough energy to dedicate to this time-consuming position.



to talk to you, the reader. It is my opinion that news is not static; what is important is not only the events, but also the dialogue surrounding it.

As editor, not only will I speak the news, but I will also listen and respond.

I will admit—I am only a frosh, and running the *Tech* is probably going to take more time than I expect.

However, I care about Caltech and I am committed to making sure that we say what needs to be heard.



BOC Chair (2 candidates, Kolner and Andrade)

CHRIS KOLNER BOC Chair candidate

The Honor Code is central to our Caltech way of life. It's something we frequently take for granted: usually during exams we're too preoccupied with trying to pass the class to stop and appreciate that we aren't taking the exam at 8:00 am under the watchful eyes of a proctor. Nonetheless, the freedom the Honor Code allows us, to make judgments and trust others, is one of the things that sets Caltech apart from anywhere else. The Board of Control plays an integral role in defending and protecting the Honor Code, and I would like to continue my service to the community by becoming its chair. I

have served as a representative to the Board for two years, sitting dozens of cases. My years of experience give me a unique level of insight into the philosophy and mechanics of the system. Many people only ever view the Board as an instrument of punishment, but in reality it is a very different process. While the Board of course acts to protect the community against violators of the Honor

Code, we also have a strong focus on doing everything we can to help rehabilitate violators, so that they can once again receive the complete trust of the community. In addition, we also pour countless hours into determining the facts of a case and ensuring all duly earned credit on work is not removed (the



nullification decision). Having seen the sometimes cursory nature of other similar systems has given me enormous respect for the time and effort we devote to every case and every student. As Chair, it will be my duty to oversee all of the Board's cases, receiving reports and giving our results to the Deans. The Chair acts as a guiding force to ensure consistency and fairness in difficult cases, and is the public face of the

Board, interviewing defendants and witnesses and discussing the Honor Code at Frosh Camp. In recent months, I have worked closely with the current chair, Ploy, preparing for the chair by serving as acting secretary on several cases in order to gain familiarity with the entire process from start to finish. I have also volunteered to sit on particularly challenging cases to help offer the benefit of my experience and insight. One of my priorities as Chair will be working to maintain public faith in the Honor Code. It is very important to me, personally, that everyone feel the freedom that comes with being able to place trust in our peers. I have been discouraged by reports that some professors are beginning to doubt us, and are considering giving in-class exams.

I want to meet with the faculty and provide strong leadership on behalf of us, the students, to help restore their faith in the system. I also want to do what I can to maintain your belief that the system works.

In my experience in the many different areas of judicial affairs at Caltech, I remain strongly convinced that the BoC is one area where things still work very well, and I want to make sure this remains the case. The Honor Code is one of the main reasons I am here, and I want to do everything I can to make sure it remains a part of our culture for years to come.

AVIN ANDRADE BOC Chair candidate

This is normally where the candidates for BOC Chair talk about the importance of the Honor Code.

Instead, I want to talk about how I will better protect the honor code. Don't get me wrong—I know exactly how vital the Honor Code is to life at Caltech. I know how it is fundamental to everything we do here.

But I think it is more important that you, as a voter, know what I plan to do to uphold the Honor Code. This past year I served as Ruddock House's Board of Control Representative. During that time, I sat on over a dozen cases as a representative or as acting secretary.

During the process, I have seen some things the BOC does well and some things it can improve on. We need to provide guidelines for the in-house BOC talks, decrease the wait time to hear a case, and improve communication with the professors and TAs.

First off, I will improve the BOC talks that we give the freshman every year once they get into their houses. As it stands now, there are no guidelines for the BOC Reps that give these talks. I want to develop an outline for these talks. It will include all of the details that may prevent several BOC cases in the first place.

For example, some of the most common Honor Code violations we see are when students do not read the collaboration policies for a class.

Not only should the house BOC talks tell the freshman to read these policies, it can also warn them about classes that tend to have stricter collaboration policies (such as Bi 1, in which students are not allowed to look at each other's written work).

