

THE TARTAN

Carnegie Mellon's student newspaper since 1906



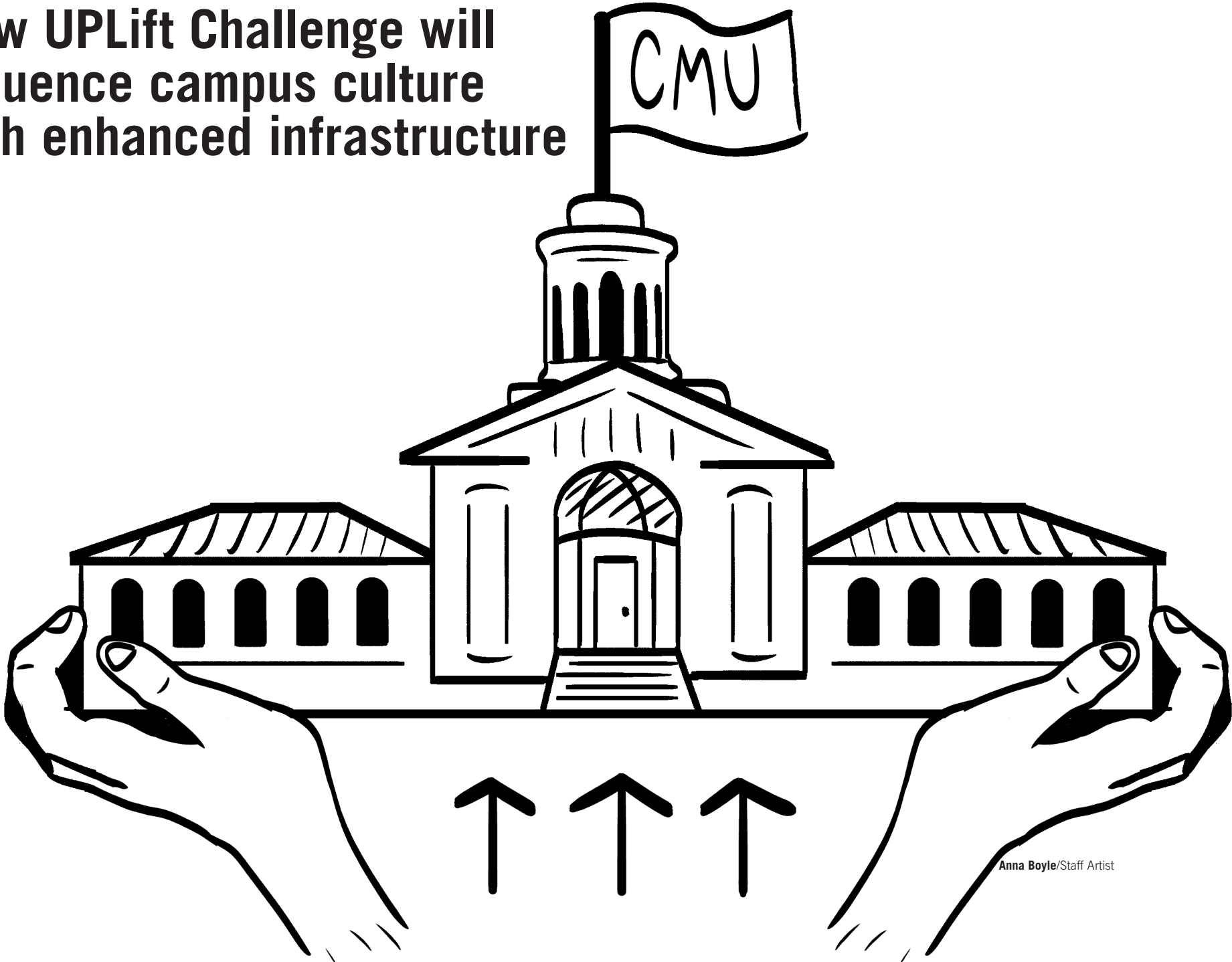
thetartan.org

@thetartan

The Tartan

April 10, 2017
Volume 111, Issue 22

New UPLift Challenge will influence campus culture with enhanced infrastructure



VALENE MEZMIN
News Editor

Provost Farnam Jahanian recently announced the Task Force on the CMU Experience's newest mission: the UPLift challenge. This challenge, which promotes the importance of university placemaking at Carnegie Mellon, allows students and faculty members to submit ideas to temporarily enhance campus infrastructure to create a more supportive and engaging environment.

According to the Project for Public Spaces, placemaking is a collaborative process by community members which “inspires people to collectively

re-imagine and reinvent public spaces as the heart of every community,” while also strengthening the connection between people and the places they share. “Placemaking facilitates creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution.”

Carnegie Mellon University will fund up to \$20,000 for each placemaking project, which will be selected and executed by a faculty-staff committee. Since this is a pilot challenge, submitted projects are meant to experiment with different ways community members can temporarily

enhance Carnegie Mellon's campus infrastructure and influence our campus culture for up to one year.

“Pilots are all about learning,” Daragh Byrne, a member of the Campus Infrastructure working group of the Task Force on the CMU Experience who has been helping to lead the UPLift Challenge initiative, said. “We are actively looking for unproven, untested ideas that we can try for a while. Through these temporary interventions, we can gain invaluable insight into what can make our experience and our campus better, in both the short and long-term.”

See **UPLIFT CHALLENGE**, A3

Non-profit org partners with Panera to help children with autism

JADE CROCKEM
Publisher

This past week the Wesley Spectrum, a local non-profit organization, began partnering with locally-owned Panera Bread stores to sell cookies with the international autism symbol on them for their “Every Cookie Counts” fundraiser. The proceeds will go directly to Wesley's programs for autism.

The Wesley Spectrum is an organization that has reached over 5800 families and children with their services. With three locations in the Pittsburgh area, Wesley Spectrum offers several onsite and outpatient programs. Many of their programs are set to target both children and teens and some, such as their Wonderskills social skills program, have a curriculum that continues to develop and adapt to their needs as the children get older. Some of the programs benefiting from “Every Cookie Counts” are Healthy Relationship, Behavioral Health and Rehab Services, and Creative Arts.

The Healthy Relationship program is set to target

transition-age youth that are starting to enter more serious friendships and relationships. It helps the students develop skills for more adult interactions, such as helping students with relationship and dating skills. It shows them different ways to handle situations like going out for a cup of coffee. Beyond just showing them skills for simple dates, Healthy Relationship also teaches them what a healthy relationship looks like.

Creative Arts is another program that will receive funding from the “Every

Cookie Counts” fundraiser. This program is open to anyone with behavioral health issues. It allows participants

to express themselves through various forms of art such as dancing, signing, drawing, and playing instruments. Out of this group, some participants have formed rock bands that have performed at churches, local fairs, and even Pirates games.

Wesley Spectrum does not

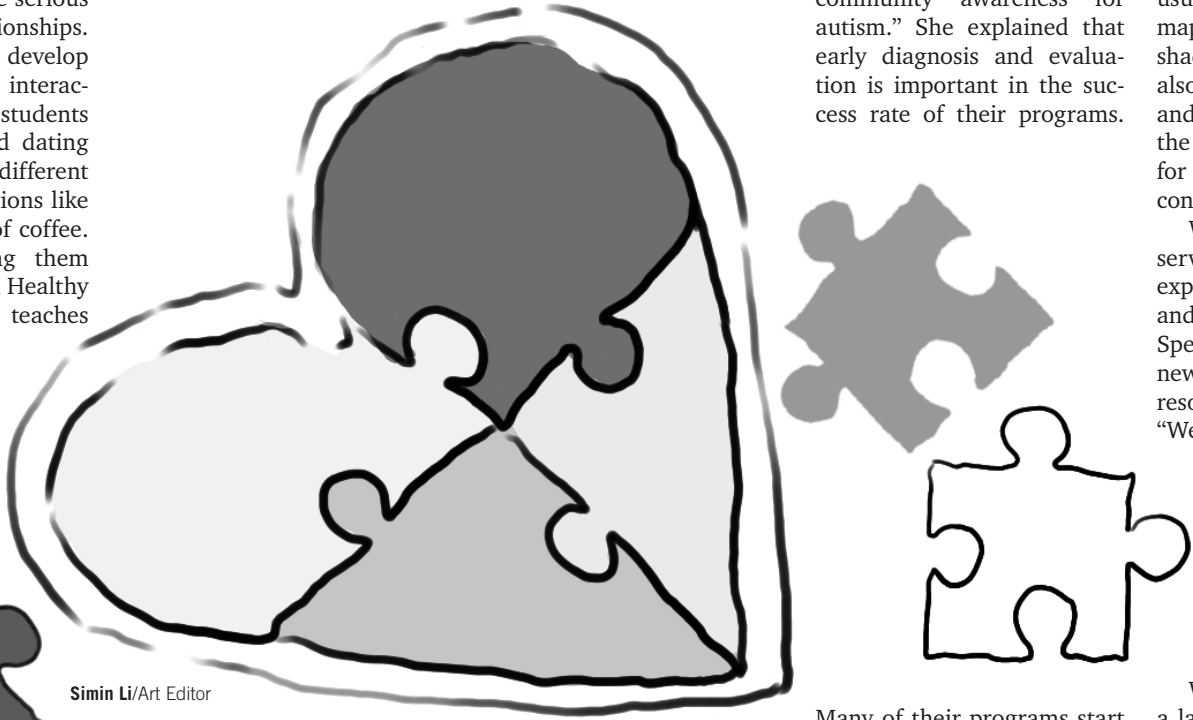
just limit its work to children impacted by autism. It also makes an effort to reach out to parents. “We work with parents so they can take over when Wesley Spectrum isn't there,” director of Public Policy and Strategy, Michelle Sloane explained in an interview with The Tartan. “We hope to

decrease stigma and increase community awareness for autism.” She explained that early diagnosis and evaluation is important in the success rate of their programs.

Sloane explained. The space is usually a large room with big maps, low lighting, and lighter shades of colors. There are also water bubble machines and other things that make the room a calm environment for soft talking and soothing conversations.

With programs and services that are constantly expanding to reach more and more families, Wesley Spectrum is always looking for new members and additional resources to help their cause. “We have a wide variety of services and positions both on and offsite for anyone looking to get involved. Whether it's interacting with families and children or doing administrative work, there's always something to do.”

Wesley Spectrum provides a large number of services to children and families in Pittsburgh, ranging from help with autism and behavioral health to education and support for families whose lives have been impacted by autism. More information about “Every Cookie Counts” and Wesley Spectrum can be found at wesleyspectrum.org.



Simin Li/Art Editor

FEATURE PHOTO

CMU UNICEF empowers individuals to help children



Lisa Qian/Staff Photographer

This past week, CMU UNICEF displayed signs and flags along the College of Fine Arts lawn to raise awareness about its lifesaving programs for children around the world. Representatives were also available to provide additional information.

NEWS IN BRIEF

Lecture focuses on accomplished female architects at Carnegie Mellon University

Based on data compiled by the Bureau of Labor Statistics, roughly 14 percent of architects are female and it appears that there is gender discrimination in the field.

However, at Carnegie Mellon University, more than 50 percent of the first-year class for the School of Architecture has been made up of women for these past two years. The Association of Collegiate Schools of Architecture says this statistic is well above those of other undergraduate schools in the country.

“When my wife started at Carnegie Tech in 1968, she was one of three women out of a class of 65,” School of Architecture Head Stephen Lee said in a press release. “During the 2000s we built up to 40 percent female entering and during the 2010s, we enroll two women for every man.”

Special faculty member for the School of Architecture, Spike Wolff, is cognizant

about these disadvantages in the architecture field. Since 2009, Wolff has put on a lecture series that showcases a selection of diverse architects and their variety of work. This year’s lecture was separated into two themes: the fall semester lecture focused on cultural climate and how that influenced architecture, while the spring semester series focused on female architects.

“In a way, this series advocates for inclusion, without compromising standards,” Wolff said.

This lecture discussion has facilitated student conversation about women in architecture and gender rights as a whole.

“The students seem pretty receptive and enthusiastic to these two themed series, both politics in the fall and all women in the spring,” Wolff said in the press release. “It’s good for students to have strong role models, to see women at the top of their field.”

Two student startups earn investments in the McGinnis venture competition

In Carnegie Mellon’s 2017 McGinnis Venture Competition, startups RoBotany and Inventory Connection secured top winnings.

“The McGinnis Venture Competition is the culmination of the entrepreneurship training we provide students at Carnegie Mellon,” said Dave Mawhinney, executive director of the Swartz Center for Entrepreneurship, in a press release. “The McGinnis Venture Competition is an opportunity to bring it all together and showcase their company’s potential to real-world investors.”

From the competition, RoBotany earned a \$25,000 investment for getting first place in the graduate student section. RoBotany was founded by business administration master’s students Austin Webb and Daniel Seim. Their company makes robotic indoor vertical farming using automated robotics and software analytics to

impact modern agriculture.

“RoBotany has been very fortunate to have the opportunity to plug into Carnegie Mellon and the Tepper School’s entrepreneurial ecosystem,” Webb said. “I have been able to marry my education at the Tepper School with the growth and progress of RoBotany, allowing for immediate application of my learning in an experiential learning setting.”

The company Inventory Connection, which was founded by senior electrical and computer engineering and engineering and public policy major Kerolos Mikaeil, won the undergraduate competition. Inventory Connection gives sales representatives real-time inventory and point sale data as a way to stock shelves better. They received \$4,000 from the competition.

Compiled by
ROSE PAGANO

STUDENT GOVERNMENT COLUMN



DOMINIQUE ESCANDON
Special to The Tartan

Editor’s Note: Dominique Escandon is the Cabinet Writer of The Student Government.

Congratulations to our new executive board! Neal Choudary and Pulkita Dua will serve as Carnegie Mellon’s Student Body President and Vice President, respectively, for the 2017–2018 school year (if you’d like to learn more about what’s possible in these positions, check any past Student Government columns). Gaby Cach Lool is our new Vice President of Finance, responsible for allocating \$1.5 million dollars in organization funding, and Hannah Nourie is Vice President of Student Organizations, in charge of the managing over 350 student organizations and recognizing new student organizations on campus. Best of luck, I’m sure it’s going to be a great year!

The Undergraduate Student Senate, as has been explained to me by Ryan LaPré, has chosen not to ratify the Senate elections results and will be holding a re-election. This is due to their belief that the “No Confidence” option was insufficiently explained to voters on the ballot. This means that we will be hosting another online election, beginning next Friday, April 14 at 10 a.m., and ending the following Tuesday, April 18 at 10 a.m., with all the same candidates who were on the first ballot. Elections Board is currently working with Senate and the executive board on drafting new language to explain the “No Confidence” option on the ballot.

After counting up the votes for the Senate elections, there were still many vacant seats left. The effect of “No Confidence” being inefficiently explained might be the reason for this, since “No Confidence” got a higher vote count than some of the candidates, effectively eliminating those candidates. By the Student Senate Bylaws, a vote of no confidence is a vote against all candidates who are in the running for the relevant vacant seat. However, not all students use the No Confidence vote in this way, leading to confusion on the actual desires of the student body. Other possible reasons are a low actual confidence in candidates for Senate or low voter turnout (skewing the weight of no confidence votes).

It may seem silly to some that a re-election is happening. My belief is that fair elections are enabled when voters have a full understanding of their voting options and what they mean. Senate’s commitment to fair elections through fair language indicates their passion for proper and informed representation, which is the true intention of Student Government. If seats remain empty after the second voting session, vacancy elections can still be held to fill these seats.

My hope is that in this next election, any confusion with the voting options is alleviated by the new language explaining the “No Confidence” vote, and that we see a great voter turnout. Between now and Friday, April 14, reach out to a former Senator of your college and learn more about our Student Senate and their role in it! If you have any further questions on this new election, contacting the Elections Board is a great place to start!

Compiled by
VALENE MEZMIN

Campus Crime & Incident Reports

Criminal Trespass/ Suspicious Male

March 31, 2017

University Police responded to the Alpha Epsilon Pi Fraternity after receiving a report of a suspicious male who was inside the building with a knife. The male left the fraternity prior to the officers’ arrival. Officers searched the surrounding area but were unable to locate the male. An investigation is ongoing.

Criminal Mischief/Theft

March 31, 2017

A vending machine in Donner House was

reportedly damaged. An AVI Foodsystems, Inc. employee stated that an unknown person removed the glass from the vending machine and unlawfully took several items from inside. An investigation is ongoing.

Carrying a False Identification Card

April 1, 2017

A Carnegie Mellon staff member turned over a found wallet containing a fake identification card to University Police. The owner of the wallet, a Carnegie Mellon student, was issued a citation for possession of a false identification card.

Assist Outside Agency/ Disorderly Conduct

April 2, 2017

University Police assisted Pittsburgh Bureau of Police officers on Forbes Avenue regarding two Carnegie Mellon students who were found in possession of stolen street signs. The students were issued citations for disorderly conduct by the Pittsburgh Bureau of Police.

Alcohol Amnesty

April 2, 2017

University Police responded to the Stever House

after receiving a report of an intoxicated student. The Carnegie Mellon student was provided with medical attention. All criteria of Alcohol Amnesty were met, and no citations were issued.

Theft of Backpack

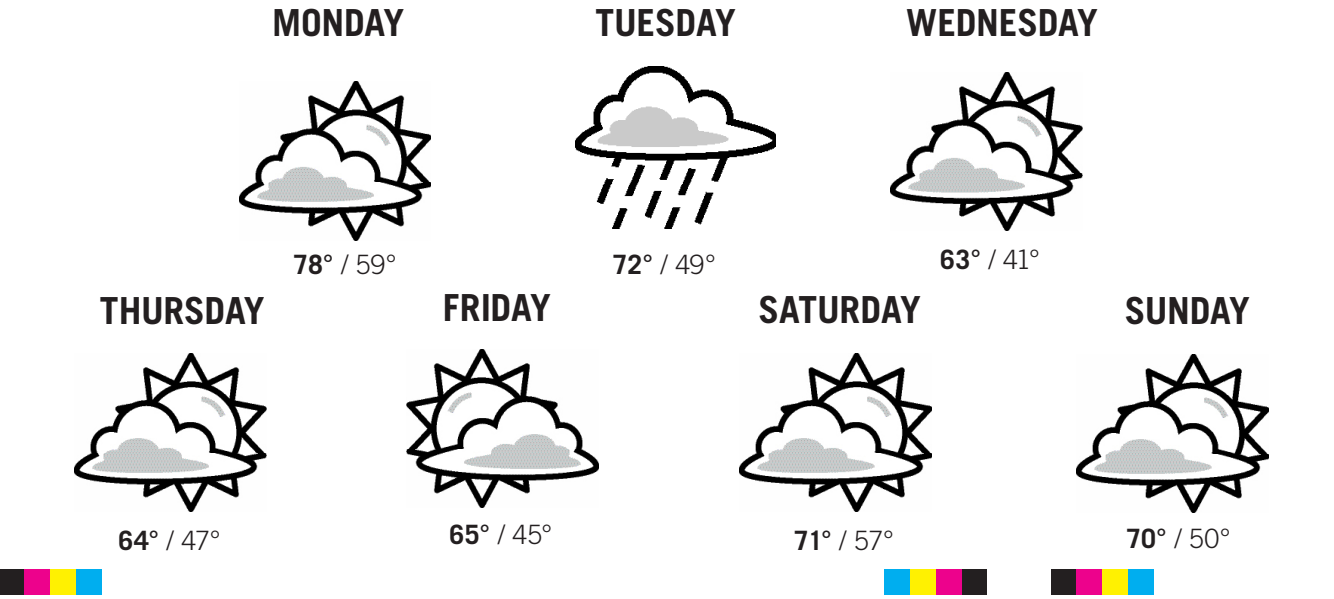
April 5, 2017

A Carnegie Mellon student reported that her backpack was unlawfully removed from the Resnik Café. An investigation is ongoing.

Compiled by
VALENE MEZMIN

WEATHER

Source: www.weather.com



Corrections & Clarifications

If you would like to submit a correction or clarification, please email The Tartan at news@thetartan.org or editor@thetartan.org with your inquiry, as well as the date of the issue and the name of the article. We will print the correction or clarification in the next print issue and publish it online.

No Confidence confusion warrants second CMU Senate election

SARAH GUTEKUNST
Contributing Editor

At Wednesday’s ratification meeting following this year’s student government elections, Student Senate voted 9–10–2 not to ratify the results of the Senate elections, upholding that the Elections Board did not communicate with Student Senate during the elections process, as they are constitutionally required. The results for the Student Government Executive positions were ratified.

