# Carnegie Mellon's student newspaper since 1906

thetartan.org

@thetartan

The Tartan

October 2, 2017 Volume 112, Issue 5

# Smart traffic signals assist the blind in crossing the street

**EVANGELINE LIU** Staffwriter For most of us, crossing the street is as routine and simple as eating and drinking. But for people who are visually impaired or who have other disabilities that impede their ability to move freely, crossing the street can be a stressful experience at best in a traffic system not always designed with their needs in mind. Researchers at Carnegie Mellon's Robotics the help of a \$2 miltute, with lion grant from the Federal Highway Administration (FHWA), are aiming to change this situation by researching smart traffic signals that can communicate directly with smartphones and adjust green-light times to accommodate those with disabilities who would require longer times to cross an intersection, or warn the user if the traffic signal detects that he or she is moving outside the intersection. One of the project's leaders, Stephen Smith, a professor of robotics, revealed the thought process behind the idea of using smart traffic signals to better accommodate those with special needs in an interview with The Tartan. Anna Boyle/Staff Artist

"I began thinking about the idea a few years ago after giving a talk on our traffic signal control work to the Golden Triangle Council for the Blind, and hearing their perspectives and problems on pedestrian navigation through intersections," recalled Smith.

Thus, when he heard about the

Thus, when he heard about the Accessible Transportation Technology Research Initiative (ATTRI) sponsored by FHWA, he seized the opportunity to start exploring the idea of using technology to mitigate the issues that special-needs pedestrians face at intersections.

"My group had already been working in the area integrating adaptive signal control with emerging "connected vehicle" technology, where vehicles equipped with dedicated short range communication (DSRC) radios communicate directly with the intersection, and extending direct communication to pedestrians with disabilities seemed like a natural idea," explained Smith.

Smith and the team involved in the project aim to develop a mobile app that can run on a smartphone equipped with DSRC capability, which will facilitate the main part of the communication between pedestrian and intersection traffic signals. They also hope to integrate this communication feature with Surtrac, a system combining artificial intelligence, traffic theory, and real-time traffic data to optimize traffic signal control to reduce waiting times, congestion, and pollution. Surtract was also developed in Carnegie Mellon's Robotics Institute and led by Smith with support from the school's Traffic21 and Metro21 initiatives. Surtrac already has shown tangible benefits: according to a university press release, in Pittsburgh, Surtrac has

"reduce[d] travel time by 25 percent, braking by 30 percent, and idling by more than 40 percent."

"Most basically, the app will encode and allow communication of the pedestrian's personal crossing constraints (namely travel speed) to the intersection, and the signal control system will ensure that the pedestrian is given sufficient green time to cross," Smith explains.

Additionally, the app will also make use of the smartphone's GPS system to monitor whether the pedestrian is crossing outside of the crosswalk and whether it is necessary to further adjust the traffic signal timing based on the pedestrian's progress through the intersection. The team also plans to use route information from the pedestrian's smartphone to streamline their travel by anticipating the user's arrival at certain intersections.

Smith says the team plans to do field testing with volunteers from the local blind community in the East End of Pittsburgh, where the Surtrac system has already been deployed, and eventually develop a system that can work for people who have other disabilities as well. It could be useful to many people who live in suburban areas where pedestrians are infrequent and signals do not always accommodate them.

Since smartphones do not generally have built-in DSRC capabilities, the testing will require outfitting a DSRC sleeve to the testing subjects' smartphones, but future phone models could integrate such a feature if it proves useful, according to Smith in a university press release. Ultimately, the driving force behind the project is integrating modern technology into our infrastructure in order to improve safety and mobility for pedestrians with disabilities.

### Interaction with the unknown connects scientists and artists



# A celebration of Machine Learning for Social Good





Evangeline Liu/Staff Photographer

On Sept. 26, Carnegie Mellon and Uptake hosted a celebration for the new fund established by Uptake called Machine Learning for Social Good which allows students to benefit the public sector.

# Campus Crime & Incident Reports

**Suspicious Activity** 

Sept. 24, 2017

Sept. 24, 2017

Four females were on the roof spotted of Clyde House. The Carnegie Mellon students were safely removed from the roof and were advised that University policy forbids them from

Theft of Bicycle

accessing the roof.

A student reported that his bicycle was taken from the bicycle racks outside of the Margaret Morrison storefronts. investigation ongoing.

Theft of Bicycle

A student reported that her bicycle was taken from the bicycle racks outside of the Morewood Gardens. An investigation is ongoing.

**Burglary** 

Sept. 26, 2017

Sept. 25, 2017

An Au Bon Pain employee reported that a large amount of money was stolen from the restaurant. An investigation is ongoing.

Theft of Bicycle

Sept. 28, 2017 A student reported that her bicycle was taken from within the Resnik Cafe. The bicycle had been left in the premises, unsecured between Sept. 22 and Sept. 23. An investigation is ongoing.

**Terroristic Threats** 

Sept. 29, 2017

A Carnegie Mellon Staff Member riding a bicycle was the victim of a road rage incident on Morewood Avenue. The staff member reported that an unknown person drove into the travel lane, yelled at her, and lifted his shirt, displaying a pistol that was holstered on his hip. CMU Police are assisting the

Pittsburgh Police with this investigation.

#### **Disorderly Conduct**

Sept. 30 2017

University Police initiated a traffic stop on a vehicle that traveled through a steady red signal on Forbes Avenue. Upon speaking with the driver, an odor of marijuana was smelled coming from from the vehicle. The driver admitted he possessed a small amount of marijuana, which was subsequently The driver was cited for Disorderly Conduct.

> Compiled by **VALENE MEZMIN**

#### A MESSAGE FROM STUDENT GOVERNMENT

Welcome back, students of Carnegie Mellon! After a summer full of new and fulfilling experiences, whether they were internships, research positions, or relaxing at home, we are already back in the swing of things and ready to start off the semester while continuing to put our hearts into the work. As your student representatives for the 2017-2018 school year, we have strategized on how to provide the most enriching student experience at Carnegie Mellon. The student body executives, along with members of Student Senate and the Graduate Student Assembly, were elected to tailor the student experience with the needs of our growing community. We are incredibly excited to share with you all the new initiatives that student body government has to

Student body government has identified four main pillars that demonstrate our priorities for this school year: mental health awareness, fiscal transformation, collaboration, and diversity. Students with a passion to improve each sector were appointed to the Student Body President's Cabinet to spearhead the initiatives of each pillar. The mental health awareness pillar focuses more on providing students with a more accurate understanding of the demands of their courses as well as figuring out how to make wellness a more viable option. Fiscal transformation deals with the finances of the university and making university transactions more transparent to students. The collaboration pillar aims to unite student organizations and provide greater entrepreneurship opportunities to students. Finally, the diversity pillar focuses on the inclusion of students of all backgrounds. To

accomplish the goals of each pillar, we are working with university administration and entities, such as Counseling and Psychological Services and the new Center for Diversity and Inclusion, to meet the needs of the entire student body.

