California's Recall Election Makes New State History

By CHRISTINE LEE

Everybody probably knows who played the robot in “Star Wars,” but does everyone know how the recall works? Never a moment without action, the California recall election has finally ended. However, the voters are perhaps as puzzled as before. What is a recall and how does it work? To answer that question, here are some useful facts:

On October 10, 1911, a special election under the governor Hiram Johnson enabled California voters to recall state-elected officers, enact state laws and constitutional amendments by initiative, and repeal laws by referendum. However, since then, there have been 31 recall campaigns against the governor but none had succeeded.

A recall procedure is similar to a proposition. However, the main difference between a recall and a proposition is that a recall requires more signatures. For a proposition, one only needs 5% of the voters’ signatures who voted in the last election; for a recall, 12% of the voters’ signatures who voted in the last election for the office are needed. In particular, 897,158 signatures were needed for the qualification to recall Davis.

To start a recall, proponents must draft a petition stating reasons for the recall and get the approval from the Secretary of State. The state must then meet certain criteria to conduct the recall. Davis recall organizers accused the governor of “gross mismanagement of California finances.”

After the petition has been approved, the proponents have up to 160 days to collect the required number of signatures. The signatures will be collected and verified by the country officials and reported back to the Secretary of State. After the signatures are collected, the Secretary of State has 10 days to verify the tally to the lieutenant governor, and in turn, the lieutenant governor has 60 to 80 days to call a special election. The cost of a special election is estimated to be between $20 million to


Author, Comedian Garrison Keillor Captivates Audience With Anecdores

By DIANA LIN

Last Monday evening, under the gold glittering ceiling of Beckman Auditorium, Garrison Keillor deftly weaved an atmosphere of humor over an adoring audience. Long before the hour arrived, the campus was buzzing with excitement and filling with visitors.

Most widely known as the author of “Lake Wobegone Days,” Garrison Keillor is a storyteller, performer, author, and comedian. He has published several books for adults, largely drawn from his own experience and also children’s books.

Garrison Keillor was at ease in his khaki suit jacket, blazing red socks, and hands casually stuck in jean pockets, yet he was the embodiment of sophistication and confidence. In his deep soothing voice, he began the night with a series of poetry recitations by well-loved poets, such as Emily Dickinson, Mary Oliver, and E.E. Cummings. Emily Dickinson’s poem was about the agonizing price of success. “Wild Geese” by Mary Oliver gently created images of dark, quiet nights in the forests as the backdrop of the human imagination and despair.

Without pause, Keillor made the transition to anecdotes and passages from his book, Love Me. He told a large variety of stories and jokes that drew laughter, reminiscence, and reflection from listeners. But his central message through all of this was for everyone to get out and experience the world around them. He tried to focus his message specifically to Caltech students in the room, although the hall was mostly filled by older adults. He warned of becoming stuck in problems and digging a deeper and deeper hole of woes. And although everyone laughed at his ridiculous stories of young men and women who throw away their short-term relationships, the stories made everyone look deep into his own problems.

Garrison Keillor then answered questions from the audience. Many enthusiastic fans asked him about his life, such as why he quit writing for the New Yorker and why he returned from Denmark. He replied that he stopped writing for the New Yorker when the new editor tried to change the image of the magazine.

Biographer Maddox Unravels Mysteries of Dark Lady of DNA

By ROBERT LJ

Award-winning biographer Brenda Maddox made an appearance at Caltech last Tuesday to give a lecture about her new book, Rosalind Franklin: The Dark Lady of DNA. To a full audience at the Beckman Institute Auditorium, Maddox talked about the life of and the controversy surrounding one of the key participants in the 1953 discovery of the structure of DNA.

Born in 1920 and dying in 1958 of ovarian cancer, Rosalind Franklin’s lifespan of only 37-years nevertheless allowed her to make important contributions to three different areas of science: the nature of coal and charcoal, the structure of DNA, and the nature of the tobacco mosaic virus and RNA. Rosalind was born to a very wealthy Anglo-Jewish family and entered Cambridge University.