According to the Student Body Election Rules, “If the number of ‘no confidence’ votes exceeds a simple majority of votes cast for a position, then there shall be a vacancy in that position.” As a result of the rule in this election, “no confidence” received enough votes to oust several candidates.

Most notably, the Dietrich College of Humanities and Social Sciences was left with

only four of its nine seats filled, despite there being nine candidates who ran. The College of Engineering only filled five of 12 seats, despite there being nine candidates who ran.

Some voters are concerned that this result can be attributed to a mishandled transition to a single transferable vote system (STV).

“STV allows voters to rank their preferred candidates and have their votes transfer as candidates are eliminated or elected. This leads to approximately proportional representation and avoids the spoiler effect of splitting votes between similar candidates,” explained junior electrical and computer engineering major Devin Gund, who serves as Chair of the Senate Committee on Business Affairs as well as Senate’s representative to the Elections Board. He was largely responsible for implementing the change to STV.

“I can say with full certainty that the single transferable

vote system was not the cause of this outcome,” Gund maintained. “STV resulted in fairer elections than the previous first-past-the-post system. For example, the ability for voters to rank their preferred candidates meant that the election for Vice President of Finance ended with a winner preferred by a majority of the student body to any other single candidate, which would not have occurred in the previous system.”

The issue with the voting, however, seems to have been more to do with the language used on the ballot than the STV system itself. The ballot instructions may have misled voters about the significance of voting “no confidence” as opposed to leaving the remainder of the ballot blank.

Gund reported that the language on the ballot was approved by the Student Government Executive Committee, consisting of the Student Body President, Vice



Courtesy of voting on Flickr Wikimedia Commons

President, Vice President for Finance, Vice President of Organizations, Senate Chair, and the Graduate Student Assembly President. It was not approved by the Student Senate.

The Student Body Election Rules state that, in the event of a failed ratification, there should be another election within 10 days. Polls will reopen at 10 a.m. this Friday, April 14, until 10 a.m.

Tuesday, April 18. Online voting will be at cmu.edu/studentvote, and physical polling locations will be open 2–4 p.m. on Friday and 4–6 p.m. next Monday outside of the Cohon Center.

Task Force on the CMU Experience moves forward with projects

UPLIFT CHALLENGE, *from A1*

According to the challenge’s website, proposals can seek to create brand new indoor greenspaces, can plan to renovate gathering spaces or shared “nooks,” or can be as simple as creating more comfortable benches. “We are looking for any kind of renovation or re-imagining of campus places that can be executed for up to \$20,000,” Byrne said.

“In addition to UPLift, our group is really excited about

the renovation of several ‘nooks’ on campus,” Marsha Lovett, co-chair of the Campus Infrastructure working group of the Task Force on the CMU Experience, said. The “Nooks” Project is an effort to renovate shared, small public spaces where students gather together to learn and collaborate. Its goal is to keep the community connected and engaged while we learn, grow, and discover together. “Just by adding seating, lighting, white boards and outlets, we can

transform an empty corner into a learning environment for students,” Lovett said. This summer, the first two “nooks” to be upgraded will be in the fifth floor of Wean Hall and the College of Fine Arts basement.

In addition to the “Nooks” Project, The UPLift challenge is yet another way the Task Force has embraced the idea that “small, creative place-making projects can make a big difference,” Jahanian said in his email.

When asked about how he hopes the UPLift challenge will benefit the Carnegie Mellon community, Byrne stated that he hopes it will remind us that “our campus environment is not just a backdrop, but a shared playground, workspace and home that can meaningfully influence our community and culture” while also fitting into the Task Force’s ultimate goal of reinforcing health and wellness, school pride, and the open exchange of ideas as core community values.

Kristen Kurland, co-chair of the Campus Infrastructure working group of the Task Force on the CMU Experience adds that “more than anything else, this is an exciting conversation starter. Even if an idea isn’t executed, hearing directly from our community about what they feel is missing from campus will help to reveal possible problems and suggest solutions.”

The Task Force for the CMU Experience will continue to move forward

with other infrastructure projects such as building the Tepper Quadrangle and creating a new health and wellness center. They are also currently working on projects to renovate classrooms, reform academic policies, and expand mental health care.

Applications for ideas may be submitted by April 28 at <http://www.cmu.edu/leadership/the-provost/cmu-experience-taskforce/application-form.html>.

picoCTF competition promotes computer security awareness



Courtesy of Carnegie Mellon University
David Brumley, the project leader of picoCTF, director of Cylab, and an engineering professor at Carnegie Mellon.

EVANGELINE LIU
Staffwriter

For the third time, students all over the nation have the chance to participate in and compete for prizes at the annual picoCTF competition hosted by Cylab, the security and privacy institute at Carnegie Mellon. The online competition is open to people everywhere, but only middle and high school students in the U.S. are eligible for cash prizes, which totaled over \$30,000 this year thanks to corporate sponsors of the event.

CTF stands for capture the flag, and this virtual game has previously drawn almost 30,000 participants. The major theme of picoCTF is computer security. Participants must solve a series of challenges surrounding a story line over a period of two weeks as the challenges get harder the further one goes in the competition. In essence, the competition, according to a university press release, teaches students “the basics of hacking.”

The challenges involve various computer-security

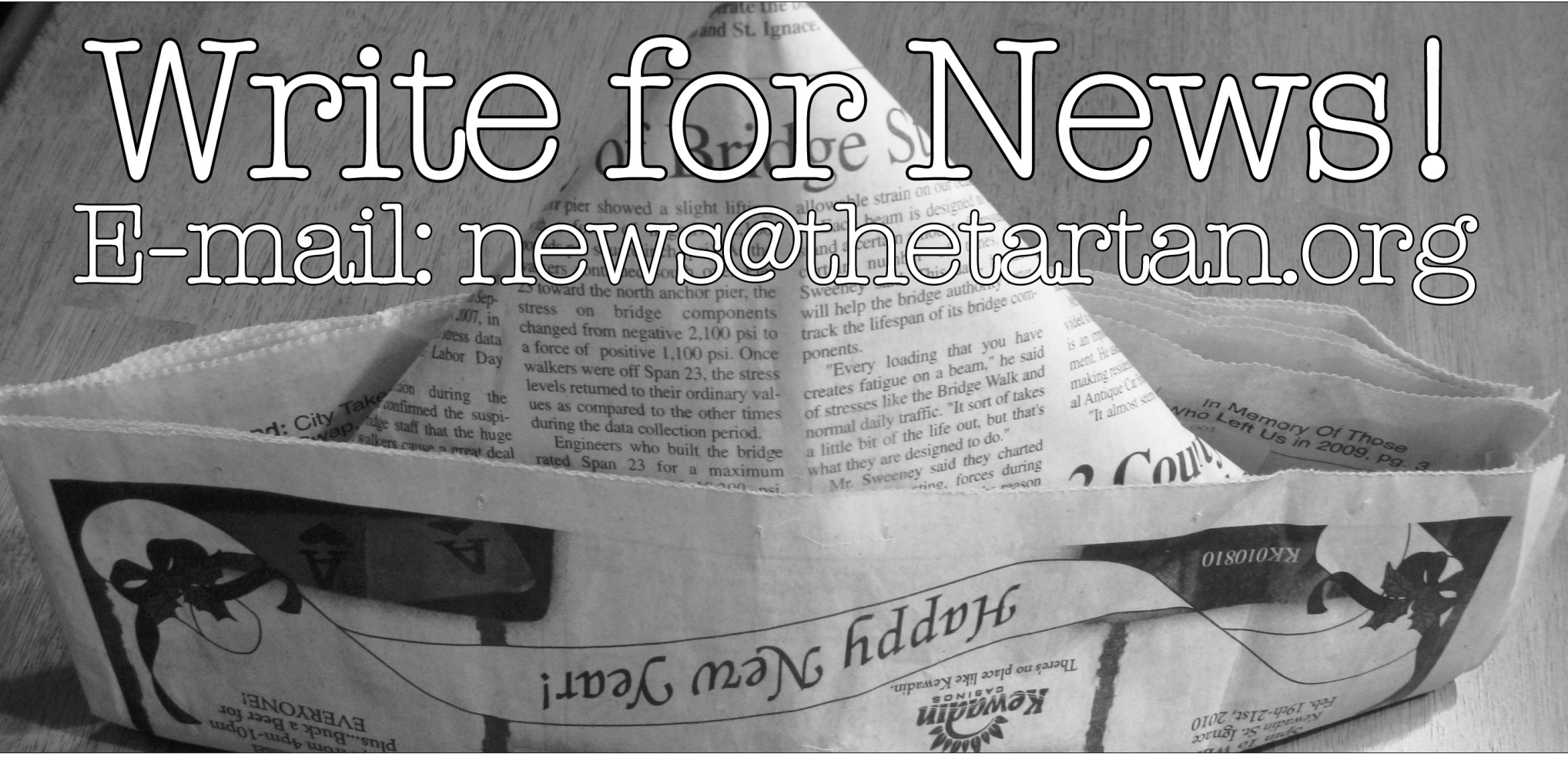
related skills, such as reverse-engineering, hacking, or decrypting.

Even though the competition has already started, it is not too late to register, as registration is open until the end of the event on April 14.

The goal of the competition is not only to have fun, but also to promote awareness of computer security as a potential career field. Currently, there is a shortage of computer security experts, and one of picoCTF’s main goals is to make up for this shortfall, according to David Brumley, the electrical and computer engineering professor who also serves as the project leader of picoCTF and the director of Cylab. “The root of the problem is that most people don’t even know that computer security is a field they can go into. Building awareness is a major goal of picoCTF,” says Brumley in the press release. According to Brumley, the competition helps build the critical thinking skills necessary for thinking and performing at a high level in challenges relating to computer security.

Carnegie Mellon has open-sourced the competition’s code so that other schools can create their own CTF competitions which can introduce more students to the field of computer security. Many high schools have already done so, creating Phillips Academy CTF and Thomas Jefferson CTF, among other examples.

There have already been examples of successes in terms of getting students interested in the field of computer security. One of these success stories is Tim Becker, an undergraduate studying computer security at Carnegie Mellon and captain of the school’s student hacking team, the Plaid Parliament of Pwning (PPP). PPP has won DefCon’s CTF competition — often known as “the Super Bowl of hacking” — three times in the past four years. Becker got into this field because he competed in picoCTF in 2013 as a high school student and unexpectedly finished in third place, better than anyone on his team would have thought possible. “That’s how I ended up getting into this field,” says Becker in the press release.



Forum

FROM THE EDITORIAL BOARD

Trump’s Syrian decision needed further deliberation

On Thursday, April 9, President Donald Trump ordered the launch of 59 Tomahawk missiles, which struck Al Shayrat airfield in Syria and resulted in the deaths of 15 people and further uncertain global consequences.

According to Trump, the decision to launch the missiles was a direct response to the brutal chemical attack that killed dozens of people — many of them children — in the Idlib province in northwestern Syria on April 4. He said it was “vital [to] national security” that the United States “prevent and deter the spread and use of deadly chemical weapons,” mentioning despair over the infants who were harmed and an overall desire to “end the slaughter and bloodshed” as an explanation for his actions — sympathies that many Americans share and want our country to act on.

But Trump, who was resolutely against taking action against Syria until this decision, acted quickly and without the approval of Congress — for all we know, he acted without any concrete plans for his next move at all. Furthermore, he may have inspired the disapproval, or downright anger, of many other countries thanks to his impulsive choice. Russia has condemned the strike as a “disgraceful attack,” and Germany and France have refused to endorse the attack.

Tuesday’s chemical attack, which reportedly originated at the airfield, was carried out early in the morning when many were still sleeping. Eyewitnesses at the scene reported waking to the sound of an explosion, only to go outside and find people in the street choking and unable to move, with constricted pupils. Other symptoms included vomiting, fainting, and foaming at the mouth. Later in the day, rockets were fired at the hospitals and clinics treating the survivors of the first attack, burying doctors and patients in rubble.

The death toll of the attacks varies by account, but most likely falls somewhere between 50 and 100 — and the number injured throughout the day is thought to be much greater. Both the Syrian government and the Russian government are denying their involvement in the attacks, but the United States maintains that Syria was behind the attack and Russia was “complicit.”

Trump’s decision to attack the airfield may be an important first step in the effort to put an end to the excessive violence against the Syrian people, but it’s too soon to say. At this point, we have no way of knowing that his actions won’t also have harmful consequences of their own. Based on his record and what we know about the attack, there is reason to doubt whether he even considered such an impact before moving forward with the attack.

Concerning to many is the fact that Congress was not involved in the decision to launch the missiles. Trump ordered the attack after only two days of deliberations with his own security advisors — and some meetings actually took place, not in the White House, but at his Mar-a-Lago estate in Florida.

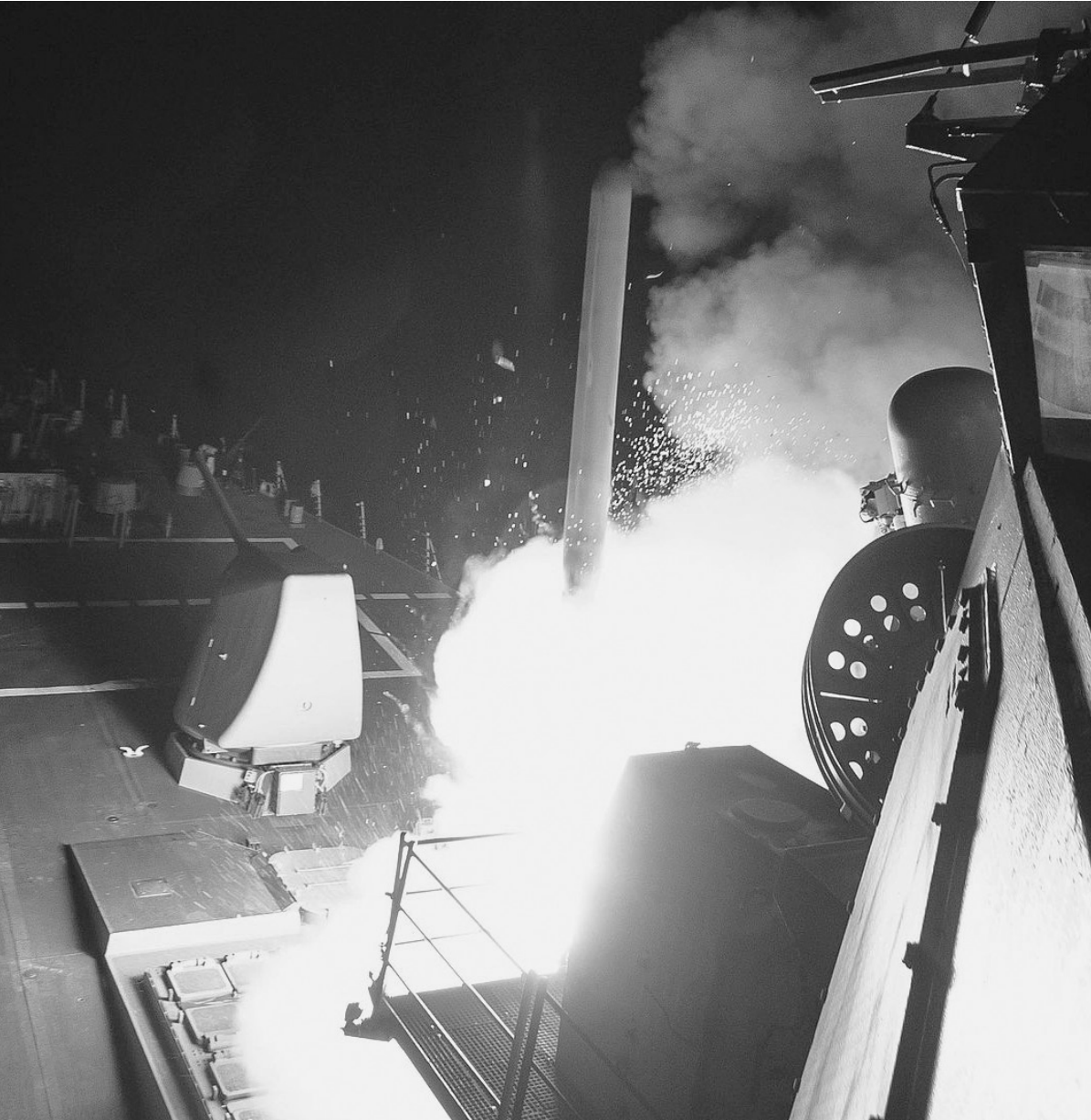
Whether the strike was legal in the United States or not is the subject of debate in the media — murky precedents regarding national interests, the War Powers Resolution, and the actions of former presidents have been used to frame the decision as a misuse of presidential powers or a justified humanitarian intervention that will also protect American interests in the end. Either way, involving more people in the decision would have been a guarantee that the possible consequences of the strike had been more thoroughly considered and accounted for in plans for the future.

Such repercussions, if they come, would develop from the

international response to the strike. Already, countries have been responding to Trump’s decision, and some of their reactions haven’t been very supportive. Russia, Iran, and China strongly oppose the strike, condemning the United States’ decision and even suggesting that Trump violated international policies by acting against Syria.

More complications could ensue if it turns out that Trump did break international law. According to the United Nations Charter, which the United States has ratified, the only valid reasons for using force on another country’s soil are for self defense, or with the permission of the United Nations Security Council. Trump’s reason for attack — preventing Syria from further use of chemical weapons — was not self defense. The Council, like Congress, was not a part of Trump’s decision. One can argue many reasons why the attacks were necessary, and many reasons why they weren’t. What remains, however, is that the decision should have been more carefully deliberated.

Can we applaud the choices of a man who acts with no serious thought for those he leads or what impact his impulses may have on a global scale? Can we condemn an action that might have been an important stand against the slaughter of innocent men, women, and children in a country that has suffered for far too long? With an issue as nuanced and volatile as this one, perhaps the best way forward is one that involves many careful minds working together and carefully weighing every option. Trump needs to be sure he comprehends the serious impact his actions could have as he considers his next move. The lives of those suffering in Syria are of utmost importance, but so is the safety of Americans and other people across the globe.



Courtesy of Petty Officer 3rd Class Robert Price on Wikimedia Commons

One of 59 Tomahawk missiles is launched after President Donald Trump gave the order to attack Al Shayrat airfield in Syria on April 6. The missile launch followed a devastating chemical attack against the Syrian people, but was not carefully deliberated.

Democrats must back even risky candidates



Editor’s note: *Post-Mortem* is a weekly column that seeks to explain the outcome of the 2016 presidential election. Find previous installments @ thetartan.org

While the 2016 elections might be (mercifully) over, there are still a few lingering special federal elections to take care of before we can finally wash our hands of the painful, messy practice of democracy. Five congressional seats are up for grabs in special elections over the next few months. Four of the five seats were vacated by Republicans appointed to positions in the Trump administration. Two of those seats, as well as a fifth seat vacated by former Rep. Xavier Becerra who became California’s Attorney General, are in uncompetitive districts. But the other two represent potential pick-up opportunities for Democrats looking to convert President Trump’s unpopularity into new seats in Congress. Unfortunately, Democrats are displaying some of the same short-sighted thinking that cost them big in 2016 and in other elections up and down the ballot since 2010.

The special election that has gotten most of the attention is in the sixth congressional district of Georgia, which represents parts of the northern suburbs of Atlanta. This seat was vacated by Tom Price,

nor of Montana in 2016.

Everyone, from the media to Democratic activists, figures, and organizations, has focused their attention on the Georgia election. And this is understandable. For Democrats to have a chance at winning back the House of Representatives in 2018, they will need to win in districts like GA-6; suburban districts that lean Republican but have wealthy, well-educated, and generally socially liberal voters. And the anti-Trump sentiment is strong there. Trump beat Hillary Clinton by just 1.5 points, whereas Romney beat Obama in the same district by twenty-three points in 2012.

However, Democrats have been far too reluctant to spend any time, resources, or money in the Montana election. This is a huge mistake and one that is motivated by intraparty politics more than sensible strategy. According to a report by KTVH, a Montana news station, no major Democratic group or party campaign apparatus has shown any interest in Quist’s election. Even the Democratic Congressional Campaign Committee (DCCC), which is charged with helping staff and financing Democratic House campaigns, hasn’t spent a dime on outside expenditures supporting Quist or direct contributions to his campaign committee. They don’t even mention the race on their website. By comparison, the DCCC has supported Ossoff’s campaign by sending nine staffers, funding qualitative research, and contributing thousands of dollars.