If you have any questions regarding the pillars, please contact the respective chair. Their contact information can be found below:

Mental Health Awareness Chair: Michael James, mrjames@cmu.edu

Fiscal Transformation Chair: Tiffany Lu, tclu@andrew.cmu.edu Co-Collaboration Chair:

Simran Jobanputra, sjobanpu@andrew.cmu.edu Co-Collaboration Chair:

Christie Chang, cchang2@ andrew.cmu.edu Diversity: Kameron

kwbradle@cmu. Bradley,

Other notable points of contact for student body government include:

Student Body President: Neal Choudhary, sbp@andrew.cmu.edu

Student Body Vice President: Pulkita Dua, sbvp@ andrew.cmu.edu

Student Body President for Finance: Gaby Cach, sbvpf@andrew.cmu.

President for Organizations: Hannah Nourie, sbvpo@andrew.cmu.edu Graduate Student

Student Body Vice

Assembly President: Travis Carless, gsa-president@andrew.cmu.edu

Undergraduate Student Senate: Maitrevee Joshi, student-senate@andrew. cmu.edu

Together, we can all work to improve the overall student experience. We wish you a successful semester!

SOCIAL ACTION CALENDAR



**TUESDAY** 

**79°** / 52°

**WEATHER** 

Source: www.weather.com

WEDNESDAY

**81°** / 57°



**77°** / 51°





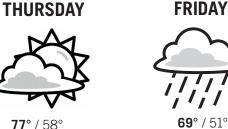




Correction: Tisbert performed with Cambridge Footlights, not No Parking Players, as mistakenly published in our last issue.









**SATURDAY** 

# Dept. of Statistics name change reflects shift in the field

**NORA MATTSON** Junior Staffwriter

The name change from the Department of Statistics to the Department of Statistics and Data Science was marked by some interesting statistics of its own. Applicants to Dietrich thinking about studying statistics have doubled since 2013, and the number of undergraduate statistics majors is four times the size of what it was in 2010, and twenty times the size of what it was in 2003.

This change was prompted not by an abrupt shift in what the Statistics Department does, but rather was meant to reflect the shifting state of the field. "Because our approach to statistics encompasses the essence of what data science is and can be, we have decided to change the name of the department to the Department of Statistics and Data Science. We feel this name more accurately reflects the department's position on the leading edge of research and education in a data-rich world," stated Richard Scheines, the Dean of Dietrich, and Christopher Genovese, head of the Department of Statistics and Data Science in a Dietrichwide email.

As "big data" becomes more and more central to the work of the Statistics Department, the work done by the department is also on the cutting edge of the technological atmosphere prevalent at Carnegie Mellon, as evidenced by the degree in Statistics and Machine Learning offered jointly by the Department of Statistics and the Department of Machine Learning in the School of Computer Science.

The Statistics Department at Carnegie Mellon has always somewhat defied classification. It is housed within Dietrich, and as such, takes a uniquely social-sciencegeared approach to statistics. "Our statisticians and data scientists exemplify the Carnegie Mellon approach to the humanities and social sciences, which infuses foundational and deep research across disciplines to take on and offer solutions for issues that are important to the world today," stated Richard Scheines in a university press release. Some knowledge of statistics is required for all Dietrich students, so a change in the mission of this

department touches dozens of majors in this university.

The distinction between data science and statistics is sometimes blurred, but often statistics tends to veer more into the realm of the theoretical, while data science tackles the interpretation of large data sets. The Department of Statistics and Data Science has long pursued both, even before the re-brand. "For the past 50 years, we have made a big impact in both statistical theory and applying those theories to real problems and real data in fields from genetics and astronomy to sports and finance," stated Christopher Genovese.

The real world application of theoretical and technical concepts is a cornerstone of both the philosophy of our university and the practice of data science, so this approach fit

s easily into the larger mission of the department. "Our curriculum is designed to give students a taste and a wide variety of experiences of what it is like to do

statistics and science in the real world. We take problems that are real — from research, industry and government — and put them straight into the classroom," said Rebecca Nugent, director of undergraduate studies.

Paola Mathus/Art Edito

# Women make up majority of Carnegie Mellon first-years

**SWETA KOTHA** 

Junior Staffwriter

Carnegie Mellon University's first-year class of 2021+ has a majority of women for the first time in the University's history, marking another milestone among the top universities that are bridging the gender and minority gaps in certain fields. 51 percent of the class of 2021+ are women, and specifically the proportion of women in Carnegie Mellon's six undergraduate colleges continues to increase.

Interim president Farnam Jahanian, interim provost Laurie Weingart, and Dean Admissions Michael Steidel suggest that Carnegie Mellon's progress in attracting more women in the last few years is the result of strategic academic and professional planning within each college, as well as the whole university's endeavor to prioritize building a sense of community based on diversity and inclusion.

This year especially, women make up 57 percent of Tepper School of Business' undergraduate class, which is not just noticeably high among top-ranked national business programs but also a

personal feat for the college itself, since this percentage is 12 percent higher than the already-increasing rates from last year.

Robert Dammon, Dean of Tepper, explained that Tepper is distinguished as a business school, because it is at the crossroads of business, technology, and analytics. Recently, Tepper's academic programs as well as its allocation of resources has helped drive specific niches in the college to increase inclusion and teamwork-based projects.