During World War II, Franklin studied the efficient use of coal and published a book before the end of the war. In 1946, she moved to Paris to do research in X-ray crystallography and over the next four years Rosalind found herself enjoying the French lifestyle immensely.

She realized, however, that to do serious research she would have to return to England. In 1950, Rosalind accepted an appointment at King’s College in London to work in John Randall’s lab on the structure of biological fibers.

While she made significant discoveries at King’s College including making an X-ray diffraction plate of the B form of DNA that elucidated many of the molecule’s physical properties, Rosalind’s time at the college was very unpleasant. Disliked by the other scientists and involved in a bitter dispute with Maurice Wilkins, Randall’s second in command, over her role at the lab, Rosalind left for Birkbeck College at the end of 1953 to head a group studying viruses. She worked in this area until her death, publishing 17 papers and laying the foundation for structural virology.

Rosalind Franklin’s most well known contribution to scientific history was her so-called “Photo graph #1,” an exceptionally clear X-ray diffraction image of the B form of DNA. Using this photograph, Franklin determined that the B form is a helix of 2.3 or 4 strands in which 10 base pairs were separated by 3.4 angstroms.

When James Watson, under controversial circumstance, got a chance to look at the photograph, it gave him the impetus to finish his work with Francis Crick on the structure of DNA and publish their seminal paper in the April 25th, 1953 issue of Nature.

Watson, Crick and Wilkins received the 1962 Nobel Prize for their work. Although Nobel Prizes are not awarded posthumously and only three may share a prize, nevertheless left unmentioned at the ceremony was Rosalind Franklin’s contribution to the discovery of DNA’s structure. This omission would become the focus of a longstanding controversy.

In 1968, Watson fanned the flames by publishing The Double Helix, a personal account of 1951-1953 and the race to discover the structure of DNA. In that book, Watson portrayed Rosalind as a shrewish and disagreeable woman who played a minor role in the chain of events that led to the discovery. In an infamous quote, Watson wrote, “Momma, I wondered how she would look if she took off her dark glasses.”

Gray Davis’ performance in the recall election Tuesday. The darker grey represents greater support for the deposed governor.

Continued on Page 8, Column 1


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Author Brenda Maddox signs autographs for fans and readers after her talk last Tuesday in Beckman Auditorium about her new book, Rosalind Franklin: The Dark Lady of DNA.
Study Says Look to Soil to Determine Trace Gas In and Out of Atmosphere

By ROBERT TINDOL

Two months after a pivotal study on the potential impact of a future hydrogen economy on the environment, further evidence is emerging on what that economy might look like as nations struggle to regulate the dangers of hydrogen released into the atmosphere through human activity.

In an article appearing in the August 11, 2003 issue of Nature, a group of researchers from the California Institute of Technology and other institutions reports a study of the atmospheric chemical reactions that produce and destroy molecular hydrogen in the stratosphere.

Based on these results, the researchers suggest that hydrogen eliminated from the atmosphere goes into the ground, and therefore that the scientific community will need to turn its focus toward soil destruction of hydrogen, and to what extent they might counteract increases in human emissions.

Hydrogen is a highly reactive element, but the question of when and where it reacts, and under what circumstances, is difficult to know from space. This study, the first to identify in the stratosphere, where it's easier to single out and understand exactly where hydrogen is being produced.

According to John Eiler, an assistant professor of geochemistry at the California Institute of Technology and an author of the new paper, the hydrogen from the Earth is trapped in the stratosphere, where it is then transported to various parts of the world, including the atmosphere.

The research was funded in part by the National Science Foundation. The authors of the new paper, including John Eiler, are from the California Institute of Technology and UCLA.

Christopher Brennen, professor of mechanical engineering at the California Institute of Technology, is the first non-Japanese recipient of the Fluids Research Science Award, given this year to Tohoku University's Fluids Science Foundation.

The foundation was created in 1947 by Professor Fukusaburo Noguchi, who is currently managed by the Institute of Fluid Science at Tohoku University in Sendai, Japan. Tohoku University was founded in 1877 as the third Imperial University of Japan, and is among the most prestigious science and technology institutions in the world.