The time it will take to develop and give a good BOC talk may save several students the many hours of anxiety that come with a BOC case.

Second, we need to reduce the time it takes to hear a BOC case. I have sat on cases where the violation occurred over three months prior to the hearing.

This is unacceptable. During these three months, the defendant needs to worry about whether they will fail the class or even be suspended. The best way to ensure cases are heard quickly is to make sure the BOC secretaries and representatives are responsive and do their job.

I will make it clear to the secretaries that they need to schedule their cases in a timely manner. This past year, we have had representatives that never responded when the secretaries asked them to hear a case.

If a representative fails to respond to the secretaries' emails and phone calls, I will personally knock on their door and remind them that they made a commitment to enforce the honor code.



As Board of Control Chair, I will take it as my personal responsibility to make sure cases are taken in a timely manner.

Finally, I want to improve our communication with professors and TAs. Right now, when a case is reported the chair and a secretary meet with the TA or professor that reported it. They take notes on what the concerns are and report them to the board during the case hearing.

This normally works well, but in highly technical cases (CS classes for example) where the chair and secretary do not have the background to understand the material, a lot of information is lost and it is much harder for the Board to make the right decision.

In cases like these, I will ask the professors (or TAs) to also write their own summary about the suspected Honor Code violation. On the other end, when a case is completed, the bylaws state that the Chair is only allowed to inform professors about nullification decisions.

Thus, if a case is dismissed, the Chair is not actually allowed to tell the professor.

This causes a great deal of confusion on the professor's part, since he or she does not even know if the case has been settled. For this reason, the current practice is to tell the professors about dismissals, even though it goes against the bylaws.

Therefore, as chair I would propose an ASCIT amendment to the BOC bylaws that allows for this practice.

It is important that the BOC follow its bylaws, but it is equally important that the bylaws provide the best system for protecting the Honor Code we hold so dear.

CRC co-Chair (2 candidates)

RACHEL DEGHUEE CRC co-Chair candidate

Hi, my name is Rachel Deghuae and I am running for CRC co-chair. I have been Ruddock's CRC rep for



the past year and have really learned a lot from my term. In my experience, the student representatives provide a crucial bridge between administrative policies and house cultures. As CRC co-chair, I would continue to provide a bridge between administrators and students in order to ensure that the CRC continues as a fair and useful committee. Throughout the school year, I have made it a priority to get to know Dean Nye, which will allow me to continue facilitating a smooth transition by acting as an experienced and reasonable voice on CRC proceedings. I respect how unique the CRC is,

as well as the Caltech culture that allows students to have a voice in their peers' disciplinary hearings, which is why I want to do my best to serve the Caltech community as CRC co-chair. Since I am chairman of the Review Committee, I would like to make it very clear that I will not oversee this election. I will appoint an acting chairman from the Review Committee to prevent a conflict of interest. Feel free to contact me at rdeghuee@caltech.edu if you have any questions.

EUGENE VINITSKY CRC co-Chair candidate

This year I have had the fortune of being the CRC Representative for Ricketts Hovse. I've sat on cases of varying type and magnitude, and through them I have learned the essential role that the CRC plays in Caltech's life. The honor code is a brief blurb, and it is natural that there are often conflicted views on its interpretation. I've sat on cases that were egregious violations of personal conduct and cases whose interpretations were questionable. Through all of these cases I have tried to stress the idea that the CRC is a body that believes in second chances. The brevity of the honor code means that we often have to place our own interpretation of the honor

code against the interpretation of others. It is easy to stumble across the line; I do my best to emphasize the second chance in these cases. The CRC's role as the interpreter of the honor code is also one that I consider essential. This year has been one of conflict between the student body and the administration's interpretation of the honor code. With a new hazing policy in place, I am certain that such conflicts will continue. Incidents similar to the Ricketts T-Shirts, the Page Waiter firings, and the Lloyd doors will happen again. If these cases come to the CRC, I want to be the one defending our traditions and the levity of spirit with which we practice them. I have had great success this year in working with the other members of the CRC, students and professors, to come to fair conclusions. I am confident that I will be able to continue doing so as the CRC co-chair.