With only two competitive races to focus on, it is hard to believe that the DCCC and other Democratic Party groups are ignoring Quist merely to prioritize allocation of their limited resources. After all, the DCCC has no trouble dispensing hundreds of staff members and millions of dollars to support dozens of competitive congressional races during regular election years. Rather, it seems like they are giving Quist

Democrats have been far too reluctant to spend any time, resources, or money in the Montana election. This is a huge mistake and one that is motivated by intraparty politics more than sensible strategy.

who became Trump’s Secretary of Health and Human Services. The Democratic candidate is Jon Ossoff, a thirty-year-old documentary filmmaker and former congressional staffer for Civil Rights icon John Lewis. There are several Republican candidates, most notably former Georgia Secretary of State Karen Handel and businessman Bob Gray. If no candidate wins an outright majority in the April 18 special election, then the winner will be decided in a run-off election a few weeks later between the top two finishers.

The other competitive election is for Montana’s at-large Congressional District. This seat was vacated by Ryan Zinke, who became Trump’s Secretary of the Interior. The Democratic Candidate is Bernie-backing populist Rob Quist, a popular Montana folk-singer with no political experience but a history of public service in Montana. The Republican candidate is Greg Gianforte, a businessman who was the Republican candidate for gover-

the cold shoulder, repelled by his independent persona and insurgent political style. Quist is a political outsider, a populist who supported Bernie Sanders in the Democratic primary election and backs progressive ideas like a single payer healthcare system. He’s also willing to buck the party when it comes to issues like gun control, holding a much more pro-gun stance than the party’s. Tepid support from the national Democratic Party for progressives and party outsiders is nothing new, and it seems clear that they have little interest in supporting such a candidate this time around.

The Democratic Party has made this mistake time and again, and it has cost them big. For example, in 2016, the Democratic Senatorial Campaign Committee shot itself in the foot in the key Pennsylvania Senate race by spending nearly \$2 million on Katie McGinty during the primary campaign against Admiral

See **QUIST, A5**

Editorial Board

JADE CROCKEM*
Publisher

INDIA PRICE*
Editor-in-Chief

SARAH BENDER
Forum Editor

YIYUAN CHEN*
Operations Manager

VALENE MEZMIN
News Editor

JOSH ANDAH
Sci/Tech Editor

SYDNEY ROSLIN
Staffwriter

Staff

COPY
Yiyuan Chen, Jade Crockem, Aisha Han, Stephanie Kuang, Charles Li, Zeke Rosenberg, Marika Young

ADVERTISING
Benjamin Stern, Andy Gao

BUSINESS
Lindsey Shi

Editorial Staff

SINEAD FOLEY
Pillbox Editor

APEKSHA ATAL
Pillbox Editor

IZZY SIO
Assistant Pillbox Editor

JULIE SANSCLARTIER
Comics Editor

IAN TANAYA
Sports Editor

MARIKA YANG
Assistant Sports Editor

COREY EMERY
Advertising Manager

SOPHIA CHENG
Business Manager

GEAR JIANTHANAKANON
Systems Manager

RUTH SCHERR
Copy Manager

THEODORE TEICHMAN
Visual Editor

AISHA HAN*
Visual Editor

SIMIN LI
Art Editor

ZICHEN LIU
Photo Editor

PAULINE TING
Online Editor

ABHISHEK TAYAL*
Layout Manager

SARAH GUTEKUNST
Contributing Editor

ZEKE ROSENBERG
Contributing Editor

* Denotes executive committee member

© 2012 The Tartan, all rights reserved.
Library of Congress ISSN: 0890-3107



The Tartan is a student newspaper at Carnegie Mellon University, funded in part by the student activities fee. It is a weekly publication by students during the fall and spring semesters, printed by Trib Total Media. The Tartan is not an official publication of Carnegie Mellon University.

The Editorials appearing at the beginning of the opinion section are the official opinion of The Tartan Editorial Board. Columns, Editorial Cartoons, and Reviews are the opinions of their individual creators. The Tartan Editorial Staff reserves the right to withhold from publication any copy it deems unfit.

Letters to the Editor Letters must be submitted by 5 p.m. on the Wednesday before publication by mail or to forum@thetartan.org. Letters from within the university community take precedence. Letters intended for publication must be signed and include the author’s address. Letters will be edited for grammar, punctuation, spelling, and Tartan and AP style. The Tartan reserves the right to edit for length and ethical reasons, including such matters as defamation, plagiarism, inaccuracies, profanity and slurs. Author’s names may be withheld at the Editor-in-Chief’s discretion upon request. The Tartan reserves the right to reject any letter.

Office: University Center 314
Web: www.thetartan.org
E-mail: contact@thetartan.org

Mail:
The Tartan
Box 119, UC Suite 103
5000 Forbes Avenue
Pittsburgh, PA 15213

Justice system neglects prisoners’ agency, futures



CHIE WACH

Somehow, the U.S. has become an overeager sentry, a guard of the thousands of human-filled cartons littering the nation. These prisons contain the country’s convicts, the two million unforgiven offenders conveniently estranged from society in these effective human warehouses.

But are our prisons truly effective? We often forget that the vast majority of these “unfortunates” will someday rejoin us, changed by the months, years, or decades spent forgotten in a box. And, unfortunately, they are usually changed for the worse. The justice system has become an efficient factory of criminals, churning out convicts more hardened and knowledgeable than when they entered.

Prison conditions have deteriorated into appallingly unsafe environments. Inmates learn to distrust everyone, especially the guards, these forgotten sentinels who are often no less in need of correction than those whom they watch. If we imprison a person and treat them as hostile and untrustworthy, regardless of the atrocities they’ve committed, how can we expect them to behave as anything else?

We, the supposed leaders of the free world, are in possession of a “correctional” system that fails to correct. It is our responsibility to invest in erasing this stain on the American justice system. Rather than continuing to dehumanize these millions whom we’ve imprisoned, we must teach them to be productive members of our society again.

The first step of transformation is to ensure that the prisoners, while still punished for their crimes, are treated as human beings. This begins with eliminating corruption among the supervisors and guards of each prison.

One way this may be accomplished is by increasing federal oversight of these systems. More vigorous employment qualifications, and re-evaluating the hiring and promotion process

for correctional officers would also help ensure their fair treatment.

Next, while reform programs for inmates do exist, they are not built into the justice system. Mandated access to resources such as literature, science, and philosophy is essential to development. Shaka Senghor, a second-degree murderer, served 19 years in various prisons, seven of which were in solitary confinement. He is now a college lecturer, author, and director’s fellow of the Massachusetts Institute of Technology Media Lab, and attributes his reformation to literature where he was able to “free [his] mind and expand [his] thinking.”

Those who criticize the financial cost of such programs should consider the astounding size of our prison system. We currently imprison 2.3 million people across the country — to the point where the U.S. has more jails than colleges. California,

New York, New Jersey, and Rhode Island are the few states who have approached reform determinedly in their prison systems, and have thus succeeded in reducing their prison populations by more than 20 percent since 2009. These states are proof that lighter sentences are possible without compromising public safety.

This can be achieved through realistic alternatives to the aggressive sentences that are common now. A report by the Brennan Center for Justice at New York University School of Law suggested expanding on alternatives such as drug treatment programs, community service for the 25 percent of prisoners convicted only of nonviolent, low-level crimes, and the termination of mandatory minimum sentences.

These ambitions are more possible than many realize. As Bill Keller observed in an article published in *The New York Times* the current cli-

mate in Congress is actually very amenable to the prospect of reform, for several reasons, one of which is that Republicans are seeking a bipartisan victory to reassure the people that the government is competent and reliable.

With each convicted offender, our justice system takes upon itself the responsibility of their life for the next two or twelve or twenty years. It removes that person’s agency over their own life and authorizes itself to control every aspect. Unfortunately, for decades, we have neglected this responsibility, sentencing millions to abusive environments with minimal prospect of a viable future. With support for prison reform now growing greater in this country, it is time accept this responsibility and transform our system into one of reform.

Chie Wach (@cwach) is a staff-writer for The Tartan.



Quist must gain focus

QUIST from A4

Joe Sestak. It was clear that they were motivated at least in part by a grudge that they have held against Sestak since he challenged and defeated former Senator Arlen Specter in the 2010 Democratic Senate primary. Sestak eventually lost to Pat Toomey. But that \$2 million would have likely secured victory for McGinty or Sestak during the general election. Is it possible that Democrats are making the same mistake yet again with Quist?

“But wait,” you might say, “isn’t Montana a super-Republican state? Might the Democrats not be supporting Quist simply because he doesn’t stand a chance?” Yes, Montana is a very Republican state, but it is wrong to assume that a Democrat can’t win this special election, especially one like Quist. In fact, Democrats have won fifty-five percent of statewide elections in Montana over the past twenty-five years, including the governor’s race in 2016 and a senate race in 2012. Montana voters split their tickets to vote for candidates from both parties more than voters in any other state. Meanwhile, Quist is exactly the type of Democrat who can win in Montana: an authentic and charismatic presence, a well-known and well-liked Montana figure, whose personality resonates with Montana’s rugged and folksy culture. Plus, Montana voters already demonstrated that they are willing to elect a Democrat over Gianforte, who lost to Democratic Governor Steve Bullock by four points in 2016. The only public poll conducted in the race so far shows Quist crushing Gianforte by seven points, a much stronger showing than any poll shows for Ossoff in his election.

By ignoring Quist, Democrats are throwing away a winnable race. They’re also squandering a valuable chance to build up momentum and campaign infrastructure in Montana, which they will need to defend Senator John Tester’s crucial and extremely vulnerable Senate seat in 2018. Additionally, they’re missing an opportunity to try out an unconventional candidate and campaign message that might help them compete in other rural districts in the future. Perhaps most importantly, they are once again alienating progressives within the party, opting to silence their base even though it may cost them a congressional seat. Democrats are ignoring Quist for all the wrong reasons, and it’s a strategic failure that the party should correct immediately.

Emmett Eldred (@eeldred) is a staffwriter for The Tartan.
Icon by Qinyi Dong.

Generalizing that all white people are racist is reductive, harmful



BRANDON SCHMUCK

Editor’s note: Outcry on Overheard is a weekly column that analyzes conversations found on the Facebook group Overheard at Carnegie Mellon. Find previous installments @ thetartan.org

A few weeks ago, I took a stand on reverse racism in dating preferences and the criticism that a number of people receive when expressing alternative opinions on most college campuses. In response, my article was cited in not one but two articles in The Tartan. I am happy to open up a debate and value the opinions shared, and there were a number of topics that I think are worth addressing in this week’s Outcry on Overheard.

In her article, “Racial dating preferences are racist, reduce entire groups to race,” Ruth Scherr described my original article in a way that made it sound like bigotry brewed from a “privileged” white man who grew up in Trump country. She refers to my beliefs as my “personal bigotry” and even states, “Wanting respect for the idea that racial preferences aren’t racist is like wanting respect for the belief that the earth is flat.” The fact that Scherr brings flat Earthers like Dr. Shaquille O’Neal, who stated last month, “So, listen, I drive from coast to coast, and this s*** is flat to me,” into this argument is offensive.

This is closed-minded dialog that will spell the end of America if we allow it to persist. Don’t get me wrong, I don’t condone racism. I will do all that I can to fight it when a true act of racism occurs. I am not convinced that racial dating preferences are a true act of racism, and I am not convinced that calling someone a bigot for having them brings forth a productive argument.

If marginalizing races in dating preferences is racism, is marginalizing sexes in dating preferences sexism? Does the fact that I’m only attracted to women make me sexist against men? Does the fact that a homosexual is only attracted to their own sex make them sexist towards the opposite sex? No, this would be an absurd statement to make and goes against the laws of nature. We can’t control our sexual preferences. People are attracted to various traits,

as I stated in my previous article, and this attraction is rooted in a subconscious level.

In “White people must acknowledge inherent racism, privilege,” Lydia Green states that, “A white person with a ‘thing for Asian chicks’ may ostensibly be attracted to Asian women because of their physical characteristics, but the why of it doesn’t change the fact that this type of fetishism adds to the oppression of Asian women.” What Green fails to state is the fact that racial dating preferences are a two-way street, and as I stated in my original article, it’s not just white people having them. If you are going to call out racial dating preferences, call out all races.

Green calls it our duty as white “racists” to “invite people of color into white spaces of authority with open arms.” She states, “We must appreciate everything that people of color do for us and for themselves” and “make them feel cared about.” In my opinion, differential treatment of people based on skin color is an impediment to ending racism. In order to end racism, we must create an environment where everyone is welcome and treated equally and fairly and skin color has no bearing on the way we treat others.

Anyone qualified should be welcome in “spaces of authority with open arms.” We should acknowledge that some people have it harder than others and do all that we can to fight racism, but calling out an entire race because society contains racial barriers is not the answer to solving

the problem. This simply marginalizes people further and, in my opinion, is just as racist as the barriers themselves.

In the process of destroying racism in the modern era, we must prevent ourselves from turning our world into an inauthentic safe space. Isolating yourself from the noise does not take it away. Scherr states, “whether or not this university is in a political bubble doesn’t matter.” If we refer to the 2016 election, we can see just how much it matters that this university is a political bubble. Walking through campus last fall, Clinton appeared to have the election by a long shot. On election night, we realized just how much of a bubble we created around ourselves when the nation selected the man that we were too busy meme-ing and insulting to draw attention towards.

Regardless of whether or not you support him, Trump’s victory brings to the forefront many of the issues currently facing this nation. People are sick of being censored by political correctness. They are tired of being afraid of insulting someone with every statement they make, and they chose to express this by electing the man who was the flaming dumpster during election season. While I acknowledge that racism is a reality, and I oppose the statements made by Trump, why are we wasting our energy calling out things that aren’t racist until we tire the nation out of being politically correct?

I find it ironic that the people who decry racism the loudest often create

some of the most racist messages. Are all white people really privileged? I’ll acknowledge that based on my background, I have some privilege that others do not. I personally believe that everyone in this university has.

However, to say that a poor, white teenager overdosing on heroin in a dying coal town is more privileged than a minority at a top tier university with a bright road ahead is just utterly ridiculous. In my opinion, your background — which is often tied to race but does not always have a one-to-one correspondence — defines your privilege more than skin color.

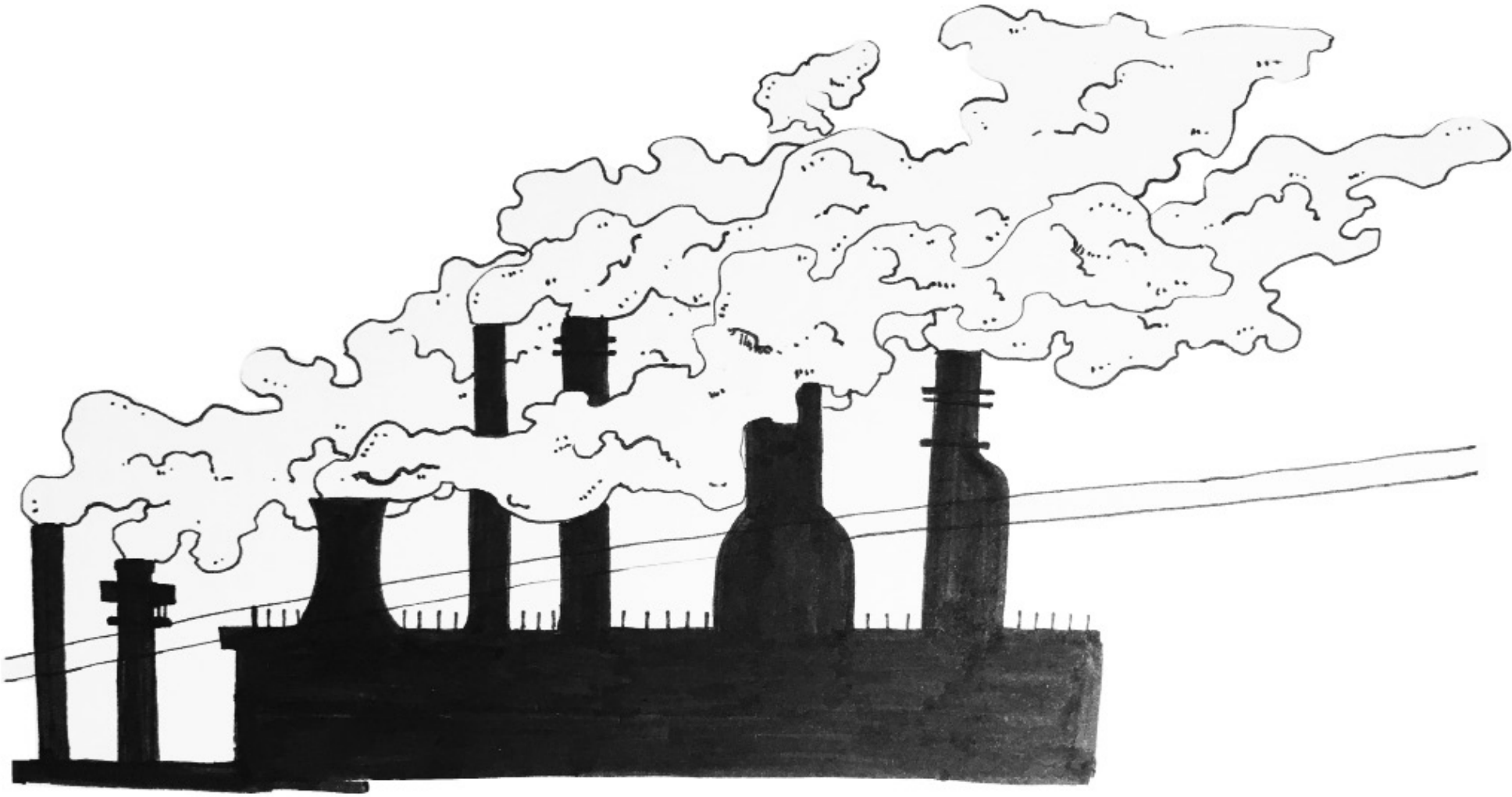
We must create a world devoid of racism, but crying wolf is not the solution. Generalizing an entire race as racist or denouncing sexual preferences as racist are counterproductive to the cause of destroying racism and only throw gasoline on the fire. As members of the Carnegie Mellon community, we all carry a certain amount of privilege. We all have a duty to end racism, to call out any case of it which we see clearly happening, and to ensure that skin color does not limit opportunities.

However, racism is a two-way highway. We can’t simply make assumptions about people based on their skin color (majority or minority), and we need to stop acting like we know what people have been through just because of their appearance.

Brandon Schmuck (@bschmuck) is a staffwriter for The Tartan.
Icon by Qinyi Dong.

Science & Technology

Carnegie Mellon develops new carbon dioxide emission index



EMMA FLICKINGER
Staffwriter

Carnegie Mellon has collaborated with Mitsubishi Hitachi Power Systems to design and create a new index to evaluate the carbon emission levels of US energy companies.

The Carnegie Mellon Power Sector Carbon Index was revealed March 28 during Carnegie Mellon’s Energy Week 2017. The release of the index was intended to contribute to this year’s Energy Week discussions, as its contents were of great interest to the hundreds of energy scientists and power industry leaders and innovators in attendance at Energy Week.

The index contains data on the carbon footprints of various electric companies in the United States. It compares the footprint data of each company to each other in addition to emissions data from past years. It also includes an online component, which includes supplemental data and projections for future emission and carbon footprint trends.

According to the university, “the index will provide poli-

cymakers, regulators, utilities, industry analysts, and the public with a source of objective information on overall emissions across the United States electric power grid.”

The data presented in the index is important information to have as the United States slowly heads toward building a future with more reliable and sustainable power sources — the index will help determine whether any progress is being made. And, aif progress is being made, the index will help determine how significant such progress is.

Paul Browning, a Mitsubishi executive and Carnegie Mellon graduate, states that “As the power sector continues to evolve, the Carnegie Mellon Power Sector Carbon Index will provide useful insights into progress the power sector is making to safeguard the environment while meeting the nation’s energy demand.”

The Carnegie Mellon Power Sector Carbon Index can be viewed at emissionsindex.org.

SCITECH BRIEFS

Genetic risk for second cancer in pediatric patients

Scientists now believe there is a genetic component to account for the higher risk of childhood cancer survivors getting a second cancer later in life. When researchers examined data from 3,007 childhood cancer survivors, they found that 11.5 percent of them carry genetic mutations in at least one of the 156 genes the researched look at.