Tepper's Community Conversations is just one of the undergraduate initiatives taken by the college across its undergraduate, masters, and doctoral-level programs. In Tepper Community Conversations, undergraduate students, faculty, and staff members discuss opportunities and methods to enhance learning experiences. The construction of the David A. Tepper Quadrangle provides physical, localized learning spaces for school-based and

In a university press release, Steidel states, "As we look at the factors that helped attract this record-breaking each college and class,

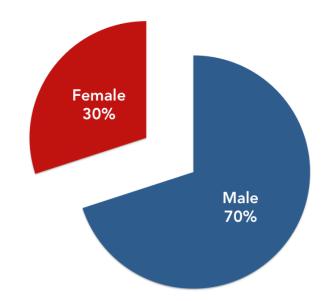
professional collaboration.

school has its own story to tell." Women make up 49.8 percent in the freshman class's computer science program and 43 percent of the freshman class's engineering program. Also, Mellon College of Science has its largest first-year class ever with 285 students including interdisciplinary scholars, and Dietrich College of Humanities and Social Sciences was recently hailed for its growing number of students, particularly women, in its most popular field of statistics and

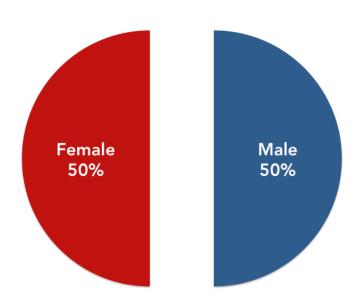
data science. All this happens as Carnegie Mellon admission

show competition as incoming SAT scores remain high, but it is important to remember that numbers can only tell us so much. Any school should not merely count or recite the numbers of its women or other minorities; this is only considered an advancement if paralleled with progress to build a better community. As seen in the case of Tepper, Carnegie Mellon should be celebrated for its dedication to "de-bias" certain programs, monitor how underrepresented groups succeed, and prioritize inclusivity in all settings.

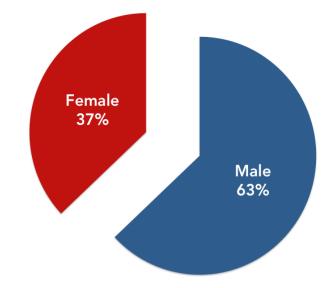
#### First-Year Enrollment 2011



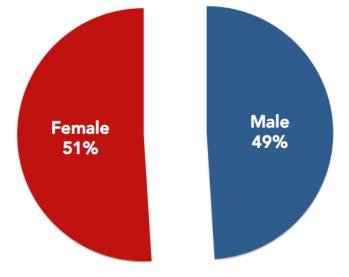
#### First-Year Enrollment 2016



#### First-Year Enrollment 2012



#### First-Year Enrollment 2017



India Price/Editor-in-Chief

FROM THE EDITORIAL BOARD

#### New Title IX interpretation undermines victims

Every 98 seconds someone in the United States is sexually assaulted. Going through such harrowing events can have severe emotional and psychological impressions on the victim. In most cases, perpetrators of these acts are able to walk away freely without punishment for their actions, thus silencing the voice, dignity, and rights of the people they have sought out as prey.

Rather than working to fight for these victims, Secretary of Education Bestsy DeVos has decided to focus her efforts on giving the accused of such crimes, who she argues are treated unfairly, due process and a larger voice in the matter. The newly proposed Title IX guidelines to be implemented at colleges supposedly seeks to make investigations into sexual assault allegations more equitable for both the accuser and accused. These new guidelines remove the two month time limit on investigations, allows the accused to appeal the accusation against them, and raises the "preponderance of evidence" to a "clear and convincing evidence" standard.

But many are worried these new guidelines limit the rights previously held by victims of sexual assault, making allegations against the accused harder to prove, and thus making it increasingly difficult for survivors to seek the justice they deserve.

The restructuring of Title IX practices onto college campuses is one of many changes made by the Trump Administration to initiatives made under President Obama's Administration. Title IX of the Education Amendments Act of 1972 states that "no person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." In the Obama-era, the Office of Civil Rights asserted that this law should be applied to all schools to protect girls and women, usually the victims of these crimes, from sexual assault or harassment. This has led to the creation of Title IX offices at many universities that train students and faculty members on how to respond to allegations of sexual harassment or assault while also strengthening the university's actions in response to such allegations.

Carnegie Mellon University has adopted its own Office of Title IX Initiatives and a sexual harassment and sexual assault policy to foster a positive living and learning environment "that promotes the confidence to work, study, innovate and perform without fear of sexual harassment or sexual assault." This policy lays out detailed procedures to address complaints and identify instances of sexual assault and provide students with resources to deal with their effects.

The most controversial part of Obama's original Title IX assertion was that schools were told to adopt a "preponderance of evidence," which places more emphasis on how convincing evidence is over the amount of evidence presented to decide if a student is responsible for an act of sexual assault. Instances of sexual assault usually take place in private rooms, without outside witnesses, making proof beyond a reasonable doubt difficult to gather. This lower burden of proof set forth by the preponderance of evidence standard takes this into account and allows for an increase in actions taken by school officials in response to sexual assault allegations.

Many critics of this act, such as DeVos, have argued that Title IX's enforcement at schools lessens the point of view of those accused, thereby ignoring their first amendment right to freedom of speech. Last year, an open letter by 21 law professors argued that although "sexual harassment represents unacceptable conduct, and those found responsible should be appropriately sanctioned," the Office of Civil Rights has "unlawfully expanded the nature and scope of institutions' responsibility to address sexual harassment, thereby compelling institutions to choose between fundamental fairness for students and their continued acceptance of federal funding." Since colleges stood to lose access to student federal aid if they didn't implement this act, the lawyers argue that this led to colleges choosing to side more heavily with victims of sexual assault, thus downplaying the accused's side of the story.

"The union bosses made it clear: They care more about a system — one that was created in the 1800s — than they do about students," DeVos said in a speech given at Harvard University. "Their focus is on school buildings instead of school kids. Isn't education supposed to be all about kids?"

Even if the Office of Civil Rights' actions were an administrative overreach that placed the behavior of universities under strict federal scrutiny, it led to a quick and immediate response by school officials to listen to the "kids" at their schools. These actions made students feel more empowered to come forward after being assaulted, to make known the ordeal they had to live through, thus, to some degree, giving them back the power that was taken away from them by such an act. Raising the level of evidence to be presented takes those rights away from students, and limits the progress that has been made to make instances of sexual assault known.

But just because a school has

to take sexual assault allegations more seriously, doesn't mean that school officials should feel compelled to implicate the accused student to make it seem that they are being proactive. A 2010 study conducted at Northeastern University indicates that the prevalence of false allegations is between two percent and 10 percent with a disproportionate amount of those accused and punished for committing acts of sexual assault being men of color.