Today's Puzzle: Acrostic

Write the appropriate answer in the numbered spaces below each clue. Then copy each letter to the same-numbered box in the grid above, which will spell out a quote. Words in the grid are separated by black spaces. The first letters of each answer, read in order, will spell the name of the author of the quote in the grid.

1	T	2	B	3	E	4	I	5	G	6	E	7	L	8	T	9	M	10	U	11	R	12	N	13	G	14	J	15	B	16	O	17	K	18	C	19	B	20	P	21	F								
		22	L	23	U	24	Q	25	A	26	S	27	C	28	K		29	B	30	P		31	N	32	O	33	M		34	T	35	O	36	H	37	K	38	Q	39	U		40	G	41	S		42	P	
43	F	44	J	45	C		46	I	47	T	48	C		49	O	50	G	51	L	52	C	53	B	54	U	55	H		56	H	57	O	58	U		59	S	60	A	61	M	62	T	63	J	64	F	65	G
66	F	67	K	68	D		69	T		70	F	71	T	72	O	73	B	74	S	75	N	76	U		77	P	78	B	79	G	80	J		81	D	82	Q		83	M	84	N		85	D	86	Q		
87	S	88	O	89	H	90	N		91	Q	92	K		93	R	94	A		95	J		96	K	97	G	98	J	99	A	100	U	101	P	102	O	103	B		104	N	105	Q	106	G		107	F		
108	I	109	L	110	O		111	U		112	E	113	U	114	M	115	L	116	B		117	A	118	C	119	O		120	A	121	K		122	J	123	C	124	K	125	D		126	C	127	Q	128	A		
129	O	130	S	131	R	132	M	133	F	134	A		135	S	136	Q		137	T		138	M	139	Q	140	K	141	O	142	B	143	N	144	U		145	I	146	F	147	E	148	P	149	O	150	J		
151	T	152	J		153	Q	154	F	155	G	156	C	157	N	158	F	159	P	160	E		161	C	162	E	163	U	164	M	165	F	166	G		167	A	168	O	169	N	170	Q		171	F	172	E		
173	P	174	M	175	S	176	E		177	M	178	R	179	A	180	S	181	D		182	F		183	B	184	A	185	U	186	T	187	P	188	Q		189	N	190	P	191	K	192	M	193	I	194	A		
195	A	196	R		197	U	198	A	199	B	200	B		201	B	202	H	203	T	204	J	205	Q	206	L	207	N	208	P	209	C	210	G		211	R	212	R	213	H	214	F	215	I	216	E	217	P	