On April 3, the researchers presented their findings at a meeting for the American Association of Cancer Research. Of the survivors they examined, a third had had childhood leukemia; by age 45, 20 percent had developed new tumors on the skin, breast, or thyroid. Some were due to effects of chemotherapy or radiation therapy. Of the 156 genes examined, there exists a subset of 60 genes in which a single mutation is highly likely to lead to cancer; 6 percent of the survivors had mutations in these 60 genes.

Genetic counseling is now advised if a second cancer develops for these patients. “This is a nice first step,” says David Malkin, a pediatric oncologist at the University of Toronto. “The results validate the thoughts of those of us who believe there is a genetic risk that increases the risk of second malignancies.”

Pesticides found in Iowa tap water

Pesticides have long been controversial. For the first time, traces of insecticide in the form of neonicotinoid chemicals have been discovered in tap water in Iowa, in a study published in the *Journal of Environmental Science & Technology Letters*.

Despite treatment, the level of chemicals was discovered to remain constant. With various types of filtration, it was discovered that 0.24 to 57.3 nanograms of individual neonicotinoids per liter remained. While it is currently unknown whether the chemicals will have harmful effects relating to human health, the uncertainty that goes along with chemical treatment is what makes this discovery a large setback for pesticide use.

Neonicotinoids were originally used as a seed coating for crops, harmful to insects but not other species. “Based on some of the literature that has been published, the nitro group has the potential to be removed in the filtration processes and that is the group that confers the selectivity to insects,” said lead author Kathryn Klarich from the University of Iowa.

Source: BBC

Atmosphere is detected around planet

An astronomy team at Keele University in England has recently discovered an atmosphere surrounding an Earth-like planet. The planet is called GJ 1132b, residing in the southern constellation Vela.

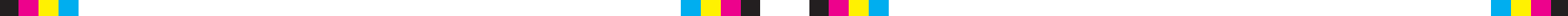
Dr. John Southworth, who led the team, said, “While this is not the detection of life on another planet, it’s an important step in the right direction: the detection of an atmosphere around the super-Earth GJ 1132b marks the first time that an atmosphere has been detected around an Earth-like planet other than Earth itself.”

The team consisted of researchers from Keele University, the Max Planck Institute for Astronomy (MPIA, Germany), and the University of Cambridge. To take images of the planet and its host star, GJ 1132, the team used a GROND imager telescope at the 2.2 m ESO/MPG in Chile. The researchers examined the planet at seven wavelengths, detecting decreases in brightness as the planet absorbed light from the host star. This discovery makes the planet a high priority for powerful telescopes like the Hubble Space Telescope to examine further.

Source: ScienceDaily



Courtesy of NASA via Wikimedia Commons
The sun rises over planet Earth and our protective atmosphere blocks dangerous sun rays to keep us safe.



HOW THINGS WORK

Use of foveal desriptors help improve facial recognition

JOSH ANDAH
SciTech Editor

Deva Ramanan, an associate professor of robotics at Carnegie Mellon, and Peiyun Hu, a Ph.D. robotics student, recently developed an improved method for detecting multiple faces in a crowd. The feat of distinguishing small objects is one challenge in computer vision, which is why Ramanan and Hu’s achievement is so crucial.

The method they developed uses “foveal descriptors.” Just as the human brain cause the eye to focus on an object and blur the peripheral vision, so does this method, which allows a computer to process specific pixels in search of facial features.

The team also developed specific detectors for different sized faces. For example, a detector was made to find faces a few pixels across, while another

other focused on faces with much higher resolution.

Improved computer vision has many benefits. Self-driving cars need exceptional vision to avoid accidents, and at high speeds the images they process may be slightly blurred. Agencies like the Federal Bureau of Investigation could use improved face detection to better identify suspects, even if the only images available are from a grainy closed-circuit television feed. Ramanan and Hu’s developments may offer a solution.

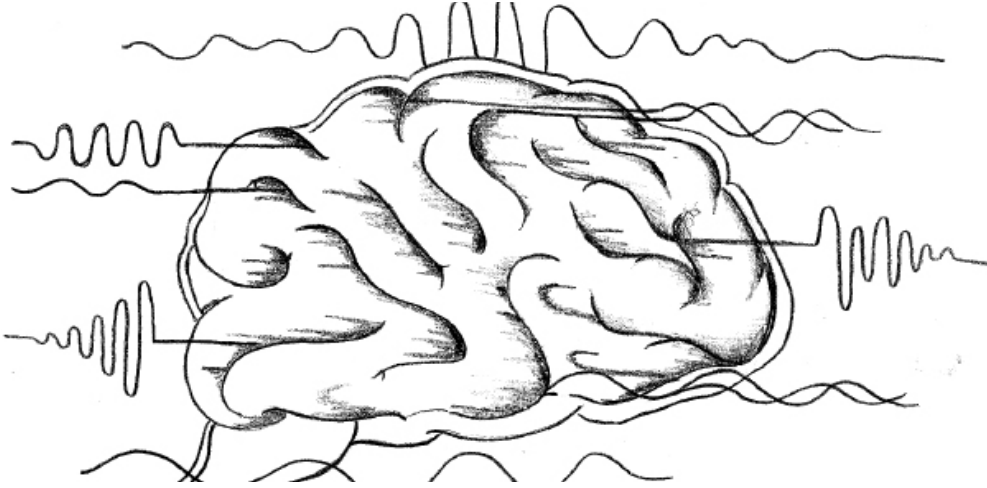
Computer vision is arguably one of the fastest growing fields in computer science. Today, phones like the Samsung S8 use facial and iris detection to restrict access. A use of face detection many of us are familiar with is in Snapchat filters, which find and distort faces. Another well known use is in tagging

on Facebook. Facebook runs a program that detects when a face in an image has not been tagged. It is also capable of pattern-matching like faces to generate tag suggestions.

The science behind face detection is even more fascinating. Analysis of millions of images has enabled computer scientists to determine the average features of the human face, such as dark regions around the nose bridge and under the eyebrows. Computers detect these features in pixel color values to detect a face. Unfortunately, this method makes it difficult to detect a face if it’s not facing the camera head-on.

Ramanan compares the feat of face detection in a crowd to “spotting a toothpick in someone’s hand.” Ramanan and Hu’s complete publication, titled “Finding Tiny Faces,” is available online.

CMU scientists looking for safer seizure suppression



India Price/Editor-in-Chief

NAVIYA SINGLA
Assistant SciTech Editor

An epileptic seizure is caused when there is abnormal and excessive amounts of brain activity. The seizure is basically a sudden burst brain activity from a collection of brain cells, which creates a very high energy wave that affects the brain and the immediate surrounding tissue. The effects of an epileptic seizure are varied. While some can be mild or controlled, others can manifest themselves as uncontrollable jerking movements, excruciating pain, extreme exhaustion, and momentary loss of awareness.

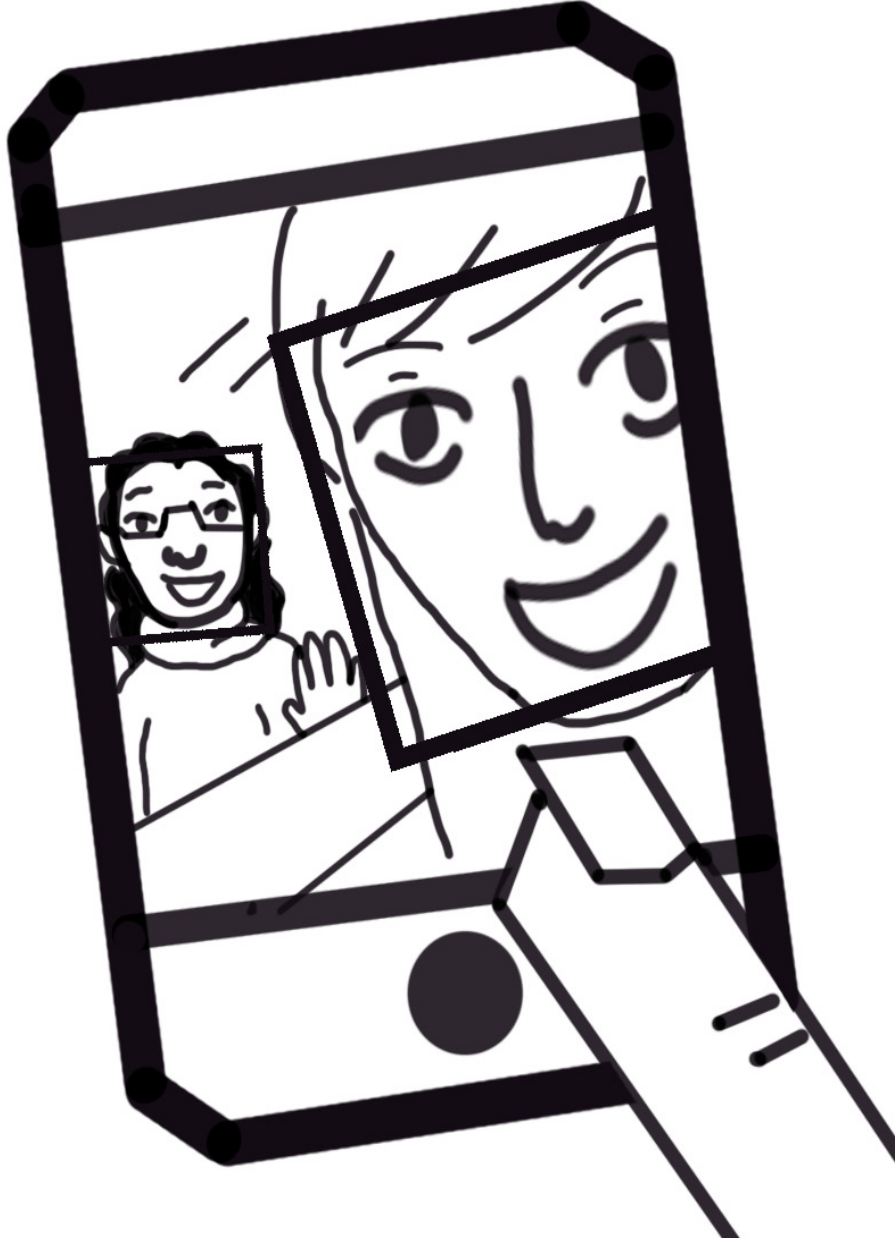
Proneness to seizures may result from a variety brain disorders or diseases that increase the probability of there being a seizure (epilepsy), but can also be a product of drug use, brain trauma, very high body temperature, low blood sugar, and low body oxygen levels. According to the Carnegie Mellon University press release of this research, patients of epilepsy often reduce the impact of their seizures or suppress them by taking medication,

avoiding triggers, and adhering to a specified diet, among other practices. Sometimes, patients whose seizures are harder to control or become exceedingly difficult to handle can choose to undergo surgery to have certain portions of their cortex removed or have neurotransmitters implanted there. These procedures, though often beneficial, are quite invasive.

Maysam Chamanzar, a professor of electrical and computer engineering at Carnegie Mellon University, Reza Alam, a professor of mechanical engineering at University of California, Berkeley, and Ben Zhang, a Ph.D. student at University of California, Berkeley recently published a paper in the Journal of the Royal Society Interface. The paper explains an alternative method to suppress seizures in a non-invasive way. The method uses Anderson localization, where a wave phenomenon occurs in the absence of waves in a disordered medium. According to the press release, Chamanzar explains this phenomenon as similar to the way ocean waves lose energy when they move over

a random and irregular topography. This phenomenon is applicable to all waves, including large optical waves or fast-moving light waves, and was discovered in a solid-state physics base context by Nobel laureate P.W. Anderson.

In the paper, Chamanzar and his colleagues aim to prove the validity of using this phenomenon with brain waves. They hypothesize that if one considers that seizures are a synchronized set of brain waves that propagate across the brain surface, then, one can ideally attempt to disrupt this spread by locally modulating neurons hypothetically using a phased array of ultrasound transducers. This would create several nodes, which disrupt the spread of the brain waves that cause the seizure by making them lose energy. The team expects to test this procedure by having patients wear a head device in the form of a cap or a headset that would launch a random pattern of ultrasound waves when a seizure onset was detected. This method is especially significant because it is an immediate and non-invasive response to a seizure.



Isabelle Vincent/Staff Artist

Got a great idea?

Small, well capitalized central California investment group looking to invest in extraordinary technology start-ups & great product ideas. We’ve had legendary success in consumer products and entertainment industries.

We’re fair, direct, honest, and accessible with connections at the highest levels of business world and Silicon Valley.

Go to MonkeyLung.com for more information.



monkeylung.com

Carnegie Mellon University

2017 buhl lecture

The Physics of Life: How Much Can We Calculate?

with **William Bialek**
John Archibald Wheeler/Battelle
Professor in Physics,
Princeton University
Visiting Presidential Professor of
Physics, The Graduate Center of
the City University of New York

Thursday, April 13, 2017
4:30 p.m., Mellon Institute Auditorium

Drosophila (fruit fly) embryo, imaged using light sheet fluorescence microscopy. Length is approximately 0.5 mm.

In the 400 hundred years since Galileo, the physics community has constructed a remarkably successful mathematical description of the world around us. From deep inside the atomic nucleus to the structure of the universe on the largest scales, from the air flow over the wing of an airplane to the flow of electrons in a computer chip, we can understand in detail what we see, and predict what will happen in places we have never looked before. What are the limits to this predictive power? In particular, can we imagine a theoretical physicist’s approach to the complex and diverse phenomena of the living world? Is there something fundamentally unpredictable about life, or are we missing some deep principles to bring the living world under the redictive umbrella of physics? Exploring this question gives us an opportunity to reflect on what we expect from our scientific theories, and on many beautiful phenomena. I hope to leave you with a deeper appreciation for the precision of life’s basic mechanisms, and with optimism about the prospects for better theories.

Sponsored by the Carnegie Mellon Department of Physics. This lecture is funded under the auspices of the Buhl Professorship in Theoretical Physics, which was established at Carnegie Mellon in 1961 by the Buhl Foundation in support of an outstanding theoretical scientist who would both impact theoretical research and help establish directions for experimental investigations. Fly Embryo Photo: "Drosophila embryo, light sheet fluorescence microscopy" by ZEISS Microscopy is licensed under CC BY-NC-ND 2.0.

Classifying alien civilizations with the Kardashev scale

JOSH ANDAH
SciTech Editor

There is a great deal of energy available to humans — unthinkable amounts of energy. But, we’ve barely tapped into it. Saying we have scratched the surface of energy harvesting is a gross overstatement.

The sun, for example, produces well over a quadrillion (thousand trillion) joules of energy every second. To put that number into perspective, that’s more energy than our species has consumed in our entire existence.

At a time in modern history when our energy production and how it affects our climate

are controversial, an interesting thought experiment comes to mind: the Kardashev scale. In 1964, Soviet astronomer Nikolai Kardashev imagined intelligent civilizations strewn across the Universe with capabilities far beyond our own. The result of his musings, the Kardashev scale is, at its simplest, an attempt to classify those civilizations in terms of intellectual and technological advancements.

There are three categories of this scale. The first category, and most primitive one, is a Type I civilization, also know as a planetary civilization: A civilization that stores and uses only a percentage of the energy delivered by its

host star. That’s the category our civilization falls into. We use some of the energy the sun delivers to the earth, be it directly in the form of solar light, or indirectly by burning fossil fuels or harvesting wind energy.

The next type is the Type II civilization. A Type II civilization uses all the energy of its host star. For earth to be considered Type II, we would have consume all quadrillion joules the sun provides.

The most likely way this can be achieved is with a Dyson sphere, a hollow sphere that encompasses the host star’s surface and transmits all emitted energy to the civilization. It will be hard to find such a

civilization since its star’s light will be blocked by the sphere, limited the survival of life on the planet.

The last and most advanced civilization is a Type III civilization, which harvests the energy of its entire galaxy. To understand how astonishing this is, realize that there are about a hundred billion stars in our own Milky Way, all producing as much or way more energy than our sun.

Type II and III civilizations would be far more advanced than us, in ways we could only imagine. It took only 200 years for us to ascend from horse-drawn carriages to supersonic jets and autonomous vehicles. Imagine if a civilization had

more time to exist and grow, say on the order of thousands or millions of years.

It would outstrip our technology many times over, achieving things we have only dreamed of.

Of course, given that some solar systems and exoplanets are billions of years older than our own, there is no limit.

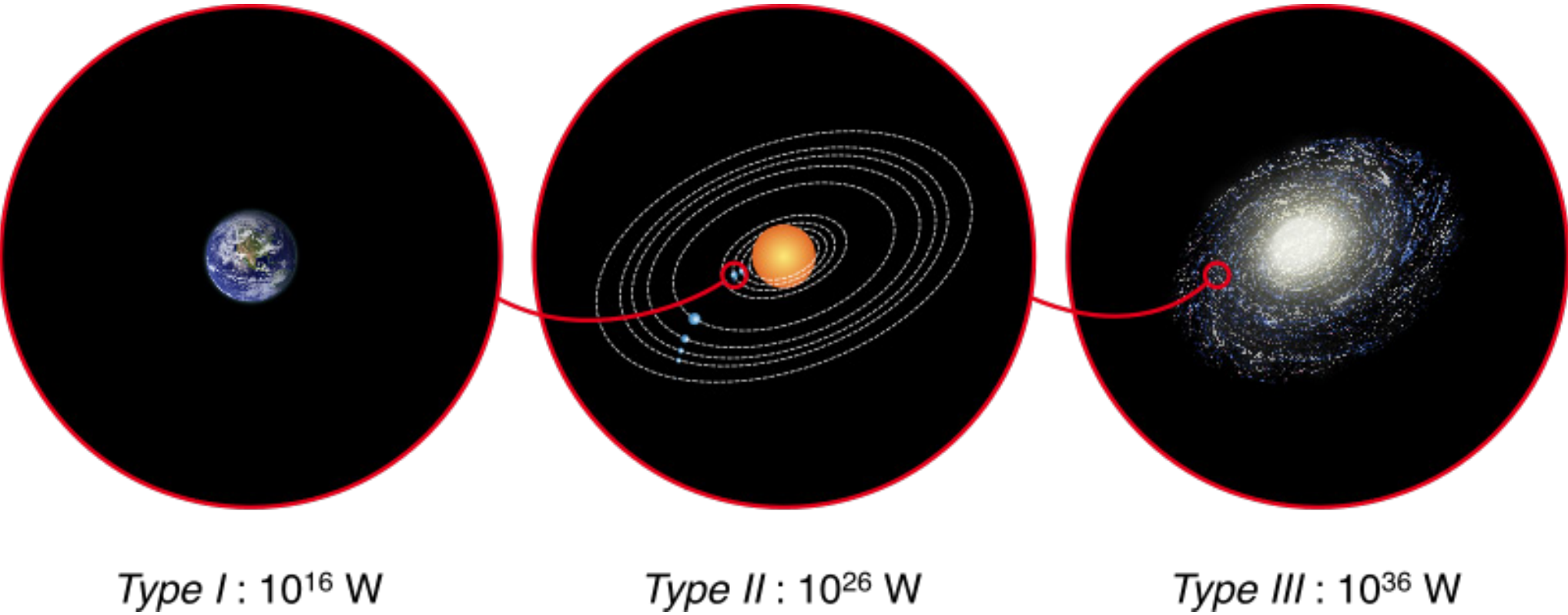
Energy on Earth is a political pivot, solely because it is extremely scarce. Its geopolitical importance starts international wars, crashes economies, and advances our technology.

However, energy is like any other product that follows supply-demand laws. With more of it, its price will di-

minish tremendously. Energy will begin to play less of a role in conflict, because it simply won’t be as valuable anymore.

With more energy, development in underprivileged communities will accelerate. More powerful transportation methods will be engineered, and humans will become a space-faring species. Powerful computers that can support artificial intelligence will be made. The possibilities are endless.

Perhaps, being a Type II or III civilization is in our future — that is, if the innovation never ceases. Until then, we will have to get by with our limited fossil fuels, hydroelectric dams, and solar panels.



Courtesy of Wikimedia Commons
The Kardeshev scale describes a hierarchy of civilizations based on the scale of their energy consumption.