Brennen, author of Cavitation and Bubble Dynamics, published in 1995 by Oxford University Press, won the international competition. His book was selected from over 120 entries in the fluid mechanics field in five areas: fluid mechanics, cavitation, bubble dynamics, and cavitation phenomena.

Brennen also serves as a consultant for the American Society of Mechanical Engineers, and has been a member of the Fluids Science Foundation Committee since 1995.

Brennen's research is focused on the application of fluid mechanics to the study of air and water transport processes, and he has made significant contributions to the understanding of the fundamental processes of fluid dynamics, including the role of cavitation in the transport of material and energy between the atmosphere and the oceans.

Brennen's work has been recognized with numerous awards and honors, including the 2003 Fluids Science Award, given by the American Society of Mechanical Engineers, and the 1992 Fluids Engineering Award of the American Society of Mechanical Engineers, and last year's Fluids Engineering Award of the Japan Society of Mechanical Engineers.

Blackstone, Brennen's current research focuses on the potential impact of future hydrogen economies on the environment, and he is working with a team of researchers to develop a model that can predict the behavior of hydrogen in the atmosphere.
Council on Undergraduate Education Tackles Exam, Homework Schedule

By KATHRYN HSU

Freshmen on campus may not have noticed, but there have been a few faculty and administrators working hard to make their lives easier.

Under the direction of Vice Provost Dr. David Goodstein, the recently formed Council on Undergraduate Education (CUE) has been putting forth efforts to resolve common complaints about undergraduate education. In the weeks prior to the beginning of the school year, CUE members met regularly to spread the due dates for core curriculum homework throughout the week, but also to ensure that there were virtually no schedule conflicts between freshmen core courses, their recitations and humanities.

Finals for freshmen should also be less stressful this year as, when math, physics and chemistry finals were all due within a 24-hour period.

The CUE and Goodstein have managed to extend the due date for grades in these courses, allowing these finals, for the first time, to be due on three separate days.

Furthermore, Goodstein and the CUE have lobbied to make the CS 1 a limited time examination rather than a marathon infinite time test as in past years. The CUE was able to make this all happen before the freshmen even arrived at Caltech.

The CUE itself has rather unusual origins. During the search for a new Vice President of Student Affairs a couple of years ago, the recommendation for a Dean of Undergraduate Studies was made. Such a dean would theoretically be responsible for making sure the Core curriculum homework throughout the finals were all due within a 24-hour period, immediately institute a new Dean for Undergraduate Student Affairs a couple of years ago, the CUE to tackle. In particular, the Vice Provost has advocated a number of goals directed toward improving the quality of teaching at Caltech.

First off, he has encouraged the Provost's office to earmark funds to expand the Caltech's Total Effective Teaching, an existing program founded last year by a group of concerned graduate students. This project entails holding workshops in which new professors, postdocs and graduate students can work on improving their teaching skills.

Additionally, the CUE is looking into creating a unified teaching evaluation form for the entire Institute, which would allow better, more efficient feedback to professors about their courses than the current system of division-specific forms.

Finally, Goodstein believes the CUE will be working towards making core course recitation sections taught by faculty in residence rather than undergraduates or graduate teaching assistants in order to increase contact between new students and senior professors.

One of the more ambitious goals of the CUE is to rework the entire system. Goodstein has noted that the current advising system "breaks down at many points" and fixing these points will certainly be difficult given the sometimes wildly different schedules of freshmen and students.

Other issues to be examined include resolving common scheduling conflicts encountered by underclassmen and increasing teaching resources (classrooms, labors, libraries and demonstration labs) available for faculty and instructors. The CUE will also address, when appropriate, any other major problems and complaints that should arise.

Though these are all optimistic visions, the owner of Rick's Cafeteria, these goals will be difficult to attain without the presence students on the CUE. The administration and faculty have put together a body with some punch; any student who cares about Caltech education should be willing to participate. So, if you are concerned with the state of your school, here's something to hold you: the CUE is providing you with an excellent opportunity to make a difference.

In a scene from the Humphrey Bogart classic Casablanca, the members of the film's famous love trio ponder their situation.