The point of Title IX is for universities to be made aware that such acts are taking place on their campuses and to take allegations of sexual assault more seriously. According to the Rape, Abuse, & Incest National Network (RAINN), women in college are three times more likely to be victims of sexual assault than those not attending a university, but only 20 percent are likely to report this, believing that it is a personal matter that they are compelled to deal with on their own out of fear of retaliation and shame. Harboring such thoughts can often lead to depression and thoughts of suicide. How can we make progress to let assaulters know that their actions have consequences if we don't give victims a safe and supportive outlet to

share their experiences? Many universities, such as the University of Colorado, have chosen to stick to the guidelines put in place during the Obama-era. In a statement made by Holly Hippensteel and Jamie Edwards, representatives of Carnegie Mellon's Office of Title IX Initiatives, the university does not plan for these new guidelines to immediately impact sexual assault prevention and response efforts at the university, but is moving forward to develop a new policy through public comments.

"We remain committed to providing support, resources and information to individuals in our community who have been impacted by these issues and to providing fair, prompt and thorough investigations and resolution to community members who seek resolution through the University," Hippensteel and Edwards said in a statement.

Schools should be responsive to acts of assault that take place on their grounds. Students have rights, and it is the duty of the university to assure students that their rights will not be violated, to assure students that they will listen to their students' concerns and do all they can to deal with the matter. Sexual assault is simply not a crime that lends itself to providing proof beyond a reasonable doubt, when it is well known that such clear proof is not always obtainable. It is, first and foremost, a violation of a woman's civil rights.

# SPEAK YOUR MIND.



forum@thetartan.org



#### **Editorial Board**

JADE CROCKEM\* Publisher

**INDIA PRICE\*** 

Editor-in-Chief

SARAH ELIZABETH BENDER

Forum Editor

#### **Editorial Staff**

LYDIA GREEN\* Operations Manager SINEAD FOLEY APEKSHA ATAL Pillbox Editor

Assistant Pillbox Editor **NAVIYA SINGLA** Scitech Editor

JULIE SANSCARTIER Comics Editor IAN TANAYA

**VALENE MEZMIN** 

News Editor

**JOSH ANDAH** 

Staffwriter

Sports Editor MARIKA YANG Assistant Sports Editor **COREY EMERY** Advertising Manager **SOPHIA CHENG** Business Manager

Systems Manager **RUTH SCHERR** Visual Editor **AISHA HAN\*** Visual Editor

Art Editor

**GEAR JIANTHANAKANON** THEODORE TEICHMAN PAOLA MATHUS

Photo Editor **PAULINE TING** ABHISHEK TAYAL\* Lavout Manager

ZICHEN LIU

\* Denotes executive committee member

YIYUAN CHEN

SYDNEY ROSLIN

Staffwriter

Staffwriter

#### Staff

Lydia Green, Aisha Han, Juhyung Park Ian Tanaya, Pauline Ting, Katrina Wong, Marika Yang

**ADVERTISING** 

Benjamin Stern, Andy Gao

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

BUSINESS Lindsey Shi

#### by The Butler Eagle. 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 their individual creators. The Tartan Editorial Staff reserves the right to withhold from publica-

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

The Tartan Editorial Board. Columns, Editorial Cartoons, and Reviews are the opinions of tion 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, inacuracies, 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 The Tartan Box 119, UC Suite 103 5000 Forbes Avenue Pittsburgh, PA 15213

thetartan.org/forum » A5 October 2, 2017 « The Tartan

# National anthem protests are about racism, not patriotism

# au Mider

#### **CASSIE SCANLON**

In an effort to gain some brownie points with veterans and out of anger from a rejected invitation to the White House by Golden State Warriors basketball player Stephen Curry, President Donald Trump tweeted calling for the firing of players who protest during the anthem at National Football League (NFL) games. In response, the Steelers, along with other teams, did not take the field during the anthem, resulting in angry fans who saw the act as disrespectful to the military. However, these protests across the NFL aren't about disrespecting the American flag and our military, they're about racism and police brutality.

While Steelers president Art Rooney issued a statement claiming that Steelers did not want to say anything political by not standing for the anthem, the team certainly said something. Football fans cannot expect the NFL

to stay out of political issues when the President of the United States calls for the firing of certain players. The Steelers did not take the field to respect the rights of their fellow teammates, not to disrespect the military.

The Steelers claiming that they did not take the field during the anthem to avoid making a statement is the just organization trying to appease angry fans. As someone who has family who served in the military, I was raised being taught that the flag is symbolic of the sacrifices made for this country. I cannot imagine a time where I would kneel during the anthem. However, I acknowledge that symbols, like the American flag, can be open to more than one interpretation. For me, America has treated me well. But, this is not the case for a great amount of American citizens who are still overcoming racial barriers. I have never taken offense to anyone kneeling during the anthem, and I never will. For them, America has not been well. For them, the flag stands for institutionalized racism and the obstacles they face for something as arbitrary as the color

of their skin. Colin Kaepernick, the player who began the movement last year, even

decided to take a knee instead of sitting after a conversation with a veteran last year. There is nothing more these players could have done to make it clear that kneeling is a way for them to bring light to issues and generate a discussion, not show disrespect for the military.

Protests during the anthem are not violent, and peaceful protests should be encouraged in a democracy. No one is harmed when someone kneels during the anthem. NFL players have a large following, and this following can be used as a platform to bring social justice issues to light. While Kaepernick has essentially been blackballed from the NFL, his protest from last year has been a success. It is the next season, and not only has the conversation continued, but other players have also joined them movement. If we fail to legitimize nonviolent protests, we only leave violent protests as an answer to injustice.

Steelers fans are so upset about the protests that they are burning jerseys and cancelling season tickets, but no one had such a violent, negative reaction when Ben Roethlisberger allegedly raped two women. In fact, he still remains the team's quarterback,

and Steeler fans

had no issue buying tickets to support him or the long list of other men accused for sexual and/or domestic assault. Steelers fans are just hiding behind the veil of "supporting the military" to mask their true intention of silencing activists who want to bring an end to racial injustice.

In order to bring change and end racism, we need activists in the NFL to generate these conversations, even if they make us uncomfortable. Steelers fans who wish they could watch a game without "politics" need to acknowledge the privilege they have that racial issues are something they can turn on and off, because people who experience racism do not get that option: it's something they have to deal with from the day they are born until the day they die.

Cassie Scanlon (@cscanlon) is a Staffwriter for The Tartan.

Paola Mathus/Art Editor



## CMU students must work to create community identity



RAPHAEL OLIVIER Junior Staffwriter

Editor's note: Transatlantic Thoughts is a weekly column that examines Carnegie Mellon's student life from a foreigner's

perspective. Find previous install-

ments @thetartan.org.