Carnegie Mellon University

CELEBRATING GRADUATE STUDENTS IN THE

classroom

studio

laboratory

community

The Carnegie Mellon Community
is invited to attend

INNOVATION WITH IMPACT

April 6, 2017 // 4:00-6:00pm

Rangos Ballroom, Cohon University Center

A CROSS-DISCIPLINARY
EXHIBITION OF
GRADUATE STUDENT
WORK
& Dessert Reception

Presentation of
GRADUATE STUDENT
SERVICE AND TEACHING
AWARDS

Recognition of
3 MINUTE THESIS
AWARD WINNER

GRADUATE & PROFESSIONAL
STUDENT APPRECIATION WEEK

April 3 - 7, 2017

Schedule of events: www.cmu.edu/graduate

Organized by the Office of the Assistant Vice Provost for Graduate Education

Carnegie Mellon math team
wins first place at Putnam

YIYUAN CHEN
Operations Manager

In the 77th William Lowell Putnam Mathematical Competition (known as “Putnam”), the Carnegie Mellon team, led by Professor Po-Shen Loh, won the first place for the first time in history, beating top schools such as Massachusetts Institute of Technology (MIT), Princeton University, and Harvard University. This is the sixth consecutive year that Carnegie Mellon ranked top five in the competition, with second most number of undergraduate student in the top 500 competitors.

More than 150 Carnegie Mellon students participated in the competition December 3, 2016. Over 4000 competitors from 568 institutes in North America participated in the contest. Putnam is widely recognized as the most prestigious undergraduate competition in the world, with the median score of 0 or 1 out of 120. Students are asked to solve 12 complex math problem by using knowledge taught in undergraduate math courses. To place in the

top five and become a Putnam Fellow often requires a score of over 100, and to be in the top 500 requires a score of 28 this year.

The competition results released last week showed that Carnegie Mellon students claimed 44 out of the top 517 spots. The Carnegie Mellon winning team includes junior mathematical science major Joshua Brakensiek, who placed first in the competition, and senior mathematical science major Thomas Swayze, and senior mathematical science major Samuel Zbarsky. Carnegie Mellon also claimed three out of the top five competitors. The last time any team had all three competitors in the top five was in 1990 at Harvard University.

Po-Shen Loh, who led the Carnegie Mellon team and taught Putnam Seminar in the fall, began teaching at Carnegie Mellon University in 2010 after graduating from Princeton University. In addition to being an associate professor in mathematical sciences, Loh is also the national lead coach of USA Math International Olympiad Team since 2013, and was an instructor and

leader at the USA Math Olympiad Summer Program. An excellent mathematician and enthusiastic teacher, Loh has transformed the landscape of the mathematical sciences department of Carnegie Mellon. He not only recruited “mathletes” through the Knaster-McWilliams Scholars program, but also heightened the interest in mathematics within Carnegie Mellon.

Before 2011, Carnegie Mellon had not been ranked top five in the Putnam competition since 1987. “When I came here seven years ago, I thought [Carnegie Mellon] should be one of those five teams,” said Loh. In 2011, 2013 and 2015, Carnegie Mellon team placed second in the competition, and place fifth in 2012 and 2014. This year’s result signified the fruition of Loh’s and the participants’ hard work.

In his post on Overheard at Carnegie Mellon, Loh thanked everyone at Carnegie Mellon. “Thank you for being awesome,” Loh wrote, “even people who didn’t take the Putnam. You all contribute to the creative atmosphere that support us all.”

Write for SciTech

scitech@thetartan.org



Write For Sports!
Interviews,
Sporting Events,
Writing Experience!
sports@thetartan.org

SPORTS BRIEFS

Women’s Track & Field

The Carnegie Mellon women’s track and field team won its third meet of the outdoor season and fifth combined when it topped a field of 16 teams at the Westminster College Invitational on Saturday, April 8. The Tartans tallied 178.50 points to lead the pack with Westminster finishing second with 101.50 points.

Senior Rebecca Fortner won the high jump by clearing 1.57 meters, junior Kiersten Chuc won the hammer throw with a mark of 45.20 meters, junior Sarah Cook won the 400-meter dash in 58.46 seconds, and junior Aparna Alavilli won the 5,000-meter run in a career-best time of 17:44.14 to lead the Tartans.

Senior Grace Yee placed third in the pole vault after vaulting over 3.62 meters while first-year Michelle Karabin was fourth after clearing an outdoor-best 3.47 meters.

In the triple jump, senior Emily Swanson took second with a mark of 10.48 meters, sophomore Autumn Hair took third with a leap of 10.38 meters, and senior Sommer Farber placed fourth with a mark of 10.25 meters.

In the throws, first-year Julianne Igbokwe finished third in the shot put with a

mark of 11.33 meters, Chuc placed fourth in the discus throw with a mark of 33.32 meters, and sophomore Alexa Barriero was fourth in the javelin throw with a career-best distance of 33.48 meters. Barriero also placed second in the hammer throw with a mark of 35.97 meters.

Sophomore Claire Yuan ran a career-best time in the 200-meter dash when she finished sixth in 27.45 while sophomore Rose Ciriello was third in the 400-meter dash in 1:01.69.

Graduate student Erin Persson ran two career-best times when she placed second in the 1,500-meter run in 4:25.81 and took third in the 800-meter run in 2:24.41. Following Persson in the 1,500-meter run was first-year Rachel Reolfi in third place in 5:01.77 and first-year Kate Reilly in fourth in 5:09.80. First-year Joanna Baranowski earned a second-place finish in the 400-meter hurdles with a career-best time of 1:07.64.

The Tartans will next visit Bucknell University on Friday, April 14 and Walsh University on Saturday, April 15 for competition.

Men’s Track & Field

The Carnegie Mellon men’s track and field team competed at the Westminster

Invitational on Saturday, April 8 and won the 15-team event scoring 232.5 points. The Tartans turned in seven first-place showings throughout the meet on their way to winning the third straight meet of the spring.

Senior Owen Norley accounted for two of the Tartans top finishes on Saturday. Norley started with a season-best time of 3:55.61 in the 1,500-meter run before winning the 800-meter race in 1:54.82. First-year Evan Yukevich also ran the 1,500-meter and placed third after crossing in 3:59.39.

The distance runners claimed three wins on the 10,000-meter, 5,000-meter and 3,000-meter steeplechase. First-year Harry Branch-Shaw won the steeplechase with a season-best time of 9:36.68 while first-year Hunter Hartshorne finished third after crossing in 9:55.20.

In the 5,000-meter run, senior Ryan Archer placed first after crossing in 14:55.28 and sophomore Jared Moore then placed third in a career-best time of 15:02.61. The 10,000-meter run was won by junior Jordan Safer with a time of 32:37.08. Sophomore Kevin Cory took second finishing in 32:44.41.

Sophomore Isaac Mills ran a career-best time of 50.21 in the 400-meter race to place

third. Senior Don Boyer turned in a career-best time of 15.32 in the 110-meter hurdles to place second.

Boyer later turned in another second-place showing in the long jump with a mark of 6.35 meters. Senior Matthew Seifu placed third in the long jump with a season-best mark of 6.33 meters. In the pole vault junior Tommy Mansfield finished second after clearing the bar at 4.20 meters. Sophomore Reed Farber cleared 1.82 meters in the high jump to place third.

Junior Jacob Schofel turned in two top finishes with the first coming Friday afternoon in the hammer throw and then winning the discus with Saturday. Schofel tossed the hammer 52.86 meters and recorded a career-best throw of 44.13 meters in the discus.

Junior David Trzcinski earned a second-place finish in the hammer with a mark of 40.03 meters, while sophomore Kenny Sladick took third in the discus with a toss of 40.33 meters. Sladick also placed second with a distance of 14.55 meters in the shot put while sophomore Julian Nelson placed third with a career-best mark of 13.94 meters.

The Tartans will be back in action on Saturday, April 15 at the Walsh Invitational. On

Friday and Saturday, April 14–15 a few Tartans will compete at the Bucknell Invitational.

Men’s Golf

The Carnegie Mellon men’s golf team competed in the final round of The Hershey Cup on Monday, April 3 and finished with a 36-hole total of 621 (310–311) to place sixth out of 15 teams.

The two-day event hosted by the University of Rochester was played on the par-71, East Course at Hershey Country Club.

Allegheny College entered the clubhouse with rounds of 300 and 302 to win the event with a 602. The individual medalist was Danny Harcourt of Gettysburg College, who carded back-to-back rounds of 73 for a two-round score of 146.

Junior Nikhil Mohan led the Tartans with a 150 after turning in rounds of 72 and 78. Senior George Qian recorded rounds of 74 and 79 to end the 36-hole event with a 153.

Junior Adrian Del Bosque fired a 77 on Monday to end the cup with a 158 (81–77). Also carding a round of 77 on Monday was senior Brad Jennette who improved six strokes from his opening round and finish the tournament with a 160 (83–77).

Sophomore Patrick Tan finished the event with a 162 (83–79).

Carnegie Mellon had one individual enter the invitational, as sophomore Adrian Berger finished with a 161 (77–84).

Women’s Golf

The Carnegie Mellon women’s golf team placed first at its spring invitational on Wednesday, April 5 after carding a 334. The 18-hole event was held at the par 72 Longue Vue Club in Verona, Pennsylvania.

Top individual medalist honors went to junior Summer Kitahara, who carded a five-over par 77.

Junior Emma Hoskins carded an 85 while first-years Lavonca Davis and Yedin Lui both finished one-stroke back from Hoskins with an 86. Sophomore Carly Jordan ended the round with an 89.

Three individuals entered the competition for Carnegie Mellon: junior Isabelle Tseng carded an 86, first-year Sanchi Gupta shot an 87, and junior Ginger Glass finished with a 96.

The Tartans will next compete at the Wooster Spring Invitational on April 15–16.

Compiled by
IAN TANAYA



Courtesy of CMU Athletics
Junior Thomas Mansfield pole vaults to a 4.20 meter mark, helping the Tartans earn first place on Saturday.



Courtesy of CMU Athletics
Junior Summer Kitahara earned top individual medalist honors as the Tartans earned a spring invitational win.

Sports

Women’s Tennis overcomes foes to earn thirteenth win

MARIKA YANG
Assistant Sports Editor

The 12th-ranked Carnegie Mellon women’s tennis team rallied against 17th-ranked University of Mary Washington on Saturday, April 8, at home to win 5–4. The Tartans moved to 13–6 for the season while the Eagles dropped to 16–4 for the year.

The Tartans earned their first point of the contest in third doubles when

sophomore Jamie Vizelman and junior Katie Lai won their match 8–3 to give the Tartans a 1–0 lead.

The Tartans trailed the Eagles 2-1 following doubles play, but Lai pulled them even with a 6–2, 6–0 win at sixth singles.

Scoring went back-and-forth from there with Tartan junior Cori Sidell winning 6–3, 6–2 at second singles, Mary Washington winning at fourth singles, Vizelman coming from down a set to win

3–6, 6–3, 6–2 at third singles, and Mary Washington winning at fifth singles in three sets.

The final point was won by Tartan senior Nicholle Torres at first singles when she finished off Kait Brogan, 6–4, 4–6, 6–2.

After a Sunday match against Johns Hopkins University, the Tartans will next take on University Athletic Association (UAA) rival Case Western Reserve University on April 15.



Courtesy of CMU Athletics
Junior Cori Sidell gave the Tartans the advantage against Mary Washington en route to their thirteenth victory.

Men’s Tennis comes back to defeat Mary Washington



Courtesy of CMU Athletics
Sophomore Daniel Levine’s victory in first singles marked the first point and beginning of the team comeback.

IAN TANAYA
Sports Editor

The seventh-ranked Carnegie Mellon men’s tennis team hosted 16th-ranked University of Mary Washington on Saturday, April 8 and earned a 5–4 victory after strong singles play. The Tartans moved to 14–7 on the year while the Eagles dropped to 14–6.

The Eagles led 3–0 after doubles, winning all three matches by 8–6 scores as the Tartans fell into a deep hole.

The Tartans then won singles matches one through five to secure the match victory.

Sophomore Daniel Levine earned the first point for the Tartans with a 6–4, 6–2 win at first singles. Sophomore Chaz Downing then won 6–3, 6–0 at third singles before first-year Michael Rozenvasser won 6–4, 6–1 at second singles.

With the match tied, senior Kiril Kirkov gave the Tartans their first lead with a 6–1, 4–6, 6–4 win at fifth singles. Sophomore Vayum Arora

earned two tiebreaker victories to win the fifth and final point for the Tartans when he topped Joseph Brown, 7–6 (8–6), 7–6 (7–1), at fourth singles.

Senior Kunal Wadwani sent his sixth singles match to a third set but fell 7–5, 5–7, 6–3 to Ryland Byrd.

Following a Sunday match against Johns Hopkins University, the Tartans will next compete at the University Athletic Association (UAA) Championships on Friday, April 21.

NBA title series no longer lock for Warriors and Cavaliers

ZEKE ROSENBERG
Contributing Editor

The NBA season draws to a close on Wednesday, and even with so few games left, questions remain about the postseason picture. That said, the end of a grueling 82-game basketball season leaves very little left to learn in the final few games besides playoff seeding.

While that seeding will determine home court advantage and can certainly swing games, the large number of possessions in a basketball game and the best-of-seven format in the playoffs mean that the best team usually hoists the Larry O’Brien trophy come June.

This article will explore the top two teams in each conference’s reasons to believe and potential weaknesses going into the playoffs. It will also pick out two teams that could potentially play spoiler and surprise people with deep playoff runs.

Golden State Warriors

Reasons to believe: The Warriors have claimed the league’s best record in three consecutive seasons, but this team has been particularly devastating at its best. The Warriors had already won the NBA Finals and broke the regular season wins record in back-to-back seasons before they added forward Kevin Durant, easily one of the five best players in the league. This team can create insane amounts of space with the shooting they get from Durant, reigning Most Valuable Player Stephen Curry, and guard Klay Thompson. Each of those guys can slice up a defense by themselves with that space, but coach Steve Kerr’s system keeps the ball flying around the court, finding open shooters and cutters and generally being a nightmare for opposing defenses. The Warriors boast the league’s top rated offense per 100 possessions. In addition, Thompson, Durant, and forward Draymond Green are all excellent defenders who can guard multiple posi-

tions. Trying to attack the basket against the forest of limbs created by this team’s defensive scheme is nearly impossible, and the Warriors’ second best defensive rating per 100 possessions adds statistical weight to that.

Potential weaknesses: Conventional wisdom says the Warriors’ Achilles heel is their rebounding, but they are an average team by rebounding rate. While this certainly isn’t good come playoff time, it’s not the weakness it’s made out to be. Only three of the nine teams ahead of them will have home court advantage in the first round of the playoffs, and only five will make the playoffs at all. The weakness I see haunting this team is their penchant for turning the ball over. Golden State was the eighth worst team at protecting the pumpkin this season and if they continuously have to run back in transition, it could wear out their rotation, which is thinner this year than in the past due to the salary dumping necessary after acquiring Durant. This would massively mitigate the edges they have all over the floor against other teams.

Cleveland Cavaliers

Reasons to believe: The Cavaliers have one of the best rosters in the league. Forward LeBron James has been to the NBA Finals in each of the past six seasons on two different teams. That’s an insane streak, and James has put up another strong campaign this season. His athleticism and physical strength combined with his keen passing vision and basketball IQ make it nearly impossible to stop James from doing damage. James’ supporting cast is also star-studded. Guard Kyrie Irving has a mesmerizing handle on the basketball and combines that with underrated strength to create space even against tight defense. His famous daggers that have come at the Warriors’ expense are not a coincidence. Forward Kevin Love has also really grown into his role with the Cavaliers, hitting three pointers consistent-

ly and crashing the glass, collecting over 11 rebounds per game. Other role players provide everything from shooting to defense to a strong bench presence, making this a scary team on paper.

Potential weaknesses: The statistical case for the Cavs being the best team in the league is weak. This team is the third-best offense in the league on a per possession basis, but only the 22nd best defensive team. They have little rim protection, and they can seem disengaged or overmatched at times on the perimeter defensively when the other team moves the ball. The offensive firepower of the Celtics, Wizards, and Raptors could prove to be an issue even before they get to the finals. They’re 19th by rebounding rate, and center Tristan Thompson has regressed badly on the glass, often getting shoved around and finding himself out of position. His thumb injury on Tuesday could exacerbate this during the playoffs. Even the Cavaliers’ offense isn’t unsailable, as turnovers have led to them giving up huge amounts of transition possessions, which every team struggles to defend. For the first time in three years, a Warriors vs. Cavs final only seems probable, not inevitable.

Utah Jazz

Reasons to believe: Utah is three seasons into being the basketball nerd darlings, and this year they finally delivered on the potential we were promised. This team has everything a not-so-casual basketball fan could want: a deep, talented rotation; beautiful, complex sets composed by coach Quinn Snyder; fringe candidates for major end-of-season awards in forward Gordon Hayward and center Rudy Gobert; and a slow, deliberate style that lends itself to picking apart every single possession to unpack what exactly was going on. This team has the tools to find itself in the Western Conference Finals or beyond should they play their best basketball. Their starting rotation features five strong defenders

who can guard multiple positions, giving them the ability to switch screens that has become so en vogue in the past few seasons. Gobert, their defensive anchor and potential Defensive Player of the Year, is a solid rim protector who uses his leaping ability and length to snuff out basically everything at the rim. The result has been the NBA’s third best rated defense per 100 possessions. Offensively, this roster is loaded with excellent passers from guard George Hill to forwards Joe Johnson and Boris Diaw who come off the bench. However, it’s Hayward’s ability to put the ball in the basket from anywhere on the floor in nearly any situation that allows this offense to be more than just an intricate Rube Goldberg machine. The Jazz are a middling offensive team, but in the playoffs where Hayward will get increased attention from opposing teams, he has shown he has the skills to thrive in that environment.

Potential weaknesses: With the exception of Hayward’s scoring and Gobert’s rim runs, this team doesn’t have a ton of ways to put the ball in the basket. Often times, it seems like the ball is moving around from player to player with no clear goal and a beautiful possession ends with a rushed chuck towards the hoop before the shot clock ends. Hayward is not a particularly successful isolation scorer, meaning that

the ball movement is their best way to put up points, but in crunch time, it would be much nicer to have a fallback option. That could cause them headaches in the playoffs that could even get them bounced in round one by the Clippers.

Toronto Raptors

Reasons to believe: This team just went on a dominant stretch without guard Kyle Lowry, their second best player and a cornerstone in both their offense and defense. Their best player, however, is guard DeMar DeRozan, whose incredibly precise footwork makes him a handful to guard and allows him to uncork thirty- and forty-point games when he’s on. The Raptors are the only team in the Eastern Conference who are rated in the top ten in both offensive and defensive efficiency. This includes the portion of the season before they acquired forward Serge Ibaka, who has been a strong presence on both sides of the ball, and PJ Tucker, their best one-on-one defender on the wing. This team is deep with talent and has a bevy of ways to score and stop the other team from scoring. If their perimeter players can’t find a shot, center Jonas Valanciunas hasn’t been the destructive force posting up he was in years past, but he provides a decent safety

valve. Pairing him with Ibaka has been successful since both players operate in different parts of the floor, giving the other one the room to deliver the damage they need to. Defensively, the Raptors don’t have the ability to switch on screens that other teams do, but they have many talented on-ball defenders that make it hard to get away from any defender that easily.

Potential weaknesses: DeRozan’s lack of three point range confines him to the midrange shot, which can be inefficient even in his capable hands. This can clog up the floor for everyone else and sometimes the Raptors just don’t find the space necessary for good looks, preventing their offense from being a dominant force like the Warriors or Cavaliers. Defensively, their versatility is difficult to match up with but their rigid roles can be exploited. This is a hard defensive team to beat, but forests of screens can short circuit it.

The NBA Finals has seen the same two teams play in in the past two years, and the current standings would point to a third straight year of Cavs vs. Warriors. However, both the East and West boast contenders that simply weren’t assembled last year, and we might see someone new break into the Finals for the first time since 2015.



Courtesy of Charles Hallman via Minnesota Spokesman-Recorder
The NBA finals may not see the third straight year of the Golden State Warriors against the Cleveland Cavaliers.