A. Turns light just right?

25 198 60 120 194 195 128 94 197 184 167 117 99 134

B. Fish people

73 201 103 142 78 116 2 183 19 53 29 199 15 200

C. How Pauling often solved problems; he _____

27 123 118 156 45 126 18 52 161 209 48

D. Kind of vacuum

125 81 181 85 68

E. Threatened soap use

147 172 6 216 112 3 162 160 176

F. Curing phthisis

43 66 171 64 107 146 70 165 21 158 214 133 182 154

G. Smashed Iceland spar fragments

13 50 40 5 106 155 97 65 210 166 79

H. Theophrastus wrote on them

36 55 202 56 89 213

I. State capital in Lewis and Clark county

108 4 215 193 145 46

J. Passages at the end of a book

95 152 80 14 44 122 98 150 63 204

K. AB - BA if A, B are operators; slip ring wired to act as rotary switch

67 121 140 191 37 96 17 28 92 124

L. The molecules _____ a conformation ... Acta Cryst B29 1611

109 206 51 22 115 7

M. What scholarship isn't in JACS

61 174 9 138 83 114 164 177 192 132 33

N. Restores to youthfulness

90 157 104 12 75 143 189 169 31 207 84

O. A good place to reach 72 (two words)

149 141 102 168 88 129 119 110 49 32 16 57 72 35

P. Set of atoms in a unit cell having a simpler pattern than the whole

30 190 148 217 77 208 20 42 159 101 173 187

Q. The filling in of intermediate values

139 170 91 86 188 153 24 38 127 82 205 105 136

R. Those unlikely to succeed at clue 'O'

93 131 178 196 212 211 11

S. Fete use of crawfish or shrimp dishes served over rice

59 87 135 26 41 130 74 180 175

T. Air broken? This will fix most of it naturally

47 69 8 34 151 186 71 203 137 1 62

U. [Type of] forms occur[ing] when we have a union of one-fourth of all the similar possible planes ... of any crystallographic system (Marshman Edward Wadsworth)

163 10 58 113 23 39 100 54 76 144 185 111 197

Clement on Sleigh Bells: Who needs eardrums?

CLEMENT LACROUTE
Staff Writer

What happens when the Beastie Boys meet L7 meet Rihanna meet Garbage? If you're thinking heavily distorted beat box + thickly layered guitars + smoothly violent female vocals, then you are pretty close to what the rock duo Sleigh Bells sounds like. Formed in 2008 by guitarist-producer Derek Edward Miller and singer Alex Krauss, the band released its first album, *Treats*, in 2010. Their new album, *Reign of Terror*, came out on February 27th, and is a very consistent follow-up.

Sleigh Bells' signature sound is unmistakable. It relies on layers of distorted guitars, distorted drums, and the soft voice of Alex Krauss. They make frequent use of dynamic compression to obtain this apocalyptic soup, and it proves very effective. The songs instantly "work," and make you want to mosh your way to the stage, dive off, and then do it again (it tends to be very addictive). But there is a catch to this production trick: listening to

Sleigh Bells for more than an hour using headphones feels a little bit like running a marathon. It's simply beyond the human body's capabilities (don't get me wrong: I don't run or practice any sort of

sport AT ALL. I just thought the comparison was appropriate).

The resultant fatigue is the unfortunate consequence of dynamic compression. You may have noticed it when watching TV commercials: they sound too freakin' LOUD. But they're not any louder than the movie you're watching. They're just at top volume ALL THE TIME. For a reason that's hard to grasp, this technique made its way to the music recording studios, leading to the so-called "loudness war" (Perhaps due to the "Spinal Tap" effect, in which everybody wants to push amps to 11). Among the casualties you'll find Metallica's last album, *Death Magnetic* (I'm not counting that bizarre "Lulu" record with Lou Reed that just came out), which sounds like it was recorded in my mum's garage. Most depressingly, one of the world's best-ever producers, Rick Rubin, is one

of the leading generals in this so-called war. Why, Rick, why?

But for Sleigh Bells, it becomes an actual—and sensible—aesthetic choice. The album opener, *True Shred Guitars*, sets the mood: Sleigh Bells is about to tear down your eardrums and they'll do it with a smile. This is true Dance-Floor Rock. Among the album's highlights are *Born To Lose*, *The End of the Line*, and *You Lost Me*. The record achieves a nice balance between the stompin' and shreddin' of the most "stadium-hit" songs and the pop-ier keyboards melodies of softer pieces.

Sleigh Bells was called "a band to watch" in 2009 by *Stereogum*. Their first album sold well and was praised by rock critics, and *Reign of Terror* will hopefully go down the same road. If you haven't heard of them before, I would urge you to go ahead and give it a try. They sound like no other band around, yet I can describe their music quite fairly in two words: aggressive and addictive. And they will be in Pomona, CA, on April 4th.



A band "discovered" by M.I.A., Sleigh Bells released its second album, *Reign of Terror*, on February 27th. The cover art: a bloodstained pair of Keds.

- uwmpost.com

Caltech women's water polo wins season opener, drop pair to division I opponents over the weekend

from gocaltech.com

The women's water polo at Caltech got the season started off on the right foot with a 13-6 victory over PSU-Behrend on Saturday afternoon at the Braun Pool.