There are about 13,000 students at Carnegie Mellon. They come from dozens of different countries and have very different cultures. They have lived very different lives, with different experiences. They study different topics and have different passions.

I knew all of this way before my Masters program started. After all, these are well-known facts that you can easily find on Carnegie Mellon's Wikipedia page. The university is proud to hold a large, heterogeneous community, and eager to repeat it in public announcements or Facebook posts. Besides, many universities in the United States or worldwide have an equally rich community. Still, this was a shock.

It was a positive shock, mostly. In the French school where I graduated, only 500 students were admitted every year through a national competitive exam. Before taking it, we studied for two years in classes especially designed to prepare students for this exam, along with thousands of other same program — it focused on science and a whole lot of math. All of us did the same exercises that we found in the same books. And eventually, for those entering this school, all of us had very similar undergraduate courses despite our respective majors.

In other words, we did not have different backgrounds — each student knew about everything the others did in the school and throughout the two years before. There were some international students, of course — but only a hundred, coming from a small set of countries used to sending students in that specific place. A lot of them even came to France before to do that same two-year training program.

Imagine how new the Carnegie Mellon experience is for me! In my own graduate program in computer science, I have met people who have little in common with where they usually had typical undergraduate programs in computer science — but not all of them: one majored in linguistics. In either case their last four years were not like mine. Some of them are Indian, and by talking to them I learned that the Indian selection system for scientific higher education had similarities with the French system — which I never would have guessed before. Some of them worked a couple of years before joining Carnegie Mellon, while my professional experience sums up to two small, mandatory internships. And we came here with different hopes and goals in

And when I widen my horizon to other departments or schools, it's even way more impressive. I have met MBA students, math students and professional musicians, whose backgrounds have nothing to do with mine — which is great!

portunity you have to leave your college or department and meet different kinds of people. And the idea that despite all that separates us we are all Carnegie Mellon students is really amazing.

There is just one small problem. If Carnegie Mellon University students are so different, if we come for such various reasons, to get educations that don't look alike, then what exactly are Carnegie Mellon students? Let's imagine that in ten years I meet a fellow alumnus who was at Carnegie Mellon at the same time as me, but I don't know personally. I honestly don't know what we could talk about, what common memories we could share and smile about. Obviously what courses we followed or which professors we knew wouldn't serve as common ground. So only a few anecdotal points remain. How the campus was. What you thought of

students throughout the country. me. Some of them are American If you haven't had the chance yet, Pittsburgh. A few funny emails, All of us followed more or less the and come from different states. I recommend you take any op- maybe. And memes on Facebook groups.

I think that isn't enough. A university should build a community, and a community is built on things to share. Although a less diverse community may not be very rich or interesting, an overly-diverse one has trouble even existing, because it lacks common ground. I am exaggerating, of course: we still have Carnegie Mellon's motto to share, "My heart is in the work." Admittedly, we all work a lot which also has a drawback, as stated in this column's previous issue. Still, I believe we could share more than that.

But we won't make compromises on student diversity just to have more in common, will we? Of course not — that would be a terrible and stupid sacrifice. So how do you build common ground when you lack common background? Well, the answer lies in the question: by building it. Actively. Through university-wide events, or non-academic projects we could all take part in.

Such things already partly exist. Orientation, for example, is a great initiative — but is only one week long. There are also a lot of student associations, and a couple of traditions: the Fence, the Spring Carnival, etc. Some day this column will tackle them specifically and reflect on how traditions could be more involving for students. In the meantime, this article's point is: participate. Build common ground, and if there isn't enough, make more. And to start with, don't forget to leave your own college sometimes. Not to enhance your resume, but just because in ten, fifteen, twenty years, this will constitute your Carnegie Mellon identity.



Paola Mathus/Staff Artist

Icon by Paola Mathus.

October 2, 2017 « The Tartan thetartan.org/forum » A6

# Apple's Face ID paves way for police abuse and surveillance

**PRATHAM GUPTA** Junior Staffwriter

The Fifth Amendment has been rendered obsolete. Apple's new Face ID is an example of human ingenuity but one that raises a whole host of questions about our privacy and mass surveillance.

There are two main concerns legal and privacy experts have expressed with Face ID. The first and foremost is exactly how much leeway law enforcement has in accessing the data on our phones. The second is whether Face ID could be a prelude to mass government surveillance.

In 2014, the Supreme Court of the United States (SCOTUS) ruled in Riley v. California that it was illegal for law enforcement to search a cell phone without a warrant. Our right to be safe from unlawful search and seizures is protected under the Fourth Amendment. However, a warrant was issued to the Los Angeles Police Department (LAPD) in October, 2014 which essentially allowed the LAPD to treat an arrested suspect's biometric information as physical evidence and not testimonial evidence.

Even though this distinction is seemingly insignificant, one important legal precedent is that physical evidence is not protected under the Fifth Amendment. One's

biometric information is under the same category as DNA, which one can be compelled to give. Worse still, arrested suspects are legally required to provide fingerprints and mug shots, the very biometrics used for Touch ID and Face ID. This dangerous precedent was further supported with an additional ruling by a Virginia circuit court judge in late 2014. Under the ruling, it was established that law enforcement cannot force anyone to give up their passcode as their passwords are protected under the Fifth Amendment; however, biometric info is not and suspects can be forced to provide their fingerprints for Touch ID.

According to Orin Kerr, a research professor at George Washington University Law School and the Director of the Cybersecurity Law Initiative said, "From a legal perspective, I don't see any difference." Since there isn't a definitive landmark case precedent set by the SCOTUS in terms of biometric information protection under the Fifth Amendment yet, Apple's new Face ID definitely seems like trading more utility in exchange for less overall benefit.

Face ID not only utilizes a twodimensional scan to unlock the iPhone but also makes a mathematical model of one's face by projecting over 30,000 points on their face and recording

a three-dimensional (3D) model. Another caveat adopted by Apple has been to ensure that Face ID only works if our eyes are open so that one can't unlock your phone if you're sleeping merely by holding it up to your face.

Yet there isn't a mechanism to detect micro-expressions in Face ID that is capable of detecting whether you're under duress and someone is forcing you to unlock your phone. Therefore, law enforcement or anyone else can simply hold up the iPhone X to our faces to unlock them.