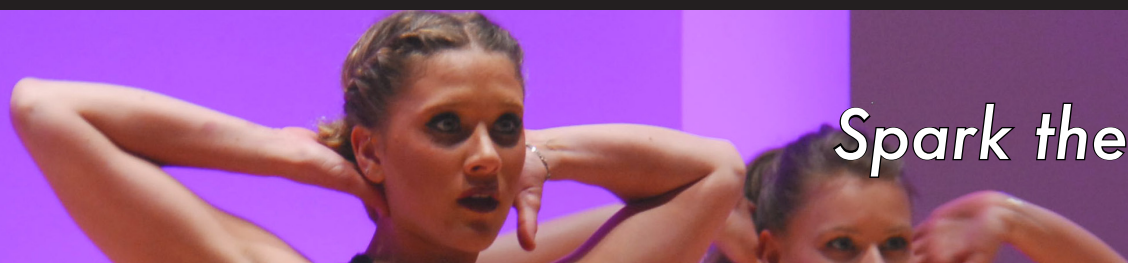
pillbox

The Tartan's Art & Culture Magazine

04.10.17 • B5 Collaborators • B8 Mattress Factory • B10 IFF

table of contents

4



Spark the Movement

6



Never Built CMU

8



Mattress Factory

3

Advice for Awkward People: On marriage and talking to relatives

3

Bar Buddies: Le Mardi Gras

5

Collaborators

10

International Film Festival: *The Age of Consequences*

11

Puzzles: Your weekly mental warmup

12

Comics: Teamwork, tolerance, and troubleshooting

14

Horoscopes: The signs as literary quotes

Publisher Jade Crockem **Editor-In-Chief** India Price
Pillbox Editors Apeksha Atal and Sinead Foley **Comics Editor** Julie Sanscartier
Visual Editors Aisha Han and Theodore Teichman **Layout Manager** Abhishek Tayal
Copy Manager Ruth Scherr **Cover Photo** Lisa Qian

Advice for Awkward People

On marriage and talking to relatives

Dear Ruth,

Coming in to Carnegie Mellon, I was convinced that medicine was my destiny. It was the perfect path for me considering my love for helping people, cutting things up, and having a viable career. The plan was to be financially independent by my mid-twenties, and to be on the cover of all the cardiologist magazines by the age of 35. But alas, I took on the premed classes and found myself grasping at straws. I struggled to find value beyond the prospects of the future, and thus diverted myself to an alternative path: one of free expression, and independence.

Now, my goal is to take some time to find myself after I graduate, with a more indefinite career path, something that I would expect my relatives to be weary of, right? WRONG.

I went home to visit family a couple weeks ago, and found myself nervously explaining my situation to a relative of mine. I was prepared to defend myself with explanations of my hopes and dreams, and was instead met by a completely different monster: a sigh of relief. "Oh wonderful! We were worried sick. Now you have the flexibility to get married before you're 27."

How is one expected to respond to THAT? Do I want to get married? I have no idea right now. Do I think I'll be financially stable by the age of 27? There's really no way of knowing. I feel sick to my stomach. Right now, it seems like the only

magazine I'll be on the cover of is Cosmo, as some sort of trophy wife. How do I tell my family that I don't really wanted to think about marriage?

**Please help,
Super Into Not Getting Literally Engaged**

Dear SINGLE,

When I started reading your question, I was honestly expecting the quandary to be "how do I explain to my relatives that I don't want to go to med school without them trying to push me toward being the typical hyper-successful perfect child." I'm actually a little blindsided that the problem is your family is okay with your "career" change.

Well. That's not really the problem, though. Because it's actually pretty great that your relatives are cool with your new plan to take time and find yourself — the problem is that they're trying to tell you what you should do with that time. Specifically, that you should get married. If it had been anything else, like "Now you have the flexibility to publish a book," or "climb a mountain," or even "sit on your parents' couch for five years," it'd still be frustrating — anyone telling you what you should or shouldn't do with your life always is — but the expectation that marriage is what should be in your plan has an extra added bonus of sexism to make it even worse. The fact that women are STILL fighting the expectation that their ultimate goal should be marriage frustrates me too no end.

Ruth Scherr | Copy Manager
Apeksha Atal | Pillbox Editor

I fully recognize that there are some people (yes, including women) out there who actively want to be married. They've wanted it for as long as they can remember, and having a fulfilling marriage is what they want from their life. There's absolutely nothing wrong with that — it's just not what you want.

So how do you tell your family, aka people you can't avoid, that marriage isn't what you're aiming for and that it frustrates you when they presume that it is and should be? Well, this is going to be annoyingly simple: you either tell them or you don't. Unless you have some special undisclosed circumstances, they can't force you to marry. It's possible they'll figure it out eventually even if you don't explain.

I think you should try telling them, though. It may take a couple tries, but you're an adult, you can explain your reasoning and thoughts. You'll probably have to do it a couple of times — and there's definitely a point where you should give it up as a hopeless case and just talk about the weather — but if it keeps coming up then that's the way to handle it. It doesn't have to be a 10 minute treatise with citations and evidence, just a comment. Think "Oh, I'm not really interested in marriage right now and I think it's a better use of my time to make plans for things I actually want."

Best of luck,
Ruth

Bar Buddies: Le Mardi Gras

Old school and dimly lit, with drinks strong enough to hold you down

This week, we decided to move back closer to campus. We ended up at Le Mardi Gras just off Walnut St.

The location: Just off Walnut is a nice place for a bar since there are multiple places on Walnut open until 2 a.m. Post-bar grub is a huge benefit and Stack'd, The Yard, and Steel Cactus will keep you fed well into the night.

Walnut, as we've mentioned before, is also pretty easy to get to. The 75 and 71B and D will get you there from Oakland and Shadyside, while the 64 will bring you from Squirrel Hill, and it's a doable walk from campus.

The drinks: I ordered a whiskey sour and Ariel ordered a ... margarita? Not only did Ariel order a margarita at a smoke-filled dive bar, but it was the most gourmet margarita in human history, coming with fresh-squeezed lime juice. They have a pretty extensive list of drinks they make,

so no matter what your drink of choice is, you will probably find it here. The fact that they will squeeze the juice at the bar is an added bonus.

The drinks were good and were also really strong. I'm not kidding about that, be careful and go slowly when drinking here. They weren't cheap, clocking in around the cost of most well drinks at nearby bars. This being Walnut St., that is quite expensive, but there aren't many better options nearby for cost effectiveness. A quick heads-up; you're going to want to stop by the ATM a block away, since this bar is cash-only.

The vibe: Le Mardi Gras is a true dive bar. I'm fairly certain the only lights are the televisions and a neon sign detailing happy hour deals. Other than that, the bar is really dark. The dark hides what I assume is a massive cloud of smoke lingering over all of the patrons. Smoking is allowed in this bar, and whether that is a good or bad thing by your count, you will leave smelling

Zeke Rosenberg | Contributing Editor

heavily of smoke. For days.

The bar can get crowded, and the cozy looking booths that dot one side of the bar were completely full when we went on a Thursday. This makes for some close quarters at the bar, but that's to be expected when a bar is at capacity.

The bar seems to have an old school theme going, with a juke box in the back with a pretty extensive selection of music and a Pac-Man table near the front. It's not a place to bring a large group of friends, but it's a fun night out with a buddy where you can have a couple drinks and the drunken cigarette you might be craving without anyone judging you.

Lit or nah: Le Mardi Gras is quite literally not lit, seeing as there are no lights. On the other hand, strong drinks, Pac-Man, and the setup with booths and the dark make this bar a place you can spend a few hours with a friend or two, which is lit.

Spark the Movement

Visual and performance art ignites new understanding in campus community

With so many different challenges to face in today's world, we as a community should take the time every now and then to reflect, to let others within and outside our community know that we are here to support and care for one another. Events like Friday's *Spark the Movement* Showcase give us that kind of opportunity to reconnect and shine light on pressing issues and topics that are very relevant to us in our current society.

The showcase was a project by fifth-year scholar Rachel Freer, who has always seen art as a powerful way to communicate messages on some of the most sensitive topics of our time. Subjects like mental health, ethnicity, and feminism (just to name a few) were represented in the visual and performance art pieces created by students from all over the university. The hour and a half long event was surely a great way of allowing more voices to be heard in the community, and a way of embracing the diversity on campus.

Before the live performances, visitors were able to view pieces of visual artwork made by students, which focused on topics related to self-identity and gender. The depiction of these concepts in the students' works were very genuine and honest. For example, one of the pieces was a collection of photos that responded to society's view of women's fashion, while another was a self-portrait of a student whose cultural heritage was the focus of the piece. Displaying all the artwork at the very front of the room helped make clear that the primary intention of the event was to create a comfortable and safe space for everyone.

The student performances were equally moving, and certainly left the audience feeling inspired at the end. The first performance, titled "Finding Your Power," was

by Carnegie Mellon's female a cappella group, Counterpoint, in which they sang two songs that focused on empowering all women and building the confidence to stand up for the equal treatment everyone deserves. The talented group clearly put a lot of emotion and soul into their performance, which helped them successfully get their message across to the audience.

The second performance was a dance piece titled "The Edge of It," choreographed by Michaelina McGee, a senior political science major at Chatham University, that portrayed the challenges that come with a mental illness like depression. The dancing in this performance was beautiful and provided a very liberating experience for everyone in the room. The purpose of this piece was to raise awareness of mental illness, and to help others better understand the difficult situations people are dealing with but may not be very vocal about. Throughout the event, there were several other inspiring dance and song performances, as well as a few incredible spoken word pieces. The entire show exhibited a different aspect of the culture on campus. Oftentimes, we as students get so busy and over-

Michelle Madlansacay | Staffwriter
photo by Lisa Qian | Staff Photographer

whelmed by our work that we don't even notice those around us. The diversity in culture, ethnicity, sexuality, and talent are what really shape the community at Carnegie Mellon. This event helped the audience realize how much more there is to learn about the people campus. If you're interested in seeing the event, click on the following link to check out a recording of it!

<https://livestream.com/cmuTVlive/events/7238772/videos/153642202>

List of performances:

1. "Finding Your Power" — Counterpoint
2. "The Edge of It" — Michaelina McGee
3. "Some Assembly Required" — Javier Spivey
4. "Voodoo Bag" — Josh Brown and Amy Lee
5. "Chivalry is Dead" — Angie Wang and Albert Du
6. "I'm Here If You Need Me" — Yiyi Zhao
7. "Parental Advice" and "Baby Don't Cry" — Jacqueline Puschmann
8. "Start Over Again" — Amy Lee
9. "When Your Feet Don't Touch the Ground" — Angela Ng and Shreya Desikan
10. "Cherry Wine" — Infra Dance Company
11. "My Skin" — Rob Stephens
12. "We Won't Live Afraid" — Jordon Bolden



Collaborators

"It's man versus monster, and the monster always wins."

Cassandra Clark |
Junior Staffwriter
art by Paola Mathus |
Staff Artist

Perhaps one of the best ways to spend a Friday night is, surprisingly, in a cold warehouse. Why? For a theatrical performance. Upon entering the Quantum location, strings with dull filament lightbulbs hang overhead and plastic drapes over various walls and over the seating structure. The space feels inherently secret. The set hints to the absurd and surreal nature of the coming play; chairs hang upside down on the wall, picture-less picture frames hang tilted, and another chair floats nearby, looming over the set for someone to sit in and watch.

Quantum Theatre's *Collaborators* hones in on a story about artistic freedom, politics, and family. The black comedy tells the story of Russian playwright Mikhail Bulgakov, who is given the ultimatum of writing a celebratory play for Joseph Stalin's birthday in order to save his own censored play. The story is mostly true sans occasional twists of the surreal as visions of Stalin dance about in Bulgakov's head – and chase him about with a typewriter with comedic music blasting in the background. Shifting from hilarious to absolutely menacing, the play highlights quirky, sometimes caricature like characters. Truly, the dark humor sucks you right in. At some points, I stopped taking notes for the review because I could not stop laughing. The humor exists both on the grand scale and the tiniest detail. However, the comedy cannot survive in this play's world forever as the threat of political terrorism and fascism becomes all consuming.

Carnegie Mellon School of Drama's own Jed Allen Harris was drawn back to Quantum to direct this particularly timely play. After all, with the current threat to the National Endowment of the Arts, *Collaborators* begins to take form as a terrifying reflection in a present mirror. "How much of your artistic soul will you sell to save your artistic soul?" asks Harris, framing the play in a dilemma that has tormented artists from Stalinist Russia to present day America. Susan Tsu, professor of costume design in the School of Drama, joins Harris in his mission to bring this show to life with costumes rich in texture: leather, fur, and fabric soaked through with blood.

On a campus arguing about Make America Great Again hats on Overheard, censorship and fascism are hot-button topics. If one is looking to venture into Pittsburgh and experience thought-provoking, comedic, and sometimes terrifying art, then Quantum's *Collaborators* is a viable nighttime adventure for a curious theatergoer. Student tickets are 18 dollars when called for ahead of time. The play runs until April 30.

NEVER BUILT CMU

Anirudh Anand | Junior Staff Designer

Theodore Teichman | Visual Editor

Aisha Han | Visual Editor

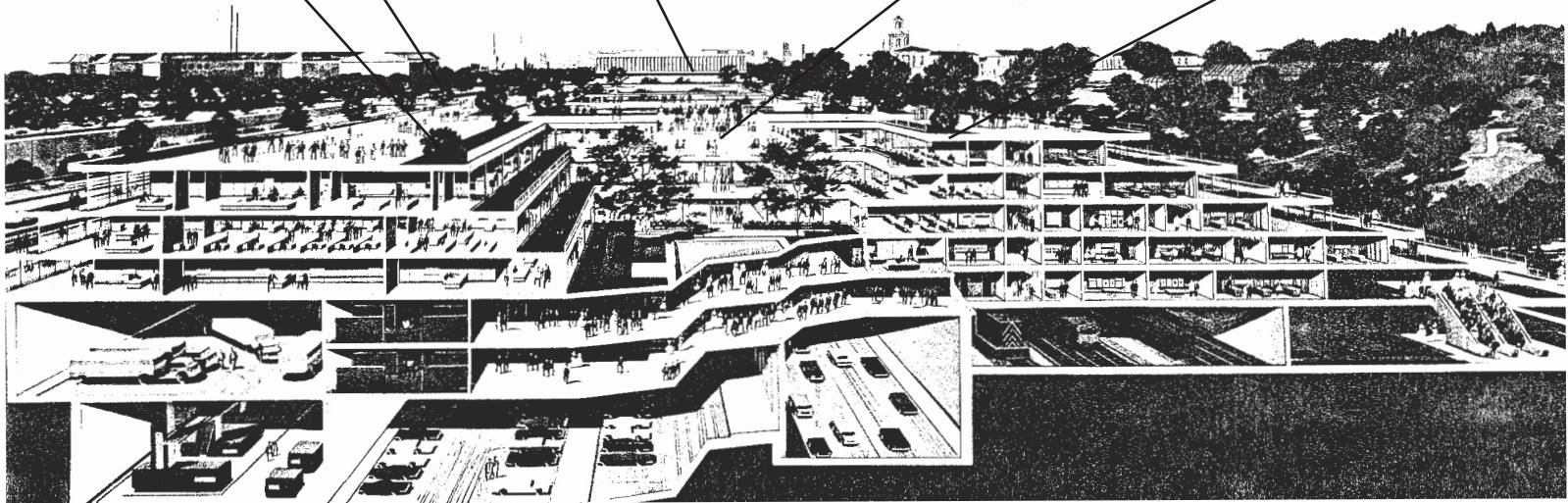
Panther Hollow Research Park
(1963)

Architects: Harrison &
Abramovitz

Post-War higher
education enrollments
increase five-fold

Technical innovation
and economics of
modern construction

First partnership proposed
for research, technology, and
innovation between Pitt. and
Carnegie Mellon

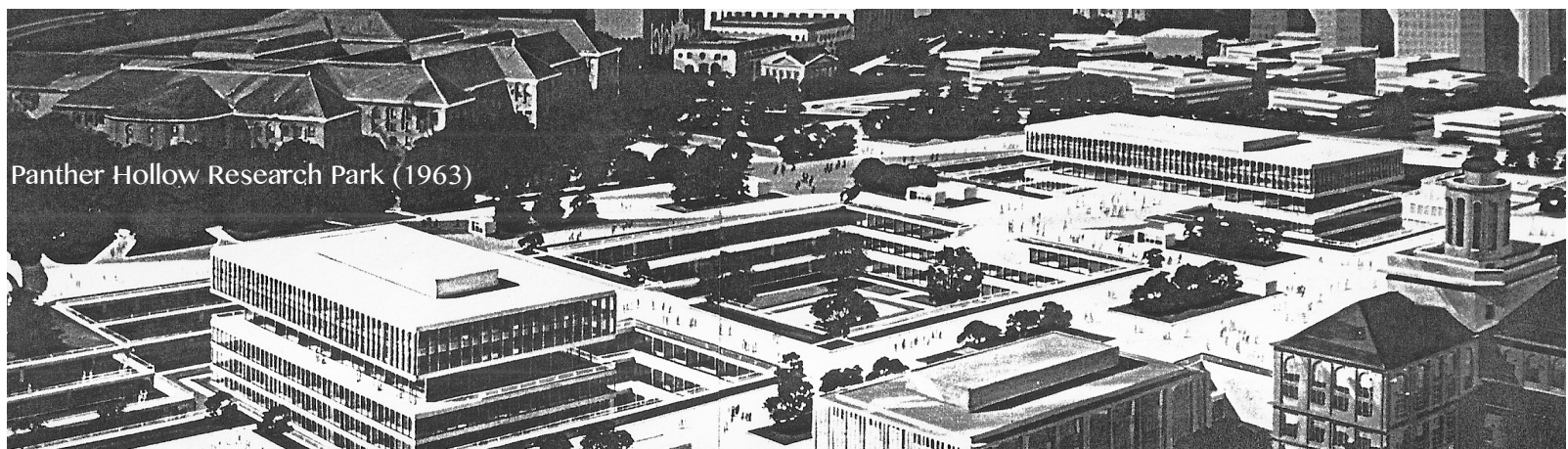


The addition of the Tepper Quad is set to completely change the way in which students, faculty, and outsiders perceive and experience Carnegie Mellon's campus. Already, the construction on Forbes Avenue has transformed the way in which members of the campus community interact with the space. Once it opens, the Tepper Quad will serve as a new entrance to our campus. It will represent us as a university and as a community to all those who visit. However, not all ambitious projects at Carnegie Mellon like the Tepper Quad have been realized. Many visions for the modern landscape of Carnegie Mellon's campus have been laid out and rendered, but ultimately rejected due to various complications. The idea of a Carnegie Mellon completely different to the eclectic scenery we know and (maybe) love struck us as quite an interesting idea. Pictured are drawings, sketches, and other documentation of Carnegie Mellon building prospects. This is a Carnegie Mellon campus that never was.

Historically, most of the built additions to Carnegie Mellon's campus have tended to work in agreement with the original campus designed in 1900-1910 by Henry Hornbostel. Despite being built in the last half

century or so, the Cohon Center, Purnell Center, Posner Hall, West Wing House, Resnik House, Newell-Simon Hall, The Collaborative Innovation Center, and the additions to Doherty Hall are all designed to fit in with the university's original 1910 yellow brick aesthetic. Despite the cutting edge nature of much of Carnegie Mellon's work and the modernity of our campus community, the architecture of our campus is largely tailored to match a style that is more than a century old.

Just a few years ago, the addition of the Gates Hillman Complex had a huge impact on the way that members of the community and visitors perceive Carnegie Mellon. It completely changed the work environment for all the members of the School of Computer Science and several others who now use Gates as a place to study. It has become a hub of campus life, and many, if not most, of us would be hard pressed to imagine Carnegie Mellon without it. However, the Gates Hillman Complex did more than just change the campus dynamic. It also played an invaluable role in bringing the university into the 21st century. It injected a fresh sense of modernity and cutting edge design into an environment populated by largely historical works of architecture.



There are some buildings on our campus that have challenged the yellow brick vernacular. The Gates Hillman Complex, Scott Hall, Hunt Library, Wean Hall, Donner House, and Scaife Hall somehow managed to escape the steady encroachment of yellow brick and stand out as examples of the architecture of their time. These buildings represent a minority of modern design proposals that made it through the selection process and were realised.

It is curious that the unbuilt proposals shown here do not display the same characteristic yellow brick. Rather than blend in with the historic style, they are each emblematic of their time. Had they been realised, Carnegie Mellon's campus would have been a very different place indeed.