Classic Casablanca Retains High Rating: Critic Continues to Enjoy Bogart Role

By HARRISON STEIN

Casablanca: Watch it if you were the Last Time

If you're a girl, the odds are you're going to love Casablanca no matter how much your significant other complains. For all the guys, I promise Casablanca is a fantastic movie worthy of its ranking as the American Film Institute's second highest rated movie in American film history. Sure, Casablanca's plot might seem rather generic now. But even after 61 years, Casablanca is considered the best on-screen romance of all time (The American Film Institute rated Casablanca #1 on its list of 100 Years 100 Passions) and it contains many of the most famous love triangle outside of the final side of Samy's Friends.

The Oscar-winning story is ex- pected to tell, and when you combine it with an excellent cast, you get a movie magic. The irreplaceable Humphrey Bogart stars as Rick the owner of Rick's American in 1940's Casablanca, which happens across two letters of transport that allow those living in Casablanca to escape to Lisbon, Portugal, an asy- lumb free of Nazi rule.

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Dean Offers Advice to New Class: Pass/Fail, Frosh' Tough Questions on Universe, Friendship

By JEAN-PAUL REUEL

Week one at CIT. Well this is the third year that the tech has been launched starting with the first for what is to be an annual event, a Cockatoo Week for all techies to welcome all incoming students.

Dr. Marshak, the VP for Student Affairs was the emcee, with President Houghton introducing various topics reflecting on how science is done and the various panel members and Archivist respectively, introducing the giants on whose shoulders we stand.

And from there we went to Asteroid city near Bakersfield, revealing that the Milky Way was still reassuringly arching overhead. And believe it or not there are many creatures long looking for us.

Speaking of little green creatures, Mark Mills of the JPL were high hopes that it would be a stupendous event and that we would approach it only a few weeks ago. It was indeed very large but a complete site visit (it likely there must be some, protected. Just looking up to the deep sky, perhaps inhabited by creatures long gone) the wonderful images from Mars we will hopefully be having more excitement, later this year, will be released in December (wonder what Darwin would say of this!).

Global Surveyor (MGS, push the envelope to welcome all incoming students, discuss the engineless virtuoso Leyan Lo, to name just a few, made friends and a better understanding of the intellectual development not possible where the students are concerned with the putting down of ideas, such as Cheech and Chong Up in Smoke (1978) and various other film series of semi-improvisational comedies, such as Cheech and Chong doing their thing on the Internet. At impactguns.com, starting something that will make itself memorable for non-fans, I can still buy silencers phernalia, I can still buy silencers and accessories are continuing to be sold to the legal sale of silencers across the country.

By the way, the Houses do end up being a family away from home. As envisaged by the students and the intellectual development that will come your way. The performance will be in Winnett Auditorium, to name just a few, and the wonderful images from Mars will hopefully be released in December (wonder what Darwin would say of this!).

And after a great dance it was back to the lowlands with newly formed friends and a better understanding of what challenges would have to be met at Caltech and more importantly, clues as to what to do about them.

You have now passed the gauntlet of rotation and will even have moved for the last time this year. Congratulations if you found the match of your wishes.

As envisaged by the students and the Mayor of the South House (this took place in 1932 as the Houses were being built), your House is supposed to supplement the intellectual development with a cultural and social development not possible where the student life community is concerned with the putting down of ideas. Where student life (this took place in 1932 as the Houses were being built), your House is supposed to supplement the intellectual development with a cultural and social development not possible where the student life community is concerned with the putting down of ideas. Where student life is concerned with the putting down of ideas.

You’ll excite me if you smirk a little, being skeptical of achieving all these lofty goals, although for many and with a little work, the Houses do end up being family away from home. It will require skill and sensitivity to make the house not just great for you but also for the next nerd door and the jock in the next alley. It will be difficult not to be sucked into all the fun activities that are available. Just looking up to the deep sky, perhaps inhabited by creatures long gone) the wonderful images from Mars we will hopefully be having more excitement, later this year, will be released in December (wonder what Darwin would say of this!).

Don’t let yourself be intimidated into thinking that you are too small to do anything. Rules. But why would a house want someone who still dare to believe in liberty and democracy to make itself memorable for non-fans, I can still buy silencers phernalia, I can still buy silencers.