The one coup there is in terms of protecting oneself from unlawful search and seizure of one's personal data is a nifty feature Apple has introduced in iOS 11. If you press the power button on your phone five times, that will disable Touch ID and Face ID, requiring your passcode to enable them again. Or, one can simply power off their phone, and on restarting, your passcode is required to re-enable Touch ID.

Another concern industry experts have professed focuses on how secure Face ID is going to be. For instance, Samsung's "extremely secure" widely touted facial recognition unlock system in the flagship Galaxy S8 was easily fooled by a mere picture. Even though this will not be the case with Face ID due to the 3D facial models iPhones will store, there are certainly other ways Face ID could

be spoofed. Apple has acknowledged that twins can unlock phones and that Face ID won't work perfectly for children 13 or younger "because their distinct facial features may not have fully developed."

and retailers were only convinced to accept Apple Pay after they saw how secure Touch ID was. Since we don't yet know how secure Face ID is, Apple's decision to move Apple Pay from Touch ID to Face ID will remain up for debate.

After Apple unveiled Face ID, U.S. Senator Al Franken (D-MN), Chairman of the Senate Judiciary Sub-Committee on Privacy, Technology and the Law sent a public letter to Tim Cook, CEO of Apple, and outlined questions he had about Face ID technology and how Apple's hopes to protect individual consumer data, specifically one's "faceprint." If someone's password is compromised, they can simply change it. On the other hand, if someone's faceprint is stolen, they can't change their faces.

Another concern Franken had was about the database Face ID was developed with. Phil Schiller, Apple's Senior Vice-President of Worldwide Marketing, claimed that Face ID had been fine-tuned using over a billion images of faces. Senator Franken is understandably curious how Apple was able to obtain access to or able to develop this database and whether the database had sufficient samples from a plethora of ethnicities, genders, and ages.

Franken has requested Apple to make their strategies for protecting their customer's biometric data public and to make the process more transparent. In addition, he is curious as to how Apple will respond if asked to divulge biometric data when faced with a warrant, especially when Apple claims that this biometric data isn't being stored in the cloud or on Apple servers

Apple has attempted to stave off any claims of Face ID being utilized as a tool for mass surveillance or the claim that Apple is creating a massive database of facial scans which it can then sell to third parties or one the government can commandeer the use of by heavily promoting their secure enclave. Schiller assured the audience when introducing Face ID on the iPhone X, that unlike Samsung, all iPhones with Face ID will store all the secure data locally, in a secure enclave built into the phone itself, encrypted to such a degree that Apple itself does not possess the key to decrypt it.

Let's give Apple the benefit of the doubt and assume that their enclaves are indeed secure and hack-proof. That still doesn't protect the average consumer from the biggest customer of their personal data — the government. Recently, Apple had a huge public disagreement with the Federal Bureau of Investigation (FBI) over providing the law enforcement agency with blanket access to all Apple devices. Apple refused.

The only reason Apple prevailed over the FBI, however, is because they challenged the FBI in the courts and won. That will not always be the case. It is inevitable the government will at least attempt to gain access to the huge database of biometric data Apple has the potential to retrieve from their iPhones. Currently, Facebook is the world leader in facial recognition; however, Facebook only controls the software. Apple has unified both the hardware and software for facial recognition in the world's most popular and ubiquitous tech.

Another concern is that certain applications will be granted access to one's biometric information and many third-party applications already do so for Touch ID. Apple now has the additional responsibility of ensuring that even though the aforementioned thirdparty developers can access the biometric info stored in the secure enclave, they can't store or further distribute it.

In fact, Edward Snowden tweeted that, while it's good Apple has a "panic disable," Face ID normalizes facial scanning and makes it mainstream, which has an extremely high potential for abuse and misuse.

A database of biometric info storing even the most basic information has the potential for strangers and law enforcement to identify someone with a simple picture. In addition, facial recognition can be utilized to track someone in real time, a prelude to George Orwell's "Big Brother."

As revealed by Snowden, under the Foreign Intelligence Surveillance Act (FISA) and the therein established FISA courts, the government can issue as many secret warrants as it deems fit. This is especially worrisome as this tactic has already been tried with Yahoo to order them to make a program to scan all their emails for keywords specified by the government.

Even if Apple appeals any order by the government to create a database of their customer's biometric data, there's always the chance that SCOTUS or the FISA courts will simply side with the government in the interest of national security. Certainly, national security is an important concern for the government, however, that does not mean that that certain government agencies should have blanket access to all consumer data.

Big Brother is watching.



# Bills should be passed for impact, not to fulfill promises

**JUHYUNG PARK** Junior Staffwriter

It was less than two weeks ago when Senate Republicans announced another strategic push to "repeal and replace" the Affordable Care Act (ACA): a promise that they had made to their voters back in 2010, when the ACA was first signed into law. "[The Graham-Cassidy Bill] would repeal the pillars of Obamacare and replace the failed law's failed approach with a new one, allowing states and governors to actually implement better healthcare ideas by taking more decision-making power out of Washington," said Senate Majority Leader Mitch McConnell (R-KY), on the Senate floor.

Developed by Senator Lindsey Graham (R-SC) and Senator Bill Cassidy (R-LA), the "Graham-Cassidy Bill" was to essentially apportion some federal funding allocated under the ACA to

of the bill, however: the Sept. 30 deadline and the need for at least 50 votes from the chamber. Last Tuesday, Sept. 26, less than 24 hours after Senator Susan Collins (R-ME) declared her opposition, the Graham-Cassidy Bill was announced dead, not even putting the legislation up for a vote on the floor. "We're coming back to this after taxes," said Graham. "I

states in the form of federal

block grants, giving states more

flexibility and discretion to use

healthcare funds. Two main

problems threatened the success

believe this is the most important thing I can ever do for the country working with my colleagues is not to just repeal Obamacare but to replace it with a system closer to where you live, controlled by people you can vote for." In addition to Collins, Senator

John McCain (R-AZ) and Senator Lisa Murkowski (R-AK) were responsible for the Republican leadership's final decision to scrap the bill — with three Republicans opposing the proposal, the leadership had no confidence to put the bill up for a vote. "I cannot in good conscience vote for the Graham-Cassidy proposal," said McCain in a statement on Sept. 22. "I believe we can do better working together, Republicans and Democrats, and have not yet really tried."

McCain has referenced to something very important bipartisanship. here: While it has been a common phenomenon to vote along party lines when it comes to issues like

healthcare, McCain — who now seems to be playing the role of the moderate, pragmatic conservative — has shown us that he cares more about the content and impact of the legislation than the passage of the bill itself.