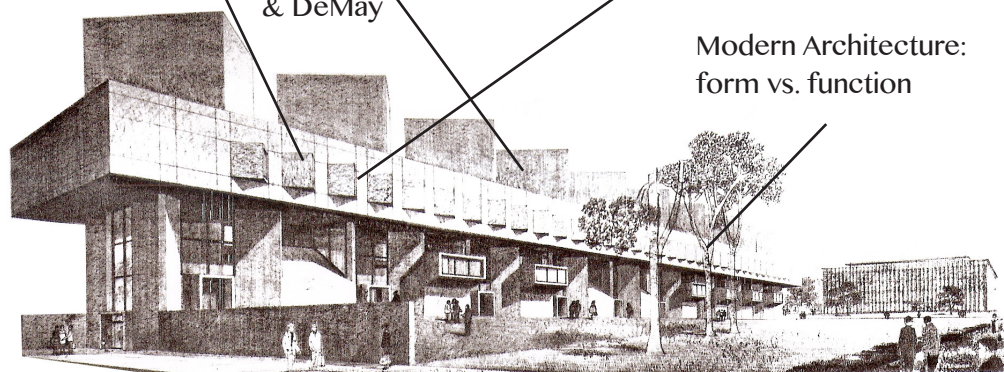
Fortunately, the architecture of our campus is moving away from historical contextualism towards a more modern style that is more representative of our community and our times. The Gates Hillman Complex and Scott Hall stand out as symbols of the university's progress and are emblematic of the community's place in society, professionally and culturally. Despite its use of yellow brick, the Tepper Quad promises to continue this trend by creating spaces that will encourage the confluence of the diverse thoughts and ideas that make our campus and our community so special. If anything, the yellow brick on Tepper symbolizes our university's connection to its heritage, while creating a new space where we can go boldly into the future.

Skibo University
Center Addition
(1968)

Architects: Sasaki, Dwason
& DeMay

Bare concrete

Modern Architecture:
form vs. function



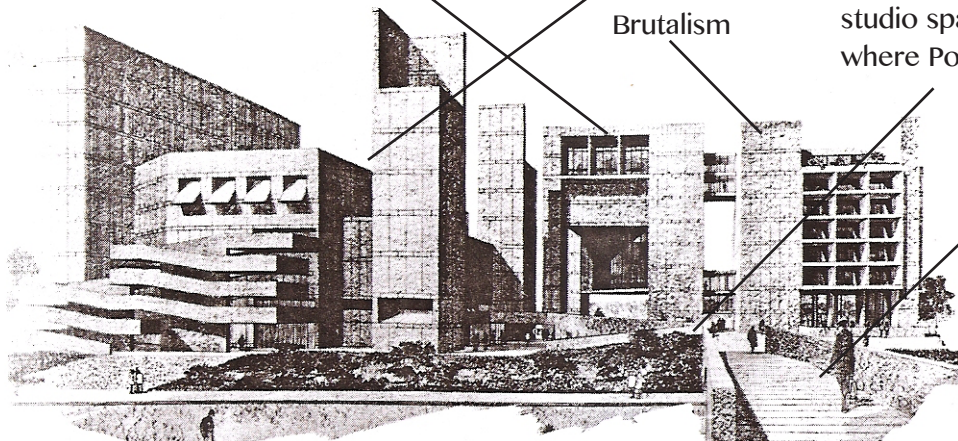
Fine Arts Complex
(1967-1970)

Architect: Paul Schwikher

Brutalism

Large windows to
maximize daylighting in
studio spaces. To be built
where Posner is currently.

Cultural
significance
of progress



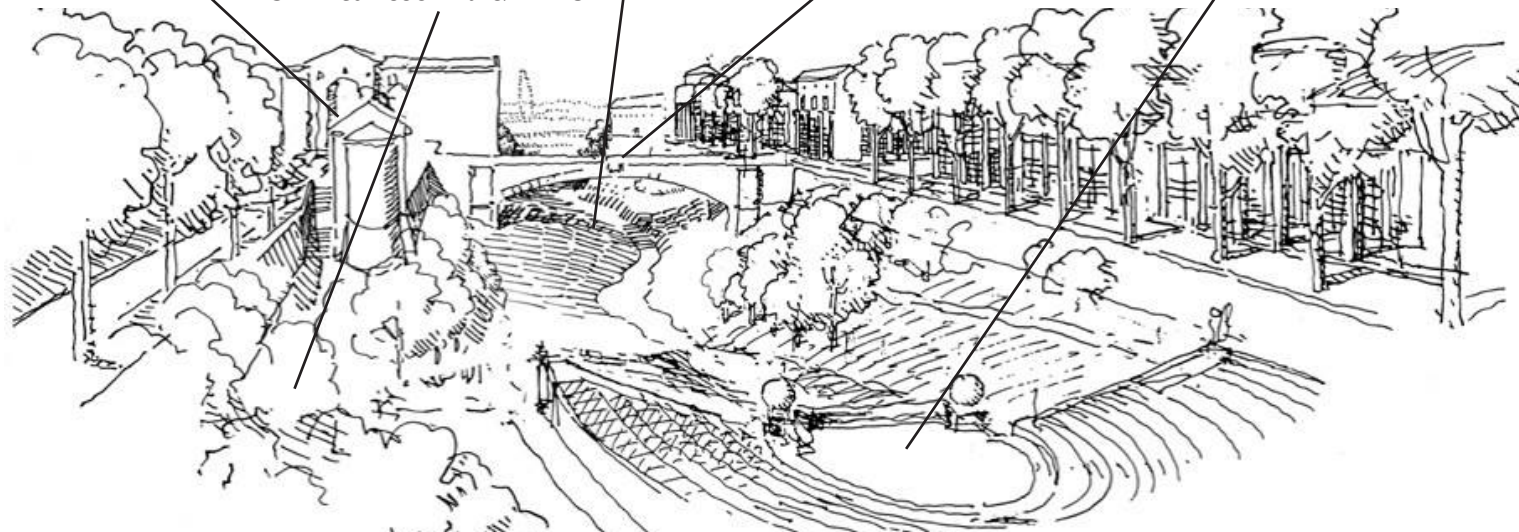
Renewed appreciation of
the historical campus:
Rebuilding "The Cut"

Competitiveness with Harvard and MIT
and the designs of their campuses

Response to the "Quality of Student
Life" Task Force report (1987)

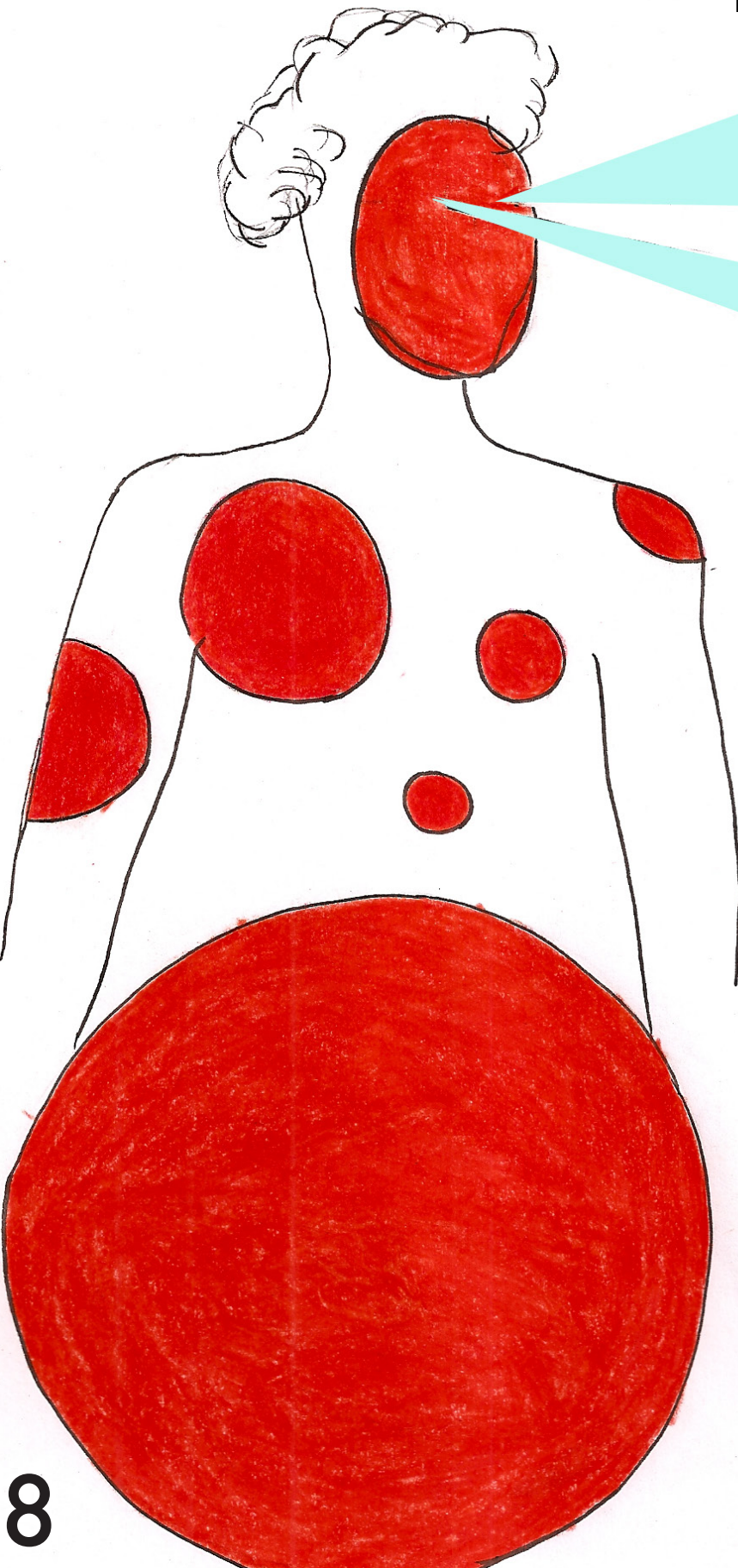
University Center
Competition: Winner (1987)

Architects: Dennis,
Clark & Associates/TAMS



Mattress Factory: "so it is"

New exhibits, renovations, and updates make room for social justice



In a time of massive political strife and division — not just in the United States, but around the world — the Mattress Factory's new exhibit, "so it is", helps to unite the present day with history and to remind people of strength, opposition, and resistance through artistic expression.

Curated by John Carson, former Head of the School of Art at Carnegie Mellon University, "so it is" opened at the Mattress Factory on April 7 at their location on 1414 Monterey Street. The exhibition is based around the works of seven Northern Irish artists whose early works were inspired from "The Troubles" of Northern Ireland, a series of political and religious conflicts between Northern Ireland's Protestant Unionist population and its Catholic Nationalist population from 1968 to 1998.

In addition to featuring "so it is", The Mattress Factory also spent months renovating their entire gallery. The gallery now features new permanent exhibits, such as a handrail featuring aluminum troughs of running water, in a collaboration between the Mattress Factory and six artists; Bill Woodrow's "Ship of Fools: Discovery in Time," a kitchen "frozen in time" left in a dilapidated state; and a modern interpretation of Leonardo da Vinci's "Vitruvian Man".

"so it is" makes the most of its space and embraces its interactivity, incorporating art into each room and using it to engage with others by educating them about the past. Rita Duffy's "The Souvenir Shop" introduces that concept to visitors as they walk in the gallery, serving not just as a functioning museum shop for the exhibit but also as its own part of the exhibition. Adapted last year in Dublin as a commentary on Irish politics and other social issues, "The Souvenir Shop" is mainly directed towards critiquing United States political issues, and showing how Irish and African American culture is intertwined in their fights for freedom. In "The Souvenir Shop," Duffy shows "how people revisit time and places of the past for understanding the future." The mass produce "grocery shop"-like aspect of the exhibit and each individual piece in it showcased the concept of how ideas were products, and how its purchase helped others to engage with modern ideas and social issues. Duffy was also influenced by aspects of Pittsburgh in her exhibit, as shown through the Andy Warhol-inspired Campbell's soup cans and the bottles of hot sauce inspired by its location in Pittsburgh, and the Mexican War Street Districts.

Ursula Burke's "The Precariat" also aimed to showcase the harsh reality of resistance of revolution through her mutilated and nearly-faceless busts. Her medium spoke volumes about her piece in general, using black porcelain to reference contemporary politics and the Black Lives Matter campaign. "Embroidery Frieze (The Politicians)" is

a mesmerizing, distorted display of current global politics, educating visitors while also serving as a display of contemporary issues.

As I continued through the rest of the exhibit, I found that each work of art was touched by political empowerment and passion, helping to kindle the drive for social justice in its visitors. Locky Morris' "Untitled (tyre fire)" used a variety of mediums, including photography, to illuminate its work. While the photo was shot in Derry, Northern Ireland, the work is also reminiscent of Donald Trump's proposed wall along the Mexican/United States border and its fire serves as a reminder of not only the failure of this wall but as a spark to empower social justice.

Paul Seawright also utilized photography in his installation "They Dropped Like Flakes, They Dropped Like Stars." Seawright's works are known for examining the impact of American troop deployment since 9/11 through the nature of conflict. In his latest photographic installation, Seawright "depicts the American city as a contested space that gives form to the fraying edges of American life," highlighting the issues that American veterans face. Seawright's use of photography succeeded in displaying the reality of the issue at hand, making the work poignant and the problems of American veterans all the more important.

Willie Doherty's "No Return," a video "set in a fictional future where the planet is slowly dying as a consequence of pollution and climate change," was one of the most interesting additions to the exhibition. Reminiscent of his earlier works, "Ghost Story," "Buried," and "Remains," "No Return" analyzes "the relationship between landscape and memory." Unlike the other works, "No Return" looks at the present to analyze the future, rather than remembering the past to change the future, and demonstrates an apprehensive fear about the future.

One of the most striking pieces of the exhibit was John Kindness' "Dionysus." Unlike the other works, Kindness' lime fresco was inspired by the unity of Pittsburgh. In the artist's statement of "Dionysus," Kindness says "We may not all eat the same things but we all feel hunger. And there I no better way to unite strangers than by getting them to share a meal." To acquire inspiration for his work he asked local Pittsburghers about what they like to eat, resulting in a lighthearted, vintage-looking, and fun work that brings a joy to people's faces.

My parents often don't understand modern art. But what I love about it is that while I may not understand the meaning of a work in greater detail, I know it carries a special meaning to the artist or even to another visitor. Throughout "so it is" I knew that each piece would be special to many people in millions of different ways, and I was so excited to see what that could bring. What made "so it is" even more special was how these seven artists came together to create an exhibit that stimulated the mind, empowered the soul, and reminded us of the past to inspire the future.



a mesmerizing, distorted display of current global politics, educating visitors while also serving as a display of contemporary issues.

As I continued through the rest of the exhibit, I found that each work of art was touched by political empowerment and passion, helping to kindle the drive for social justice in its visitors. Locky Morris' "Untitled (tyre fire)" used a variety of mediums, including photography, to illuminate its work. While the photo was shot in Derry, Northern Ireland, the work is also reminiscent of Donald Trump's proposed wall along the Mexican/United States border and its fire serves as a reminder of not only the failure of this wall but as a spark to empower social justice.

Paul Seawright also utilized photography in his installation "They Dropped Like Flakes, They Dropped Like Stars." Seawright's works are known for examining the impact of American troop deployment since 9/11 through the nature of conflict. In his latest photographic installation, Seawright "depicts the American city as a contested space that gives form to the fraying edges of American life," highlighting the issues that American veterans face. Seawright's use of photography succeeded in displaying the reality of the issue at hand, making the work poignant and the problems of American veterans all the more important.

Willie Doherty's "No Return," a video "set in a fictional future where the planet is slowly dying as a consequence of pollution and climate change," was one of the most interesting additions to the exhibition. Reminiscent of his earlier works, "Ghost Story," "Buried," and "Remains," "No Return" analyzes "the relationship between landscape and memory." Unlike the other works, "No Return" looks at the present to analyze the future, rather than remembering the past to change the future, and demonstrates an apprehensive fear about the future.

One of the most striking pieces of the exhibit was John Kindness' "Dionysus." Unlike the other works, Kindness' lime fresco was inspired by the unity of Pittsburgh. In the artist's statement of "Dionysus," Kindness says "We may not all eat the same things but we all feel hunger. And there I no better way to unite strangers than by getting them to share a meal." To acquire inspiration for his work he asked local Pittsburghers about what they like to eat, resulting in a lighthearted, vintage-looking, and fun work that brings a joy to people's faces.

My parents often don't understand modern art. But what I love about it is that while I may not understand the meaning of a work in greater detail, I know it carries a special meaning to the artist or even to another visitor. Throughout "so it is" I knew that each piece would be special to many people in millions of different ways, and I was so excited to see what that could bring. What made "so it is" even more special was how these seven artists came together to create an exhibit that stimulated the mind, empowered the soul, and reminded us of the past to inspire the future.



THE AGE OF CONSEQUENCES

Scott captures the implications of our perceptions of climate change

Caleb Miller | Staffwriter
art by Paola Mathus | Staff Artist

A lone polar bear floating on a shrinking iceberg. Plumes of smoke billowing from a factory. Hundreds of gas-guzzling SUVs inching forward in traffic. These are all images commonly associated with climate change, but for some people, these warning signs still don't register. *The Age of Consequences*, directed by Jared P. Scott and just shown at the tail end of the Carnegie Mellon International Film Festival, approaches climate change from an unusual angle, United States national security, in a bid to convince those who still don't believe in climate change of how dire the situation has become.

As Scott discussed in a question and answer session following the showing, the idea for the film came after a conversation where Scott learned that his uncle still didn't fully believe in climate change. Scott thought that by looking at climate change through a lens of conflict and national security, conservatives like his uncle would more easily understand the direct impact of climate change on their lives.

The Age of Consequences's main message is that climate change is an accelerant to instability — it is not climate change alone that causes conflicts, but unexpected or particularly brutal natural disasters can help exacerbate growingly unstable situations, and these volatile situations can be a threat to the United States' national security. Scott provides global evidence, like Syria, where a years-long drought drove unemployed young men to urban areas where ISIS easily recruited them; later, ISIS would use precious water as a way to hold communities hostage. He later brings the issue home by discussing Hurricane Katrina and the ensuing violence caused by this storm. He also uses a more unique example, showing how the U.S.'s ability to help with

humanitarian situations and lessen the chance of a resulting conflict will be hindered as rising tides threaten Naval Station Norfolk, where many of the missions embark from.

The documentary presents a new, intriguing perspective on climate change and several useful narrative examples, but it quickly becomes repetitive. While Scott dissects the film into several chapters ("Instability" and "Conflict" for example), the actual ideas within each section differ very little from each other, making the titles seem arbitrary. The basic idea behind the documentary is certainly interesting, but becomes tedious after it has been rehashed again and again. Scott claimed in the Q&A that it was his intention to hammer in the message that there are immediate national security effects of climate change, but he pushes the idea a few too many times.

The repetition also rears its head through the overwhelmingly dismal outlook of the film. Images of desperate refugees, rioting civilians, and armed terrorists dominate the documentary, and after a while this catastrophic onslaught grows tiresome. The overdramatic music score makes the depressing images even more ominous. There is a brief glimmer of hope near the end of the film, which encourages action, shows video of wind

turbines and wave energy converters, and claims that the technology and money is available and that change simply relies on having the wisdom to act. However, this section is short and while the rest of the film may feel pertinent to the target audience, complex alternative energy technology and vague call-to-actions are not as relatable or effective. A more extended and focused section on what can be done in daily life would have been more successful.

Finally, it is important to consider that such a barrage of imagery — violent riots, terrorist convoys, and refugees sneaking across borders — that mostly involve people of color could prove to be harmful even as the film tries to promote climate change awareness. Terrorism, civil unrest, and illegal immigration are important issues for many members of the target audience, so perhaps by constantly showing those images and associating them with threats to U.S. security, the film may just be reinforcing xenophobia and fervent nationalism. Might *The Age of Consequences* be increasing support for Trump's wall while also teaching new audiences about the effect of climate change? It can't be known for sure, but it does seem possible that the constant negativity matched with images of people of color, as well as the fact that the people interviewed about U.S. national security are almost entirely white, could have unfortunate consequences.