The first three-plus minutes of the game were scoreless before the Beavers broke through. Caitlin Regan scored with 4:05 left in the frame to open the scoring. Erin Hoops gave Caltech a two goal edge less than two minutes later. PSU-Behrend got their first tally with exactly two minutes left in the period but the Beavers responded with goals by Regan and Hanna Dodd to end the stanza up 4-1.

Caltech continued their scoring to start the second period and eventually took a 6-1 lead. The Nittany Lions found the back of the net with 2:01 remaining to cut into their deficit. However, the home squad scored the final two goals of the period in taking an 8-2 advantage halfway through the contest.

The Beavers kept their comfortable cushion throughout the third period by posting a 3-2 scoring edge in the stanza. Leading 11-4, Caltech put the game away by scoring two of the first three goals during the final eight minutes of action.

Regan and Dodd led the Caltech offensive charge with four goals apiece. Erin Hoops chipped in a two-goal contest. The home squad got single goals from Janis Intoy, Anastasia Markovtsova and Joy Lu to round out the scorers.

In her first collegiate start, Connie Hsueh had 10 blocks in goal while also contributing three assists.

PSU-Behrend got a hat trick from Lindsay Musoleno.

THOUSAND OAKS, Calif. -- The Caltech women's water polo lost a pair of contests on Sunday morning at the Posada Royale Invitational hosted by Cal Lutheran.

Grove City 11, Caltech 5

Grove City jumped out to a 7-1 lead after the first two periods and kept a Caltech comeback at bay in their six-goal victory.

The Wolverines scored the first period's only goal with 5:45 left in the frame. Grove City upped their lead to 3-0 less than two minutes into the second period.

A Hanna Dodd goal got Caltech on the board with 6:27 left in the period. However, Grove City proceeded to score four unanswered goals in building their six-goal lead at the halfway point.

Caltech got a pair of goals in the third period but Grove City wouldn't let the Beavers cut into the deficit as they scored two as well.

The final period was the same story as both teams but two goals on the board in the final period.

St. Francis (NY) 11, Caltech 7

In a back-and-forth game, the Terriers ended the game on a high note in posting the win.

St. Francis jumped out to a 3-0 lead just before the halfway mark of the first period before Hanna Dodd but Caltech on the board with less than a minute remaining in the frame.

Caltech scored the second period's only goals as Joy Lu and Dodd each found the back of the net to tie the score at 3-3 after two periods.

The Beavers took their first lead of the game with a Dodd goal at the 5:44 mark on the scoreboard. After the Terriers tied the contest at 4-4 with 3:50 left in the stanza, Dodd quickly put Caltech back in front 26 seconds later.

A Terrier goal at the buzzer sent the two teams tied at 5-5 heading into the final period.

St. Francis took on-goal leads of 6-5 and again at 7-6 only to see the Beavers knot the score up on both occasions.

With 4:15 left in the game, the Terriers took the lead for good on a Regina Toth goal. Toth scored three of the game's final four goals in leading the Terriers to the victory.



Water polo is polo that is played in water.

- gocaltech.com



Caltech's Anish Agarwal prepares to hit a volley.

- gocaltech.com

Caltech men's and women's tennis teams lose; individual players get wins

from gocaltech.com

The Kenyon women's tennis team grinded out a 5-4 win over Caltech on Sunday afternoon at the Braun Tennis Courts.

The Lords, who came into the match ranked 12th in the central region, won two of the three doubles matches to take control of the match heading into singles play.

Kenyon posted straight set wins at the No. 2, 4 and 6 positions to seal the team match.

Caltech tallied victories at the No. 1 singles positions as Rebekah Kittostayedundefeatedthroughthe first five matches. Stephanie Kwan won a thrilling three-set match at the No. 3 singles slot. Michelle Lee won the last singles match on court

with a 6-2, 7-6 (8-6) win in the fifth position.

The St. John's (MN) men's tennis squad posted a 7-2 win over Caltech on Saturday evening in a non-conference match-up at the Braun Courts.