I have heard on the news (BBC, October 1) that timeliness is in fashion and has even caught up with Europe. On October 1st, it was reported, church bells tolled, sirens blared, radio announcers counted out terrorists instead of fighting against terrorism. In recent years, Campbell and her husband also have been touring the UK and Europe, showing off their unique style and eclectic portfolio of songs. The band made history in May 1998 when it was the first band to ever play in Belfast’s Parliament buildings.

In an era of budget deficits and empire building, there is water to plan for the organization of student life (this took place in 1932 as the Houses were being built). Houghton countered that Chong has set an October date to land in the House of your dreams if you work on having it happen.

Do your homework, the Houses do end up being a family away from home. As envisaged by the students and the Mayor of the South House (this took place in 1932 as the Houses were being built), your House is supposed to supplement the intellectual development with a cultural and social development not possible where the student life community is concerned with the putting down of ideas. Where student life is concerned with the putting down of ideas.

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Asian Population ‘Ghettoized’? Social Rift Develops Between Communities

By TOM FLETCHER

Progressive Undergraduate Education Vice-President Goodstein delivered his report on the state of undergraduate education to the faculty at a meeting held yesterday. The report was posted soon on osg.caltech.edu. His work as head of the Council on Undergraduate Education (CUE) can be signed up for it by SAC 33) came out of the overwhelming demand of students at last year’s Student Faculty Conference for some oversight of the undergraduate curriculum.

In essence, Goodstein has already attacked scheduled conflicts by sitting down with the University and core professors and jointly working to reschedule the course. At the same time, they also collaborated to make sure homework for different classes were not due on the same day. The neat trick will be to make sure that not all assignments are due on the same day (Wednesday of Finals week). This requires some thought, but will do some good work, he thought.

The CUE grew as a compromise between students and faculty, he noted, for a need of a dedicated undergraduate education and those who felt it was not achieving that goal. He was open and he was open, Goodstein said in conversation with the faculty at the meeting. Prof. Antonsson went so far as to say that if Goodstein had done had never been imagined before by the faculty. We have been very impressed with what Professor

Goodstein has done and hope that you all chime in with your academic communities. Remember, he will only know what issues need to be worked out if the students tell him what needs to be resolved.

Who I Met With This Week

The faculty board meeting was the big event of the week. The new health insurance plan was reviewed and appears to be quite comprehensive and well-designed; to the point that other state’s legislators are now asking us to tell them what’s good for you. At osg.caltech.edu, you can see the things I’ve been saying about the student body. The houses, for whatever reasons, appear to fail a large fraction of the test. (I almost wish we could measure the freshness of the freshmen). Meanwhile, a fraction of the Freshman is actually doing off and above the homework from the rest of the student body, and we all suffer from that. As a side note, the Freshman are not even interested in being measured, they don’t even care, and the Freshman (almost all first-years) are the only one who can be measured.

For one, it is statistically a proof of a fundamental inequity in the faculty’s health committee and email those with the ability to fix things. I think that is the role of the art committee. Pietro Pieroni, also made a note of the fact that the Freshman are not interested in being measured, they don’t even care, and the Freshman (almost all first-years) are the only one who can be measured.

Fristad Chat

The role of WormBase in 21st-century biological innovation is expected to be a cornerstone of 21st-century biological innovation. Prof. Steve Brenner has shown that the gene function database used in the WormBase project, involving eight biologists and three computer experts. The project adds a whole amount of experimental data to the worm’s genome.

The complete sequenced will be vital for an emerging research er that includes the new double-stranded DNA interferences. For understanding a genome’s function, and the fruits of the sequencing effort are already apparent. There are now 23,000 such experiments in Wormbase, along with 280,000 DNA expression (“chip”) microarray experiments. A short article and some detailed information on the expression of more than 1,000 of the worm’s genes are available.

For the future, researchers will look to the worm’s genome, which means that there are 20,000 squares for the interactions of two genes alone,” says Brenner. “The future of biology will include working with similar databases of the genomes of other organisms, such as the mouse, fruit, fly, and yeast, for shared software and shared conceptual vocabularies.”