Regardless, President Donald Trump expressed his discontent for these Senators. "We were very disappointed by a couple of Senators, Republican Senators I must say." he said. "At some point there will be a repeal and replace, but we will see whether that point will be now or shortly thereafter. But, we are disappointed at certain so-called Republicans."

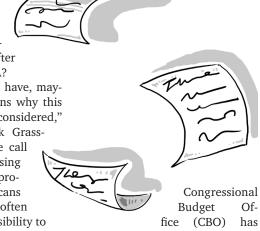
Democrats, on the other hand, celebrated. "From one end of America to the other, the Graham-Cassidy bill would have been a health-care disaster," commented Senate Minority Leader Chuck Schumer (D-NY). "Our colleagues had no choice in the face of opposition from one end of the land to the other."

This, in fact, is far from the first effort by Republicans to repeal the ACA. From the American Health Care Act to the Better Health Care Reconciliation Act to the Obamacare Repeal Reconciliation Act to the numerous proposals drafted by individual Senators, Republicans in Congress have repeatedly pursued a replacement for the ACA in the past few years. As a matter of fact, the ACA is, indeed, in need of serious reform. According to The New York Times, insurance premiums are set to rise in 2018 due to insurers "citing the Trump administration's hostile policy messages as a substantial reason for higher prices." So, the question is, why hasn't Congress found a solution yet, seven years after the passage of the ACA?

"You know, I could have, maybe, give you 10 reasons why this bill shouldn't be considered," stated Senator Chuck Grassley (R-IA) in a phone call with reporters discussing the Graham-Cassidy proposal. "But... Republicans campaigned on this so often that we have a responsibility to carry out what you said in the campaign. That's pretty much as much of a reason as the substance of the bill."

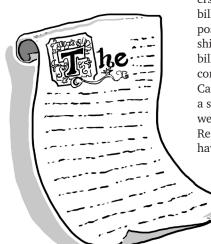
Frankly, Grassley — though heavily criticized for the above statement — said it all. In too many situations, especially when dealing with polarizing issues such as healthcare, the prevailing attitude of politicians — both left and right — is that they desperately need to get legislation passed regarding their campaign promises, regardless of the "substance of the bill." Yes, it is important for representatives to keep their word and fulfill promises. However, shouldn't we expect policymakers to be equally considerate of the quality and the impact that their bill will have on the American people?

Perhaps, this is the reason why Congress has yet to replace the ACA with a more sustainable solution. When it comes to decisive issues like healthcare, a rushed bill simply won't do. As such, the



recently shed light on the lack of long-term thought put into many of the recent "replace and repeal" efforts, including the Graham-Cassidy proposal itself which was projected to leave millions more without comprehensive health insurance.

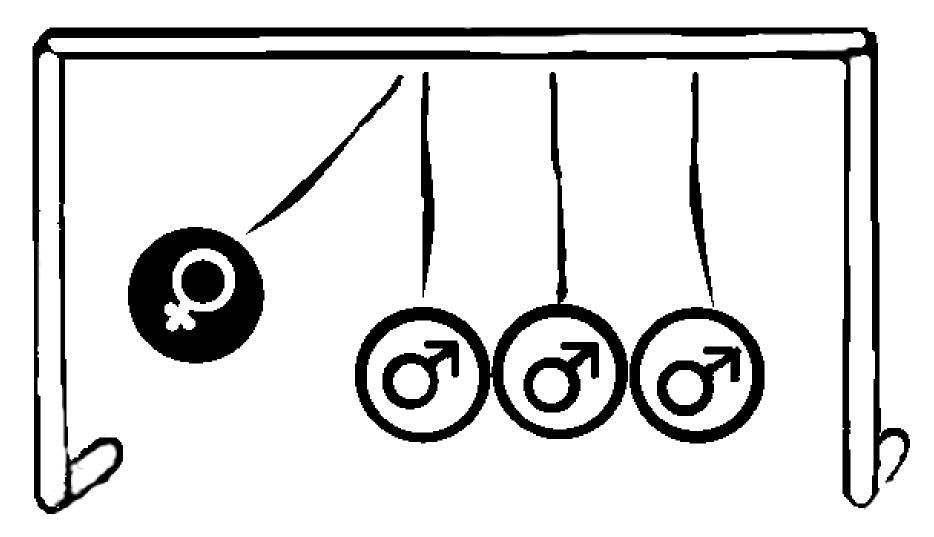
In this regard, we go back to what McCain mentioned: the most tenable and balanced solution requires bipartisan dialogue. This healthcare impasse is neither political sustainable nor economically viable. Voting across party lines and rushing bills through the Senate floor should no longer be condoned: we ought to expect higher standards of our representatives. Politicians, on both sides of the aisle, should stop treating policymaking as opportunities to add new items to their resume. In essence, Congress should never pass bills just because they were promised; Congress should pass bills because they can make a positive, lasting impact.



Paola Mathus/Art Editor

# Science & Technology

# Statistics don't represent implicit gender bias in STEM



Rebecca Enright/Junior Staff Artist

**SARAH KIM** *Junior Staffwriter* 

There are two assumptions about science, technology, engineering, and mathematics (STEM) that are so reinforced by society that they are now almost accepted as truths. The first is that STEM is probably the most explicitly gender-divided area of academics, since men outnumber women by so much. The second is that this feeds a vicious cycle of more women being unwilling to join STEM fields simply because they are perceived as minorities in those areas. But, regardless of how socially accepted these assumptions are, to what extent are they true? If true, where do these so-called "facts" come from?

The very first step is to examine the reality of STEM fields. Contrary to what most people consider to be true, men do not outnumber women in all STEM fields.

Studies from National Science Foundation show that for the past two decades, women in the biosciences, social sciences, and mathematics received more than 50 percent of the bachelor's degrees, meaning they cannot be considered minorities in those areas anymore. The biggest differences in the number of bachelor's degrees earned between men and women in computer science and engineering, two fields still considered to be primarily studied by men. However, the gender gap becomes much more evident after the undergraduate level of studies. Women have been earning fewer than 30 percent of the Ph.D. degrees in computer science, engineering, mathematics, and the physical sciences since 1991.

The same pattern appears in the workforce. Although women account for half of

the workforce in the United States, fewer than 25 percent of the STEM industry is occupied by women, according to the US government's Economic and Statistics Administration. This indicates that even women with STEM degrees are relatively less likely to pursue STEM career paths than their male counterparts.

