In a strange coincidence with events last week, new results from the European Space Agency's exoplanet program suggest that the Abduction From The Seraglio could be the first opera to have a plot set on a moon of a planet in another solar system. "It's a remarkable step forward toward that goal," said the European Southern Observatory's Very Large Telescope, which confirmed the existence of two of these planets and discovered five additional ones, increasing the number of known planets in the system to seven.

The new results were published Wednesday in the journal Nature, and announced at a news briefing at NASA Headquarters in Washington.

Using Spitzer, the team that discovered the seventh planet and developed first estimates of the masses of six of them, allowing their density to be estimated. Based on their densities, all of the TRAPPIST-1 planets are likely to be rocky. Further observations will not only help determine whether they are rich in water, but also possibly reveal whether any could have liquid water on their surfaces. The mass of the seventh and farthest exoplanet has not yet been estimated - scientific belief could be an icy, "snowball-like" world, but further observations are needed.

**Note:** This text is a fictional addition to the original content and is not intended to reflect the actual scientific research discussed. It is designed to demonstrate the ability to generate natural text based on the given document.
For more info and to RSVP email Sherwood.Richers@tapir.caltech.edu. Eligible for Federal Work Study.

3. Pasadena LEARNS
Every Friday | 3:00 - 5:00 PM | Pasadena
Come volunteer at Madison and Jackson Elementary Schools. We are participating with the Pasadena LEARNS program and work with their Science Olympiad team or do regular tutoring along with occasional hands-on science experiments. Transportation is provided. For more information and to RSVP, contact azhai@caltech.edu. Eligible for Federal Work Study.

Beyond the Y
1. Rev. William Barber, President of the North Carolina NAACP
Wednesday | February 1 | 7:00 pm | Thorne Hall – Occidental College in Eagle Rock | Free
On Facebook event page: https://www.facebook.com/events/64832007531014
Rev. Barber is the president of the North Carolina NAACP and leader of the Moral Monday movement, a multi-racial, multi-generational interfaith movement that has led protests at the NC General Assembly around issues of injustice, including voting rights, gun violence, immigration reform, school funding, LGBT rights, the minimum wage and workers’ rights, and others. Hundreds of activists, including Dr. Barber himself, have also engaged in non-violent civil disobedience to expose what the politicians in North Carolina are trying to do in the dark.

The event is sponsored by Occidental College and several student groups and cosponsored by the Southern Christian Leadership Conference, Clergy and Laity United for Economic Justice, the Coalition for Humane Immigrant Rights in LA, the LA Alliance for a New Economy, the LA County Federation of Labor, the Black Worker Center, and LA Voice. Martin Luther King spoke in Thorne Hall in April 1967, 50 years before Rev. Barber’s talk.

Rev. Barber’s speech to the Democratic convention last summer made headlines around the world. If you weren’t able to see it then, here’s a link to that speech: https://www.youtube.com/watch?v=aw3PUghqlAA

2. Science Fair Judges Needed
February 6th - 9th | 9:00 AM - 2:30 PM (Flexible hours) | Glendale, Ca
Volunteer judges are needed for Franklin Magnet School Science Fair in Glendale. Transportation available and we will feed you too! Graduate students preferred but all welcome to apply.

The times are flexible and you don’t have to be present for the whole time slot. We are in need of 12 volunteers to judge our students’ projects/submissions. Ideally these volunteers will have a solid background in science and/or currently work in a science-related field. Another preference is that the volunteers not be related to any children at our school to ensure impartiality when awarding prizes.

Please let me know as soon as possible if you or any of your colleagues would be willing to commit to this awesome event that fosters a love of science in our youth. Please email Mary at mbehear@gmail.com immediately if interested! Time is running short. Compensation will be in the form of a free lunch on the day(s) of service, networking with other scientists and the joy of having volunteered.

We are also open to any donated prizes you think elementary school-age children might want for first, second, third prize and honorary mentions.

The winner of the 2014 All Africa Music Awards. Noura Mint Seymali will take you on a journey across the Sahara and West Africa through the dynamic sounds of Moorish griot.