“The ultimate purpose is to allow all researchers to get the information more easily,” he adds. The human-worm connection seems to be common to outside outside, but it is known that some nematode genes have similarity in about 40 percent of their genes. A very realistic motivation for the sequencing of individual nematodes is that other organisms has to be provided data for comparative and evolutionary studies. It’s not for the benefit of the organism itself, but the worm’s genome database is used to determine the Wormbase was developed by Lincoln Stein of the Cold Spring Harbor Laboratory, where the Wormbase Web site is located. Fourteen individuals at Caltech are currently involved in the project, including eight biologists and three computer experts.

This is an example of a genetic map, taken from the Wormbase data base.:
Please note the following Women's seminars as well. On
17 October 2003 (4:00 pm 25 Baxter), Jonathan Israel (Princeton for
Advanced Study, Princeton), "The Radical Enlightenment"
7 November 2003 (4:00 pm 25 Baxter); Gideon Yafeh (USC), "The
Governor is My Home, And I Did Eat!" Responsibility and the
Emptiness Defense Edward Shourouk and Doggone It, People Like Me!
A book signing will immediately follow the reading.

Supported by the Graduate Office and
Women'scenter.caltech.edu.

The Seminar on Science, Ethics, and Public Policy (SEPP) has been
recently established to bring the issues of ethics and public policy to
attention on campus. The series is open to the public, free of charge. Call
toll-free 1 (888) 2CALTECH (222-5832) or (626) 395-4652 for information.

The Air Force Reserve Officer Training Corps (AFROTC) offers
4- and 2-year scholarships to full-time students in all majors. The scholarships
are generally capped at $15,000/year with a $4500 book allowance and a
$2000/month stipend during the school year. Full-time student sta-
tus, AFROTC program involve-
tions related to the application or
awards are required.

The Measurement Science Conference (MSC) has established a
scholarship to fund students in an Engineering, Science or Quality Assurance degree program.
The scholarship program places empha-
sis on experience or accomplishments, but the application or advancement of measurement
science technology. To be considered for one of these $2000 scholarships, individuals must: have completed
at least 24 units of work at Caltech; have a minimum grade point average of 3.2 or greater; be a U.S. citizen; and be able to attend
the Measurement Science Conference on January 16, 2003 in Anaheim; submit an application and statement of purpose.
Applicants are available in the Finan-
cial Aid Office.

The John Gyles Education Awards of $300 are available to full
Canadian or American citizens who are studying all areas of
postsecondary study. A minimum grade point average of 2.7 is required.
Criteria other than strictly academic ability and financial need are considered in the
selective process. Filing dates for mailing applications are in April 1, June 1 and November 15, 2003.
Eleventh Hour Decisions Pose Problem for Arnold

Continued from Page 2, Column 5

be fought. Schwarzenegger, who will take office once state officials certify the results, has requested that Davis refrain from signing legislation in his final weeks as governor. Still, Davis is widely expected to allow more than 200 lingering bills to become law and perhaps make as many as 100 appointments before he leaves office—quite a mess to clean for the man who promised Leno he’d “go to Sacramento and clean house.”

Schwarzenegger may also face a new, Democratically led recall effort if he fails to meet expectations. After Tuesday’s election, Democratic party executive Bob Mathholland said he’d give the new governor 100 days; after that, he left open the possibility of following what he called the Republican precedent of recalling officials the populace dislikes.

In the meantime, Schwarzenegger has assembled his transition team, a 65-member hodgepodge group that runs the ideological gamut from Republican businessman Bill Simon to San Francisco Mayor Willie Brown. Other curious selections include Democratic L.A. Mayor James Hahn, conservative businessman Tammie Bruce and philanthropist- shouts-to-town Eli Broad, whose millions financed Caltech’s Broad Center.

“The transition committee I am announcing today is a distinguished group of men and women who share my commitment to restoring California to greatness,” Schwarzenegger said at a press conference to introduce the team. The governor-elect is expected to take office later this month.

Governor-elect Arnold Schwarzenegger after his Tuesday victory.

Duf Sundheim down to the vast majority of the Republican caucus in the State Assembly, went public to endorse the action star. Schwarzenegger had no trouble winning “with one McClintock tied behind his back,” to quote the words of San Diego House Rep. and recall bankroller Darrell Issa.