The Johnnies took two of the three doubles matches to go up early in the team match. The visitors won three of the five singles matches in straight sets in posting the victory. Caltech got a win at the top doubles slot as the duo of Devashish Joshi and Luka Mernik tallied an 8-4 win.

Alex Runkel got his first win of the season in his opening singles match of 2012 with a 6-4, 6-1 triumph at the No. 5 singles position.

Winning scores:

Singles

1. Rebekah Kitto (CIT-W) def. Amy Schlessmann (KENYON) 6-3, 6-2

3. Stephanie Kwan (CIT-W) def. Lydia Winkler (KENYON) 2-6, 6-4, 11-9

5. Michelle Lee (CIT-W) def. Samantha Betts (KENYON) 6-2, 7-6 (8-6)

5. Alex Runkel (CALTECH) def. Alex Wiegmann (SJU) 6-4, 6-1

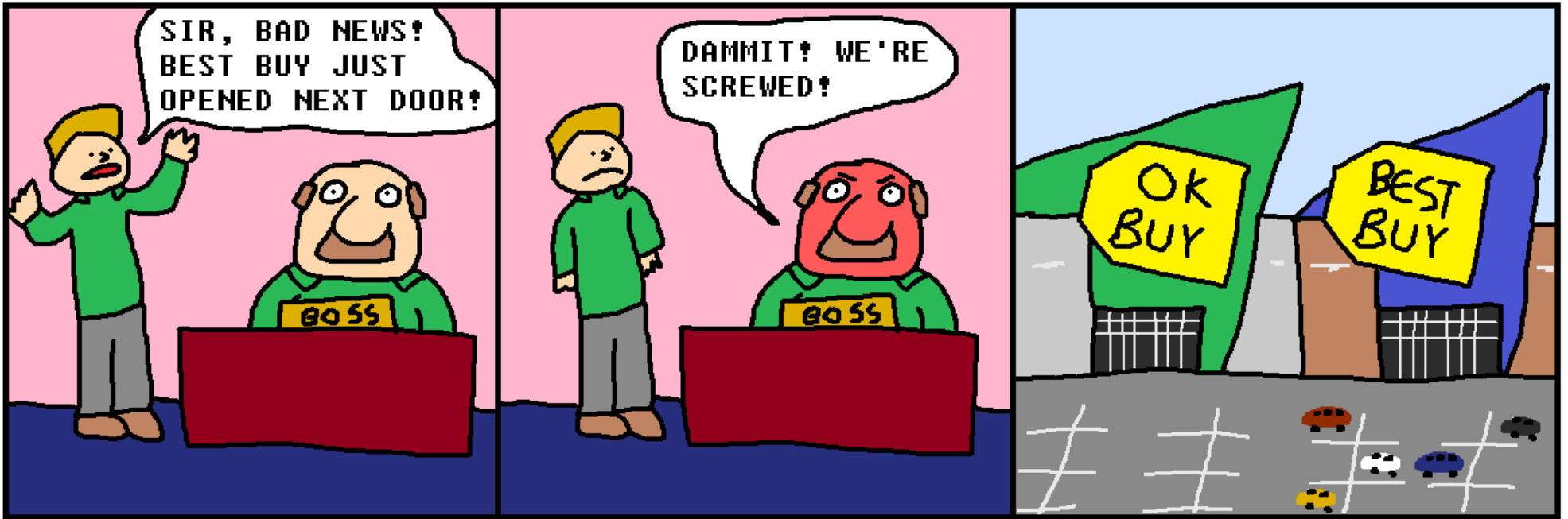
Doubles

1. Devashish Joshi/Luka Mernik (CALTECH) def. Zach Shriwise/Ian Hansen (SJU) 8-4

3. Jessica Yeung/Michelle Lee (CIT-W) def. Annan Becker/Abigail Younger (KENYON) 8-6

BIG BUSINESS

BY PETER CURMANCH



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www.uptomynipples.com



Why you don't see World War I Reenactments.

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