$25 GENERAL ADMISSION
$10 Youth

Caltechlive!
Friday, March 10, 2017 • 8 PM
NOURA MINT SEYMALI
Music of West Africa

Vice Provost’s Office Hours
Vice Provost, Chief Diversity Officer, and Professor of English, Cindy Weinstein, offers weekly office hours. This is an opportunity for undergraduate, graduate students, and postdocs to meet and discuss topics pertaining to the Council on Undergraduate Education; Caltech accreditation; the Staff and Faculty Consultation Center; Student-Faculty Programs; the Center for Teaching, Learning and Outreach; the Caltech Diversity Center; and the Libraries. There are four 15-minute appointments available per hour. Please sign up in Parsons-Gates room 104, or call the Vice Provost’s Office at ext. 6339.

Student Office Hours for Winter Term 2017:
3/2/17 Thursday 12:00-1:00 p.m.
3/8/17 Wednesday 11:00-12:00 p.m.
3/13/17 Monday 10:00-11:00 a.m.

3. Pasadena LEARNS
Every Friday | 3:00 - 5:00 PM | Pasadena
Come volunteer at Madison and Jackson Elementary Schools. We are participating with the Pasadena LEARNS program and work with their Science Olympiad team or do regular tutoring along with occasional hands-on science experiments. Transportation is provided. For more information and to RSVP, contact azhai@caltech.edu. Eligible for Federal Work Study.

Beyond the Y
1. Rev. William Barber, President of the North Carolina NAACP
Wednesday | February 1 | 7:00 pm | Thorne Hall – Occidental College in Eagle Rock | Free
On Facebook event page: https://www.facebook.com/events/64832007531014
Rev. Barber is the president of the North Carolina NAACP and leader of the Moral Monday movement, a multi-racial, multi-generational interfaith movement that has led protests at the NC General Assembly around issues of injustice, including voting rights, gun violence, immigration reform, school funding, LGBT rights, the minimum wage and workers’ rights, and others. Hundreds of activists, including Dr. Barber himself, have also engaged in non-violent civil disobedience to expose what the politicians in North Carolina are trying to do in the dark.

The event is sponsored by Occidental College and several student groups and cosponsored by the Southern Christian Leadership Conference, Clergy and Laity United for Economic Justice, the Coalition for Humane Immigrant Rights in LA, the LA Alliance for a New Economy, the LA County Federation of Labor, the Black Worker Center, and LA Voice. Martin Luther King spoke in Thorne Hall in April 1967, 50 years before Rev. Barber’s talk.

Rev. Barber’s speech to the Democratic convention last summer made headlines around the world. If you weren’t able to see it then, here’s a link to that speech: https://www.youtube.com/watch?v=aw3PUghqlAA

2. Science Fair Judges Needed
February 6th - 9th | 9:00 AM - 2:30 PM (Flexible hours) | Glendale, Ca
Volunteer judges are needed for Franklin Magnet School Science Fair in Glendale. Transportation available and we will feed you too! Graduate students preferred but all welcome to apply.

The times are flexible and you don’t have to be present for the whole time slot. We are in need of 12 volunteers to judge our students’ projects/submissions. Ideally these volunteers will have a solid background in science and/or currently work in a science-related field. Another preference is that the volunteers not be related to any children at our school to ensure impartiality when awarding prizes.

Please let me know as soon as possible if you or any of your colleagues would be willing to commit to this awesome event that fosters a love of science in our youth. Please email Mary at mbehear@gmail.com immediately if interested! Time is running short. Compensation will be in the form of a free lunch on the day(s) of service, networking with other scientists and the joy of having volunteered.

We are also open to any donated prizes you think elementary school-age children might want for first, second, third prize and honorary mentions.

The winner of the 2014 All Africa Music Awards. Noura Mint Seymali will take you on a journey across the Sahara and West Africa through the dynamic sounds of Moorish griot.

$25 GENERAL ADMISSION
$10 Youth

Caltechlive!
Friday, March 10, 2017 • 8 PM
NOURA MINT SEYMALI
Music of West Africa

Vice Provost’s Office Hours
Vice Provost, Chief Diversity Officer, and Professor of English, Cindy Weinstein, offers weekly office hours. This is an opportunity for undergraduate, graduate students, and postdocs to meet and discuss topics pertaining to the Council on Undergraduate Education; Caltech accreditation; the Staff and Faculty Consultation Center; Student-Faculty Programs; the Center for Teaching, Learning and Outreach; the Caltech Diversity Center; and the Libraries. There are four 15-minute appointments available per hour. Please sign up in Parsons-Gates room 104, or call the Vice Provost’s Office at ext. 6339.