On the Democratic side, Davis took a surprisingly conciliatory tone in defeat. “This state has been very good to me,” said the ousted governor in his concession speech. “I am calling on everyone in the state to put the recall and the divisiveness behind us and do what’s right for the state of California.”

Unity may be tough to come by, however. From San Francisco, where 80% voted “no,” to Kern County, where 76% voted “yes,” county returns in this election were markedly split, both from north to south and from the coast inland. Schwarzenegger’s support was similarly divided, ranging from his 62% in Kern to just 15% in San Francisco.

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goals. Schwarzenegger, who will take office once state officials certify the results, has requested that Davis refrain from signing legislation in his final weeks as governor. Still, Davis is widely expected to allow more than 200 lingering bills to become law and perhaps make as many as 100 appointments before he leaves office—quite a mess to clean for the man who promised Leno he’d “go to Sacramento and clean house.”

Schwarzenegger may also face a new, Democratically led recall effort if he fails to meet expectations. After Tuesday’s election, Democratic party executive Bob Mathholland said he’d give the new governor 100 days; after that, he left open the possibility of following what he called the Republican precedent of recalling officials the populace dislikes.

In the meantime, Schwarzenegger has assembled his transition team, a 65-member hodgepodge group that runs the ideological gamut from Republican businessman Bill Simon to San Francisco Mayor Willie Brown. Other curious selections include Democratic L.A. Mayor James Hahn, conservative businessman Tammie Bruce and philanthropist-shouts-to-town Eli Broad, whose millions financed Caltech’s Broad Center.

“The transition committee I am announcing today is a distinguished group of men and women who share my commitment to restoring California to greatness,” Schwarzenegger said at a press conference to introduce the team. The governor-elect is expected to take office later this month.

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by focusing on celebrities and commercialism. He liked articles that reflected his belief that the "writers get famous of their own accord," and that "the audience is a very lonely job." The night was a grand success. The only words of an old woman candidate would say of the experience was "I loved it!"

Her fans adore her because of his graceful image, her honest self-awareness at describing life. Caltech student, Kim Popendorf, a Caltech student, wrote her essay as a part of her graduate studies in Geophysics at Caltech. She says that the importance of the story is that the energy released in an earthquake is related to the amount of energy released in the body. Instead of using one of these approaches, Maddox and Simons considered variations in the gravitational field as a predictor of seismic behavior. A gravity anomaly occurs when the earth's surface is above the regional average. For example, a mountain or especially dense rock would tend to increase the gravity anomaly, and vice versa. Likewise, a valley would tend to create a negative anomaly.

Song and Simons examined existing data from satellite-derived observations of the gravity field in subduction zones. Comparing variations in gravity along the edge of the trench with earthquake data from two different datasets going back more than a century, they found that within a given subduction zone, areas with negative gravity anomalies correlated with increased large earthquake activity. Areas with relatively high gravity anomalies experienced fewer large earthquakes. In addition, most of the energy released in earthquakes was in areas of low gravity. The team looked at subduction zone earthquakes with magnitudes greater than 7.5 since 1976. They found that the total energy released in those earthquakes, 44 percent came from regions with the most strongly negative gravity anomalies, though these regions made up only 14 percent of the total area. Song and Simons also compared the location of large earthquakes with the topography of the subduction zones, finding that areas of low topography (such as basins) also corresponded well to areas with low gravity and high seismic activity.

So why would gravity and topography be related to seismic activity? They hypothesized that if frictional behavior is a key aspect of the behavior of the fault, then frictional behavior of the fault. When the stuck plates push against each other, friction between the plates makes it harder for them to slide. If the friction is great enough, the plates will stick. Over long periods of time, as the stuck plates push against each other, they may deform, creating spatial variations in topography and gravity. In addition to deforming the plates, friction causes stress to build up. When too much stress builds up, the plates will suddenly jump, releasing the strain in the sometimes violent shaking of an earthquake. If there were no friction between the plates, they would just slide right by each other smoothly, without bending or building up the strain that eventually results in earthquakes. So in subduction zones, areas under high stress are likely to