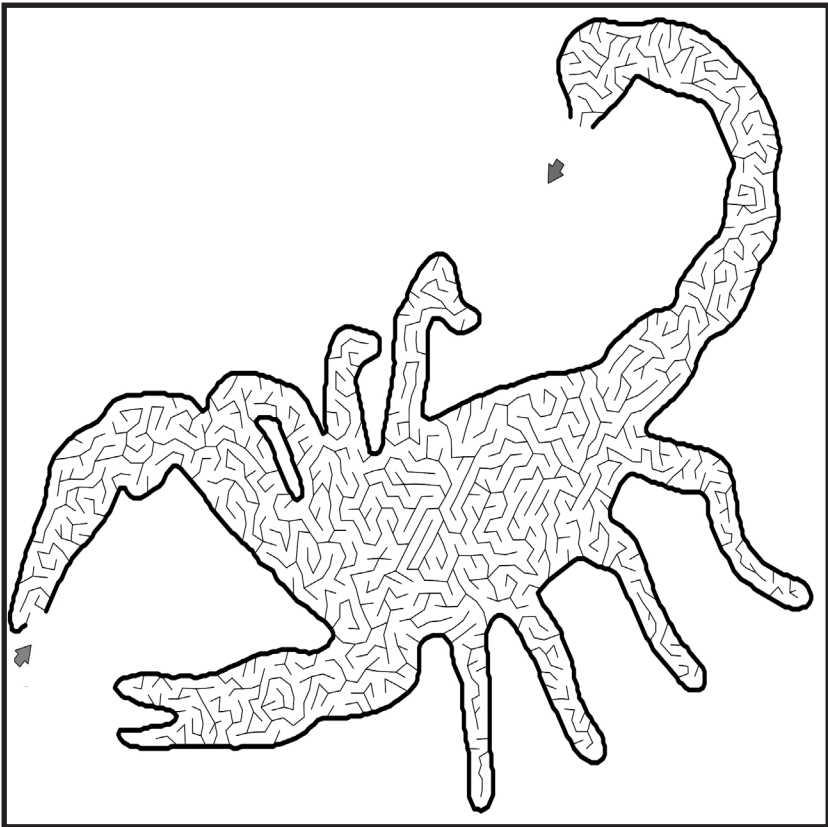
The Age of Consequences has noble intentions, a compelling main topic, and numerous convincing examples to back it up. However, the repetitiveness of the argument and constant deluge of bleak, disastrous imagery cause the documentary to grow redundant and difficult to continue watching.

sudoku

		1						6
		6		5		8	7	
		3	9		6		5	1
			3	6				
7								5
				9	7			
2	1		7		5	6		
	9	8		1		2		
6						5		

sudoku courtesy of www.krazydad.com

maze

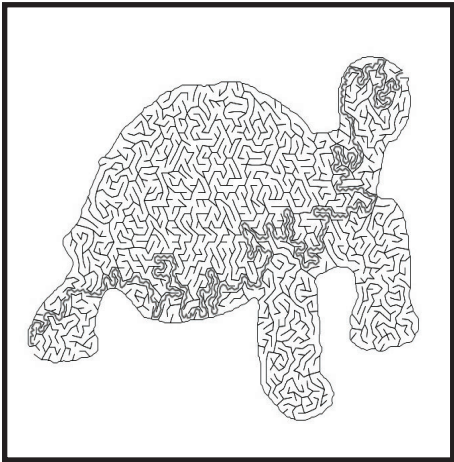


maze courtesy of www.krazydad.com

Solutions from April 3

8	6	3	1	2	5	9	7	4
7	1	4	9	6	8	3	2	5
9	5	2	4	7	3	6	8	1
3	7	5	6	8	9	4	1	2
4	8	9	2	5	1	7	3	6
1	2	6	7	3	4	8	5	9
5	9	8	3	4	2	1	6	7
6	3	1	5	9	7	2	4	8
2	4	7	8	1	6	5	9	3

sudoku



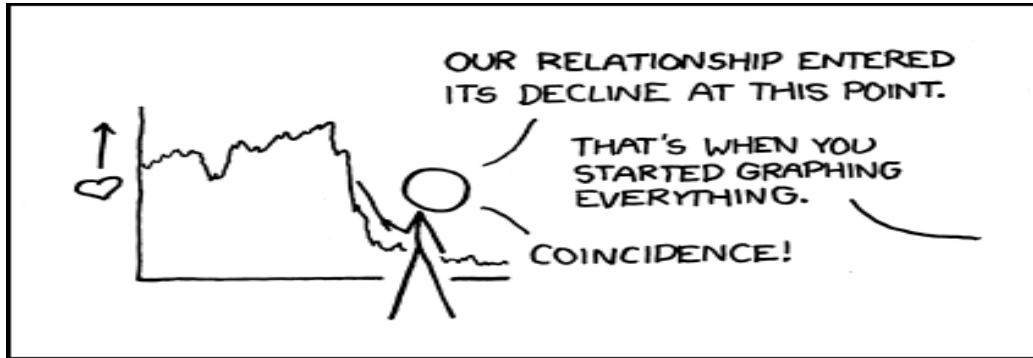
maze

1	2	3	4	5	6	7	8	9	10	11	12	13								
L	I	L	A	C		O	C	H	O		E	P	P	S						
14	O	C	A	L	A		15	S	A	A	B		16	C	O	O	P			
17	C	O	M	I	C		18	A	S	P	S		19	L	I	S	A			
20	K	N	E	E	H		21	G	H		22	23	A	S	E	S				
							24	N	E	N	E		25	P	R	E	T	E	R	M
26	27	28					29	C	O	V	E									
30	A	H	A	B			31	O	N	O	N	E	S	33	T	O	E	S		
37	L	I	S	L	E		38		39	E	S	T		40	E	E	R	I	E	
41	A	N	T	E	M		42	O	R	T	E	M		43		44	L	A	N	A
							45	O	C	T	A			46	O	P	E	N	E	R
48	49	50	51				52	E	L	L	S									
53	N	A	U	S	E	A		54	G	A	L	A	C	55	56	57	C			
58	A	R	M	S			59	N	E	E	T			61	N	O	R	T	H	
62	I	T	B	E			63	I	D	E	M			64	A	P	O	S	E	
65	L	O	S	T			66	C	U	R	E			67	R	E	T	A	R	

crossword

Decline

by xkcd

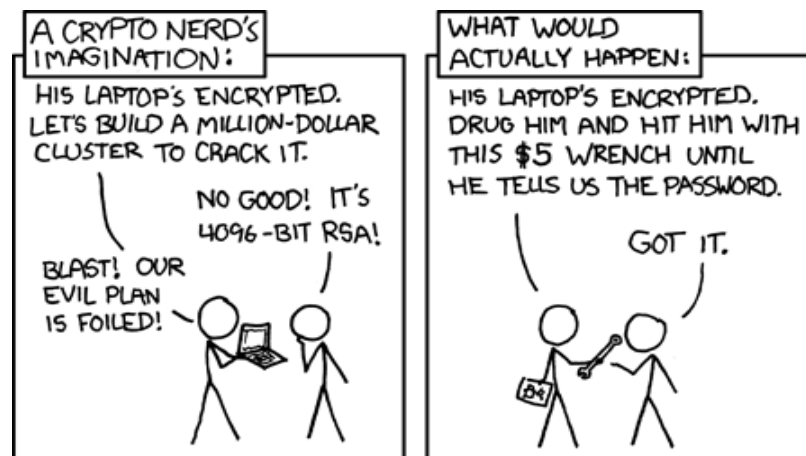


xkcd@gmail.com

xkcd.com

Security

by xkcd

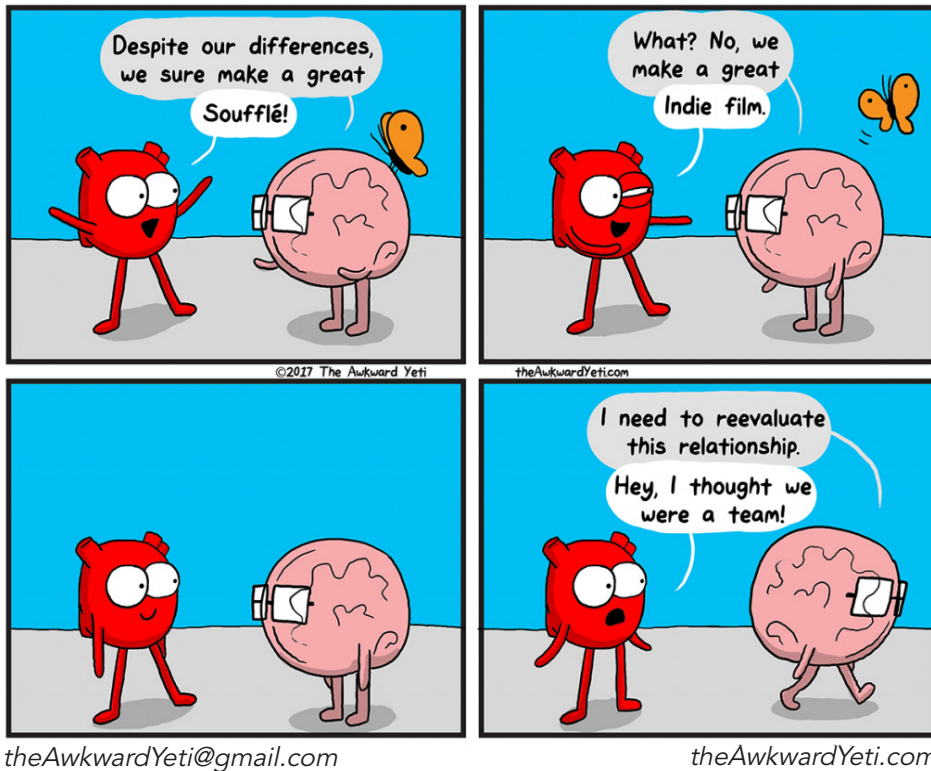


xkcd@gmail.com

xkcd.com

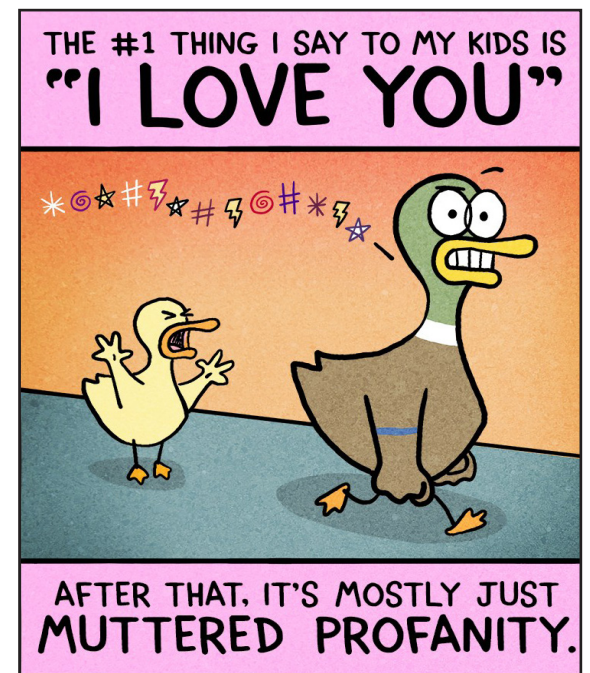
A Team

by Nick Seluk



Listening

by Brian Gordon



fowllanguage.com

horoscopes: Signs as literary quotes

Aries

march 21–april 19

Taurus

april 20–may 20

Gemini

may 21–june 20

Cancer

june 21–july 19

Leo

july 20–aug. 22

Virgo

aug. 23–sept. 20

Libra

sept. 21–oct.19

Scorpio

oct. 20–nov. 20

Sagittarius

nov. 21–dec. 20

Capricorn

dec. 21–jan. 19

Aquarius

jan. 20–feb. 20

Pisces

feb. 21–march 20

“Folks say God crumbles up the old moon into stars.”
— Alexander Solzhenitsyn

“The curves of your lips rewrite history.” — Oscar Wilde

“There are more things in heaven and Earth, Horatio,
than are dreamt of in your philosophy.”
— William Shakespeare

“Do I dare disturb the universe?” — T.S. Eliot

“We cross our bridges as we come to them and burn
them behind us, with nothing to show for our progress
except a memory of the smell of smoke, and the
presumption that once our eyes watered.”
— Tom Stoppard

“So we beat on, boats against the current, borne back
ceaselessly into the past.” — F. Scott Fitzgerald

“We need never be hopeless, because we can never be
irreparably broken.” — John Green

“We remember the past, live in the present, and write the
future.” — Shaun David Hutchinson

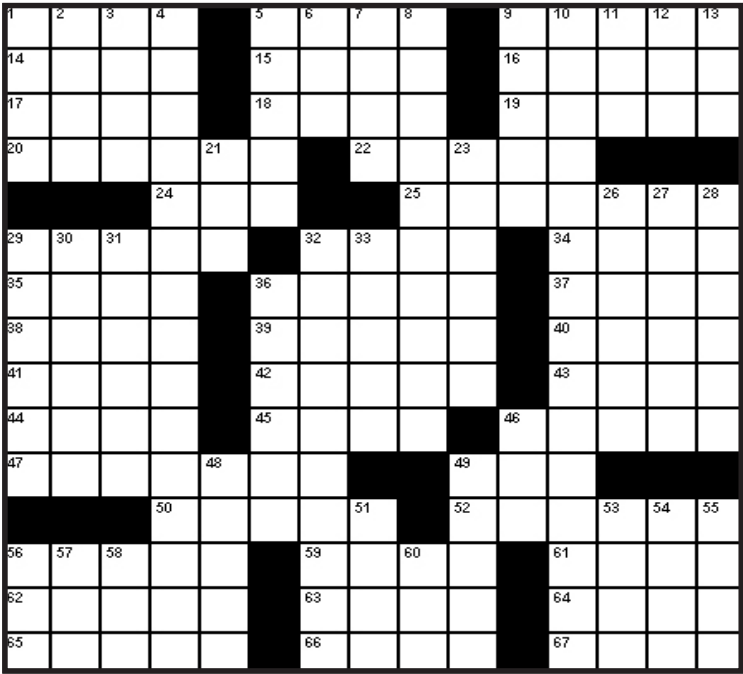
“The half-life of love is forever.” — Junot Diaz

“I want to know you moved and breathed in the same
world with me.” — F. Scott Fitzgerald

“I will not say do not weep, for not all tears are an evil.”
— J.R.R. Tolkien

“We are all Holden Caulfield at fifteen, but when we grow
up we want to be Atticus Finch.”
— Shaun David Hutchinson

crossword



Crossword courtesy of FreeDailyCrosswords.com

across

- 1. Type of gun
- 5. Injectable diazepam, in military lingo
- 9. Tendencies
- 14. Schilling replacement
- 15. Baseball family name
- 16. Like some symmetry
- 17. Horse's gait
- 18. Skeptic's scoff
- 19. Histrionic
- 20. Reply
- 22. Hermit
- 24. Can ____ now?
- 25. Noblest knight of the Round Table
- 29. Disney dog
- 32. Artist Mondrian
- 34. Mediterranean juniper
- 35. Wife of Jacob
- 36. Contour feather
- 37. Humerus neighbor
- 38. Inquires
- 39. Composer Bruckner
- 40. Highway
- 41. The wolf ____ the door
- 42. Swagger
- 43. Baptism, e.g.
- 44. Asta's mistress
- 45. New Mexico art colony
- 46. Broaden
- 47. Small ornament
- 49. Shamus
- 50. Valleys
- 52. Pertaining to the brain
- 56. ____ I can help it!
- 59. ____ no good
- 61. Director Wertmuller
- 62. Large piece
- 63. Support for a broken limb
- 64. Mary Kay competitor
- 65. Last letter of the Greek alphabet
- 66. Excitement
- 67. Actor Auberjonois

down

- 1. Bristle
- 2. Rotate
- 3. Archer of myth
- 4. In spite of
- 5. Capital of Egypt
- 6. Liturgical vestment
- 7. Christmas
- 8. Self-generated
- 9. Swiss city on the Rhine
- 10. Like afterschool activities
- 11. Actress Peeples
- 12. Label
- 13. Shortened version of actor Stallone's first name
- 21. Sense of self
- 23. Swimming
- 26. Resembling salt
- 27. Congenitally attached
- 28. Make less sensitive
- 29. Lament
- 30. Landlord
- 31. Naked-faced Amazon monkey
- 32. First 5 books of the Old Testament
- 33. Emcee's job
- 36. Soft subdued color
- 46. Itsy-bitsy
- 48. "The Trial" author
- 49. Govt. security
- 51. Neuter
- 53. Split apart
- 54. Prolific author, briefly
- 55. Alley
- 56. Cpl., e.g.
- 57. Resistance unit
- 58. Calendar abbr.
- 60. Recipe abbr.

tuesday

04.11.17

JSA presents: Matsuri 2017

3:30–8 p.m.

Cohon University Center

Tickets at: matsuri.cmu-jsa.com

Come celebrate Matsuri with the Japanese Student Association this Tuesday with food, performances, and plentiful decorations and games teeming with Japanese culture. This annual festival will also be incorporating booths from other Japanese student organizations, including cooking, origami, and cosplay. All profits from the event will be going towards a disaster relief fund for the Minato Middle School in Japan. Further donations can be made here: matsuri.cmu-jsa.com/cause.

thursday

04.13.17

Carnegie Mellon University Jazz Orchestra

8–11 p.m.

Carnegie Music Hall, Oakland

4400 Forbes Ave

Pittsburgh, Pennsylvania 15213

Tickets at: eventbrite.com

The Carnegie Mellon University Jazz Orchestra will be hosting a performance free for faculty and students on April 13. The ensemble includes students from all disciplines, and hosts numerous performances throughout the academic year. Be sure to check them out in the beautiful Carnegie Music Hall, this Thursday.

Activities Board Presents: Laverne Cox

7–10 p.m.

Wiegand Gym, Cohon University Center

Tickets at: carnegiemellontickets.universitytickets.com

The Emmy-nominated actress will be coming to Carnegie Mellon this Thursday to speak on issues such as race, class, and gender, specifically through the lens of trans women of color. Cox has been an active advocate for the trans community, both through her political activism, and acting roles, such as in *Orange Is The New Black* as Sophia.

saturday

04.15.17

Arabic (Khaleeji) Coffee House

3–5:30 p.m.

CMU Arab Student Organization

5032 Forbes Ave

Pittsburgh, Pennsylvania 15289

ASO's second annual Arabic coffeehouse will be held this Saturday, and will feature a variety of Middle Eastern snacks such as chai, karak, and other traditional sweets. The event this year will be focused on cuisine of the Arabic Gulf region, or the Khaleej, and offers the opportunity to learn about the region.

sunday

04.16.17

Tickling Giants | Carnegie Mellon University

7:30–9:30 p.m.

Porter Hall 100

Tickets at: eventbrite.com

The Roosevelt Institute at Carnegie Mellon, FORGE, and Amnesty International, are hosting a screening of *Tickling Giants* this Sunday. *Tickling Giants* is the story of Bassem Youssef, who becomes the creator of “Al Bernameg”, a satirical show launched in the midst of the Arab Spring. This film brings into question themes such as hypocrisy, political controversy, free speech, media, and religion. Catch the trailer here: bit.ly/2hSoBHe.

classified

Highland Park Tennis Club

The Highland Park Tennis Club is recruiting 4 Tennis Coaches for their summer tennis clinic. Part-time, 12 weeks, Saturdays only: 9:00 am–11:00 am, May 6–July 22. \$20/hour. Group lessons. Must have tennis experience (preferably college level as a player or coach but others will be considered). Requirements: child abuse, criminal background, and FBI clearances. Familiarity with USTA teaching. Qualifications: reliable, punctual, strong people skills. Send cover letter, resume, 3 references to Ms. Bey at msbeybey@hotmail.com. All applications must be received by April 14, 2017.



SPIRIT Fashion Show

This year's annual SPIRIT Fashion Show took on the challenge of creating a safe space for individuals by addressing a theme of resistance. The show explored three different stages in the life of a person: childhood, adolescence, and adulthood. The show was divided into three acts, each specific to one of these stages. Senior civil engineering and engineering and public policy major Pierce Sinclair, who was the overall chair of the show, explained that the show emphasized that "beauty has no standard, be it in shape, skin, color, or orientation."

The show featured lines from 14 designers, and performances from Infra Dance Company, Chuku of the Wh9le collective, and the SPIRIT Dance Group, each catered toward one of the different stages. The lines within each act also emulated the conceptual features of the stage of life. The act surrounding childhood focused on the concepts of youth and coming into the world as a blank canvas, free to do what one wants. The adolescent act looked at how people begin to adhere to trends, and follow others' expectations and standards. The adult act was focused on resistance, and how people can find themselves, break away from beauty standards, and speak up for what they believe in.

For more information on this show, and shows to come, check out spiritfashionshow.com.

Apeksha Atal | Pillbox Editor
photos by Aisha Han | Visual Editor