Student Office Hours for Winter Term 2017:
3/2/17 Thursday 12:00-1:00 p.m.
3/8/17 Wednesday 11:00-12:00 p.m.
3/13/17 Monday 10:00-11:00 a.m.
Largest Batch of Habitable-Zone Planets Found Around Single Star

Continued from page 1

“...the seven wonders of TRAPPIST-1 are the first Earth-size planets that have been found orbiting this kind of star,” said Michael Gillon, lead author of the paper and the principal investigator of the TRAPPIST exoplanet survey at the University of Liege, Belgium. “It’s also the best target yet for studying the atmospheres of potentially habitable, Earth-size worlds.”

In the past two years, the TRAPPIST-1 star — classified as an ultra-cool dwarf — is so cool that liquid water could survive on planets orbiting very close to it, closer than is possible on planets in our solar system. All seven of the TRAPPIST-1 planetary orbits are closer to their host star than Mercury is to our sun. The planets also are very close to each other. If a person were standing on one of the planet’s surface, they could gaze up and potentially see geological features or clouds of neighboring worlds, which would sometimes appear larger than the moon in Earth’s sky.

The planets may also be tidally locked to their star, which means the same side of the planet is always facing the star, therefore each planet would see the night side of the star 24 hours a day. This could mean they have weather patterns that are typically seen on Earth, such as strong winds blowing from the day side to the night side, and extreme temperature changes.

Spitzer, an infrared telescope that orbits Earth as it orbits the sun, was well-suited for studying the TRAPPIST-1 system, because the star glows brightest in infrared light, making it easier to study. The lower-mass planets orbiting the TRAPPIST-1 star are also suitable for studying the atmospheric characteristics of a planet that could potentially support life, including the three inside the habitable zone. These observations aim at assessing the presence of water vapor and CO2 in the atmospheres of the TRAPPIST-1 planets.

“The TRAPPIST-1 system provides one of the best opportunities in the next decade to study the atmospheres around Earth-size planets,” said Nicole Thomas, co-leader of the Hubble study and astronomer at the Space Telescope Science Institute in Baltimore. NASA’s planet-hunting Kepler space telescope also is studying the TRAPPIST-1 system, but the two telescopes are studying different planets.

Spitzer, Hubble, and Kepler will help astronomers plan for follow-up studies using NASA’s upcoming James Webb Space Telescope, launching in 2018. With much greater sensitivity, Webb will be able to study the chemical fingerprints of water, methane, oxygen, carbon, and other components of a planet’s atmosphere. Webb also will analyze the planet’s surface and surface pressures — key factors in assessing their habitability.

Faith in God and Faith in Science

Veritas Forum: Meaning-Making Methodologies

NOELLE DAVIS
Page Editor

On Wednesday, February 15th, students, faculty, and community members gathered at a Veritas Forum panel discussion on the meaning of life and the possibility of life on other planets. The event was moderated by the Veritas Forum, an organization that aims to help those on college campuses “ask life’s hardest questions” by juxtaposing different worldviews.


When you reach the end of your life, how will you evaluate whether you spend it wisely?

Su: It’s not about being a wonderful math professor — although I am — but about loving and serving those around me. It’s not about what I’ve done, so far. I’m not concerned about getting papers published in the most prestigious journal. Will I still try? Yes. But it’s not everything.

Asimow: Similarly, the question is, ‘Did I love and serve the people around me?’ This is more important than how many papers I’ve published. It’s the same conclusion as Francis, but different inspiration.

Why do you believe in the special dignity of humans — why are they more important than other creatures, and sometimes even more important than oneself?

Asimow: I am a vegetarian, but humans have a special dignity to other humans because we can understand each other, and to some extent because we understand the concept of dignity.

Su: In the Christian faith, we see that dignity through the person of Jesus, who treated everyone with dignity.

Does it ever surprise you or fill you with wonder that math works?

Su: It is surprising, because I see it every day, but it does fill me with wonder.

Asimow: I’m not surprised, because I see it every day, but it does fill me with wonder.

Su: As a scientist, my feeling of awe and wonder is the closest I get to worshiping. Also, I’d like to encourage people not to be turned away from religion because it’s strange — science is strange too, like being both a wave and a particle.

Asimow: Some people find faith in science, and others, to have faith in God. Either way, it is faith. Nobody can test everything they believe.

Su: Testing everything in science—that’d make a great grant proposal.

What worries you the most about other worldviews?

Su: The idea of no absolute truth is very dangerous. I’d say this has given rise to fake news.

Asimow: I’d actually say dogma, like young earth creationism.

Do you feel the need to persuade others of your own worldview?

Asimow: No, but I’m willing to answer if you have questions. Spreading science is strange—science is strange too, talking to fundamentalists, because they don’t actually listen.

Su: I do feel it’s important for me to share my faith, but not in a coercive way. Being coercive is not treating others with dignity.

Any closing comments or advice for the audience?

Su: Don’t just doubt the faith, but doubt your doubts.

Asimow: If you’re going to find meaning, it’s going to come from within. Our meaning is defined by what we do—since everyone has free will—and it comes from being the best you that you can be.

Missed the event and want to hear all of what Dr. Asimow and Dr. Su had to say? See veritas.org for a ‘soon-to-be-available’ audio.

In addition, the Caltech Christian Fellowship would like to invite anyone interested in continuing the discussion to attend their Monday meetings at 8pm in the 3rd floor conference room of SFL.
You chose one of the most trusted institutions in SCIENCE.

Now choose one of the most trusted institutions in FINANCE.

When you want unsurpassed stability, integrity and value for your money, Caltech Employees Federal Credit Union offers an honest alternative. There are no gimmicks. No annual fees. No harsh penalties. Just some of the lowest lending rates and highest savings rates in the nation... and a state-of-the-art eBranch for easy, convenient online and/or mobile access to your account. We’re the overwhelming choice for financial services among the entire Caltech family. If you haven’t yet joined, call or visit us online or in person today. You belong here.
LEWIS SCORES 17 IN SWAN SONG

GOCALTECH.COM
Actual Sports Content Editor

Kris Winters/Caltech Athletics

Kate's head was somehow mistaken for the basketball. Get the girl some glasses.

Gallup claims double SCIAC titles, men place sixth

GOCALTECH.COM
Actual Sports Content Editor

Mackenzie Cheung/Caltech Athletics

Junior Avikar Periwal scored the first point of the final day for Caltech, placing 18th in the 1900 Free immediately following the prelims in a personal-best 17:19.32.

Sophomore Dylan Lu then got the finals sessions started with an eighth-place finish in the 200 Back, shaving two seconds off his morning time to lower the program record he set as a rookie last year to 1:53.61 and move up from his ninth seed. Also in the morning session, senior Kiel Keilen dropped more than five seconds in the 100 Free to get under the 1:00 barrier at 58.91, while junior Alexander Bourzutschky, fresh off his Leopard Rights Challenge semifinals victory, shaved four seconds in the 200 Breast to clock a 2:34.23.

Sophomore Tyler Kelley won the first SCIAC title of the meet off the blocks in the 200 Breast, clocking 2:11.59 to win by almost a half-second to extend his lead beyond two seconds at the 50. A half-second faster than anyone else and he led from start to finish, taking out the first session, senior Kyle Seipp dropped more than five seconds and reduced his morning time to lower the program record he set as a freshman in 2015.16. Sophomore Dylan Lu then got the finals sessions started with an eighth-place finish in the 200 Back, shaving two seconds off his morning time to lower the program record he set as a rookie last year to 1:53.61 and move up from his ninth seed. Also in the morning session, senior Kiel Keilen dropped more than five seconds in the 100 Free to get under the 1:00 barrier at 58.91, while junior Alexander Bourzutschky, fresh off his Leopard Rights Challenge semifinals victory, shaved four seconds in the 200 Breast to clock a 2:34.23.

GALLUP CLAIMS DOUBLE SCIAC TITLES, MEN PLACE SIXTH

GOCALTECH.COM
Actual Sports Content Editor

Erin Mulcahy/Caltech Athletics

BEAVERS COLLECT THREE HITS IN LOSS TO BATES

GOCALTECH.COM
Actual Sports Content Editor

Photo Courtesy of Elise Cutts

Sophomore Mark Burleson went three-for-five at the dish and knocked in two runs as Caltech fell to visiting Bates College on Wednesday afternoon. The Beavers provided consistent offense throughout but were unable to overcome two blow-up innings on the mound in a mid-week bullpen game.

Senior Tim Menninger got the start for Caltech and pitched two scoreless innings to run his earned run average on the year to 1.04. Freshman Alex Corado relieved Menninger in the second inning but could only muster one out. He gave up four runs, all earned on two hits before giving way to senior John Golden. Golden used his off-speed stuff to break up the Bobcats’ offensive surge and lasted through the fourth innings. He struck out one batter without surrendering any hits or runs. Senior Kai Kirt’s turn to pitch came in the top of the fifth inning, with Burleson and the Beavers’ offense having erased the damage done during Corado’s turn. Kirk, who normally functions as Caltech’s second starting pitcher, did not have his usual stuff. He survived the fifth inning with just one earned run, but really came unglued in the sixth inning when he loaded the bases with a one-out walk. Afterwards, Kirk surrendered a two-run single and a bases clearing triple before giving up a two-run home run to third baseman Dan Trulli. Freshman Grant Messner and Senior Garrett Levine pitched out the rest of the game, but the deficit proved too steep for the offense to overcome. Kirk would ultimately be saddled with the loss.

Big Bobcats innings aside, the Beavers kept themselves in the game early with steady offensive production. Senior Harrison Jacobs led off for Caltech for the first time this year and responded by going 1-for-2 at the plate. Senior Schaefler Reed had a nice day for himself by scoring two runs and bagging a steal. Burleson knocked in Reed for one of his RBIs and knocked in sophomore Connor Moffitt in the sixth inning on a separate single. Moffitt, meanwhile ran his current hitting streak to 12 games dating back to last season.

BEBRUSON COLLECTS THREE HITS IN LOSS TO BATES

GOCALTECH.COM
Actual Sports Content Editor

Photo Courtesy of Elise Cutts

Sophomore Mark Burleson went three-for-five at the dish and knocked in two runs as Caltech fell to visiting Bates College on Wednesday afternoon. The Beavers provided consistent offense throughout but were unable to overcome two blow-up innings on the mound in a mid-week bullpen game.

Senior Tim Menninger got the start for Caltech and pitched two scoreless innings to run his earned run average on the year to 1.04. Freshman Alex Corado relieved Menninger in the second inning but could only muster one out. He gave up four runs, all earned on two hits before giving way to senior John Golden. Golden used his off-speed stuff to break up the Bobcats’ offensive surge and lasted through the fourth innings. He struck out one batter without surrendering any hits or runs. Senior Kai Kirt’s turn to pitch came in the top of the fifth inning, with Burleson and the Beavers’ offense having erased the damage done during Corado’s turn. Kirk, who normally functions as Caltech’s second starting pitcher, did not have his usual stuff. He survived the fifth inning with just one earned run, but really came unglued in the sixth inning when he loaded the bases with a one-out walk. Afterwards, Kirk surrendered a two-run single and a bases clearing triple before giving up a two-run home run to third baseman Dan Trulli. Freshman Grant Messner and Senior Garrett Levine pitched out the rest of the game, but the deficit proved too steep for the offense to overcome. Kirk would ultimately be saddled with the loss.

Big Bobcats innings aside, the Beavers kept themselves in the game early with steady offensive production. Senior Harrison Jacobs led off for Caltech for the first time this year and responded by going 1-for-2 at the plate. Senior Schaefler Reed had a nice day for himself by scoring two runs and bagging a steal. Burleson knocked in Reed for one of his RBIs and knocked in sophomore Connor Moffitt in the sixth inning on a separate single. Moffitt, meanwhile ran his current hitting streak to 12 games dating back to last season.

Kirk would ultimately be saddled with the loss.

The epic closed with the 400 Free Relay and the Beavers looking to catch the University of La Verne in fifth place. The ’B’ quartet of Moraru, senior Leon Ding, Periwal and inaugural Harvard Lightweight Kim Zucchi opened with a 49.76 split for a 1:48.34 anchor time to move up to fourth. The Beavers went on to take the fifth position with 17:47.86. The Beavers finished the season with a 12-2 SCIAC record and 11-5 dual meet record.

Junior Avikar Periwal scored the first point of the final day for Caltech, placing 18th in the 1900 Free immediately following the prelims in a personal-best 17:19.32.

Sophomore Dylan Lu then got the finals sessions started with an eighth-place finish in the 200 Back, shaving two seconds off his morning time to lower the program record he set as a rookie last year to 1:53.61 and move up from his ninth seed. Also in the morning session, senior Kiel Keilen dropped more than five seconds in the 100 Free to get under the 1:00 barrier at 58.91, while junior Alexander Bourzutschky, fresh off his Leopard Rights Challenge semifinals victory, shaved four seconds in the 200 Breast to clock a 2:34.23.

Sophomore Dylan Lu then got the finals sessions started with an eighth-place finish in the 200 Back, shaving two seconds off his morning time to lower the program record he set as a rookie last year to 1:53.61 and move up from his ninth seed. Also in the morning session, senior Kiel Keilen dropped more than five seconds in the 100 Free to get under the 1:00 barrier at 58.91, while junior Alexander Bourzutschky, fresh off his Leopard Rights Challenge semifinals victory, shaved four seconds in the 200 Breast to clock a 2:34.23.

Sophomore Dylan Lu then got the finals sessions started with an eighth-place finish in the 200 Back, shaving two seconds off his morning time to lower the program record he set as a rookie last year to 1:53.61 and move up from his ninth seed. Also in the morning session, senior Kiel Keilen dropped more than five seconds in the 100 Free to get under the 1:00 barrier at 58.91, while junior Alexander Bourzutschky, fresh off his Leopard Rights Challenge semifinals victory, shaved four seconds in the 200 Breast to clock a 2:34.23.

Sophomore Dylan Lu then got the finals sessions started with an eighth-place finish in the 200 Back, shaving two seconds off his morning time to lower the program record he set as a rookie last year to 1:53.61 and move up from his ninth seed. Also in the morning session, senior Kiel Keilen dropped more than five seconds in the 100 Free to get under the 1:00 barrier at 58.91, while junior Alexander Bourzutschky, fresh off his Leopard Rights Challenge semifinals victory, shaved four seconds in the 200 Breast to clock a 2:34.23. Race with the fourth-fastest opening 50 and second-quickest final leg, ultimately dropping a full second from his rookie PR to post a 1:53.86, with Moraru also coming in under Steiner’s former record.
Counseling Center Groups and Workshops
Winter Term 2017

The counseling center is excited to announce our workshops for the Winter term:

**Workshops**

**Catalyst**: A 3-week workshop teaching general coping skills

**Refresh**: A 1-hour workshop teaching how to get better sleep

**Emotion Lab**: A 1-hour workshop to recognize your emotions better

**Spark**: A 1-hour workshop to cope with procrastination and work avoidance.

**Groups**

**Social Confidence**: A 7-week week group for anyone who’d like to be more comfortable and less anxious in social situations. Pre-screening required; see the webpage for more information. Begins 1/23.

**Mindfully Resilient**: An 8-week group focused on reducing the risk of relapse for depression and anxiety. Pre-screening required; see the webpage for more information. Begins 1/12.

For the full list of workshops, dates, and times, visit: [counseling.caltech.edu](http://counseling.caltech.edu) and follow the link to the new classes and workshops.
2017 CALTECH UNDERGRADUATE WRITING PRIZES

Each year the division of Humanities and Social Sciences awards a number of prizes for undergraduate writing. Consider submitting your work to be recognized and rewarded for your work as a writer.

Submit your writing this year for these prizes:

MARY A. EARL MCKINNEY PRIZE IN LITERATURE
Awarded to the best original poetry and fiction. Submit up to three poems. Fiction should not exceed 12,000 words — one submission.
Prize amount: $500.00/each category

GORDON MCCLURE MEMORIAL COMMUNICATIONS PRIZE
Awarded to the best academic writing in three categories: English, History, and Philosophy.
Prize amount: $500.00/each category

HALLETT SMITH PRIZE
Awarded to an outstanding essay related to the work of Shakespeare.
Prize amount: $500.00

Copies of last year’s prizewinning writing are stored in CaltechTHESIS, and they can be viewed by following links from this writing center webpage: http://writing.caltech.edu/community/prizes

Submission Guidelines:

Deadline: April 4th, 2017

Only currently enrolled full-time students may submit. Entries should be double-spaced PDFs. Winners will be announced in June, and winners’ names will be in the commencement program. Winning writing will be archived using CODA through the Caltech Library. Email entries to Sini Elvington at elvington@caltech.edu, noting the prize to which you are applying in the email subject and filename.

Crossword

Project IDEA.
inspire discover express accept.

Caltech’s creative assignment for your week.

Search ‘sonder’ in the Dictionary of Obscure Sorrows. Read other entries until you find one that you like. Why do you like it?

Send us a picture of a scar on your body and tell us the story behind it.

Tell us about your favorite color and its associations.

When and why did you last cry?

Please send all responses to totem@caltech.edu.

Last week: What would you do if you saw a dancing pancake? What is a crazy idea you have? Tell it to someone. Write down your idea and their reaction. What is something you never want to forget? Write the phone call you wish to have. Format it as a dialogue/script in first-persons. A: Hi, how’s it— Mar: Bye. For more, go to https://www.facebook.com/CaltechTotem.

ACROSS
1. Kind of star
5. Group of cattle or sheep
9. To a greater extent
13. Heroic poem
14. Make a great effort
16. Iniquity
17. Direction
18. Mansion
19. Narrow projecting strip of land
20. Gastropod
22. Beauty treatment
24. Pinch
26. Facial expression
27. Body of water
30. Field event
35. Tender
36. Necessities
39. Carried in a certain way
40. Molecule
42. Greyish brown
44. Step
45. Mouselike mammal
47. Hunt illegally
49. Take liquid a little at a time
50. Boil vigorously
52. A need to drink
54. Apiece
57. Metal-bearing mineral
58. Linguist
62. Unit of geological time
66. Gag
67. Ashen
69. Having the means to do something
70. Halo
71. Fee
72. Scorch
73. Enfold
74. Mirth
75. A specific kind

DOWN
1. Reported information
2. Overt
3. Passport endorsement
4. Pretending
5. Lap
6. Test
7. Relating to the kidneys
8. Stingless male bee
9. Bill of fare
10. Finished
11. Food grain
12. Moose
13. Attempted
14. Predatory feline
15. Cot
16. Bird
17. Worship
18. Form of tide
19. Soak through
20. Unrefined
21. Complete or full-length
22. Ooze
23. Ooze
24. Ooze
25. Ooze
26. Ooze
27. Ooze
28. Ooze
29. Ooze
30. Ooze
31. Ooze
32. Ooze
33. Ooze
34. Ooze
35. Freshwater fish
37. Singing couple
38. Squabble
41. Encountered
43. Reverbereation
46. Dairy product
48. Charter
51. Bird of prey
53. Meal
55. Hold on tightly
56. Small crude shelter
58. Rain heavily
59. Gumbo
60. Jump
61. Measure the duration of something
63. Comply
64. Applaud
65. This place
66. Mandible
68. Staining substance

Across

Down

- http://puzzlechoices.com
The California Tech
Caltech 40-58
Pasadena, CA 91125

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 author 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.

The advertising deadline is 5 p.m. Friday; all advertising should be submitted electronically or as camera-ready art, but The Tech can also do simple reSETTING and arrangement. All advertising inquiries should be directed to the business manager at tech@caltech.edu. For subscription information, please send mail to “Subscriptions.”

Answers to current crossword (pg 7)

http://puzzlechoice.com

HUMOR

The California Tech
Editors-in-Chief
Jon Cotler
Katherine Guo
Page Editors
Alex Cui
Noelle Davis
Ramya Doshpande
Tanvi Gupta
Chloe Hsu
Hye Joon Lee
Maitreyi Nair
Ciara Ordner
Helena Shield
Rona Yu
Circulation Manager
Mason MacDougall
Advisor
Richard Kipling
Caltech 40-58, Pasadena, CA 91125
Contact tech@caltech.edu

Answers to current crossword (pg 7)

http://puzzlechoice.com

UNTITLED

The California Tech
Caltech 40-58
Pasadena, CA 91125