So, the common belief that the gender discrimination in STEM is explicit and can easily be represented by statistics is wrong. Gender differences are rather more implicit, as it is being perpetuated by a cycle that is very difficult to uproot.

Then where does the cycle even begin? From when do women start facing barriers from following STEM career paths relative to men?

Sharon Traweek, associate professor in the Department of Gender Studies at the University of California, Los Angeles, spent years

"observing physicists, attending research meetings, interviewing faculty, staff, students, and more," and found a community of people who claim to have "no culture." However, she noticed that the same people were simultaneously reinforcing a culture of seeing physics as empty of emotion and void of human influence — in other words, cold and rational. Thus, these characteristics have become the stereotypes of what a scientist looks like. In a society where implicit gender stereotypes are still somewhat prevalent, such descriptions of the ideal "scientist" (regardless of whether they are true) may present barriers for women's participation in STEM. Another particularly recent issue that has come up regarding women in STEM is the potential grading bias that exists even at the high school level. An analysis of eight years of data shows

that there were consistent gaps in the performance of male and female students solving questions regarding projectile motion: the motion of an object subject only to the force of gravity.

Though we do not know exactly what we can credit the relatively large performance gaps (25 to 30 percent difference) to, we need to ask ourselves if certain topics, especially the fundamental ones like projectile motion, present disadvantages to certain genders.

When this is combined

When this is combined with the fact that, as proven through studies performed in several German-speaking countries, inexperienced physics teachers tend to give better grades to male students than female students we can see the disadvantages women face from the early stages of their involvement in STEM.

Much has been done to get rid of this gender bias.

The Massachusetts Institute of Technology, perhaps the hub of development in engineering and the sciences, specially offers programs like the Women's Technology Program to "spark high school girls' interest in the future study of engineering and computer science," the two areas where the number of females is most deficient. Even on our own campus, there are clubs like Women in Science that encourage women to be more active participants in STEM activities. With such programs providing sparks to push girls to study the sciences, perhaps, in a future not too far from our time, issues about women being underrepresented in STEM will be long-disputed and outdated.

But for now, the fact that society needs to provide special programs dedicated to women hoping to pursue careers in STEM should keep us thinking.

HOW STUFF WORKS

# Why don't poison dart frogs poison themselves?

EMMA FLICKINGER
Staffwriter

The poison dart frogs of Central and South America are some of the world's deadliest creatures. The largest poison dart frogs are the length of a paper clip (the smallest are barely half an inch), yet the poison in their tiny bodies is 200 times stronger than morphine, and the amount of toxin in a single frog can kill a water buffalo. so why doesn't it kill the frog?

Frogs acquire the posion throught their diet of mites and ants; they don't make the poison themselves. They use this poison to paralyze their attackers, which is often done in nature by attcking the nervous system.

Thus, frogs resist the action of the toxins by developing mechanisms to not allow the toxins to bind with the crucial protein whose function the toxins would disrupt or modify.

The toxin found in many poisonous frogs is a neurotoxin called epibatidine. Chemically, it resembles the compound acetylcholine, which facilitates communication between nerve cells.

Because of their molecular similarities, epibatidine and acetylcholine bind to nerve receptors in the same spot.

When a predator eats a poisonous frog, the epibatidine binds to the predator's nerve receptors, replacing acetylcholine. This disrupts crucial nerve functions, paralyzing the predator.

To find out why the frogs are immune to epibatidine, University of Texas biologist Rebecca Tarvin and her colleagues studied the frogs' acetylcholine receptors. Tarvin's team found that the receptors had mutated slightly: they accepted acetylcholine as usual, but the mutated shape no longer allowed epibatidine to bind. By ensuring that only acetylcholine can enter the receptors, the mutation protects the frogs from their own poison.

The mutation's precision and specificity amazed the biologists who discovered it. "It almost seems unlikely that something like that would evolve," says Tarvin.

Yet, it did evolve — and not just once,

See FROG, A8



Courtesy of Sascha Gebhardt, via Flickr Creative Commons

The poison dart frog, characterized by its brightly colored exterior, has enough toxin in its body to kill a water buffalo. The poison contained in its body doesn't affect it because it has mutated acetylcholine receptors that don't bind to the paralysing neurotoxin—epibatidine.

from FROG, A8

but at least three separate times on the poisonous frog family's genetic tree. "This is beautiful... a very rare insight into how evolution works and how neurobiology works," said venom specialist Zoltan Takacs.

Calling this finding "very rare" isn't an overstatement. Researchers know that they obtain the toxin from their diet, but its specific mechanisms are not known. Biologists have found over 800 poisons in various species of frogs, but only a few dozen are understood. "Tracking down these toxins' sources and learning more about how animals evolved resistance also offers insights that could hit close to home," says Butch Brodie III, a biologist from the University of Virginia who reviewed Tarvin's research.

Venomous animals are an untapped source of potential in many bio-chemical applications. While, many of these animals, such as the King Cobra, stingrays and even a caterpillar that causes severe internal haemoragging are deadly, they could have the answer to curing Lyme disease, diabetes and Alzhemier's, according to an article in the National Geographic.

The toxins that are understood are rapidly finding applications outside the rainforest. Biomedical researchers are working on developing epibatidine into a painkiller similar to morphine, but without the dangerous side effects.

Many medical contributions and other applications have arisen simply from studying the frogs in order to understand them - how their bodies function, how they've evolved, and how they fit into their ecosystem. The tiny, colorful frogs are worth studying not just because they might benefit humans, but because they are amazing creatures in their own

# MIT's 'origami' robots can switch exoskeletons and tasks quickly

**NAVIYA SINGLA** SciTech Editor

Researchers at MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL) recently published a study in Science Robotics that explains "origami robots" that fold in-and-out of different exoskeletons that help them navigate over various types of surfaces and perform different types of motion. The robot that they describe can "change" into four different skins — a glider that allows to "fly", a wheel that it can use to roll for faster motion, a walker, and a boat-like skin that allows it to sail.

In an article in Science Daily, Daniela Rus — a robotics researcher at MIT and one of the co-authors of the study, says "It's almost like putting clothes on the robot to give it different kinds of powers,"

Conventional robots operate with specific physical parts that perform a single function. This specialization of components leads to bulky, non-portable and often, expensive products.

However, these robots use several self-foldable skins and the same mechanism to control them all. As quoted in a press release, Rus says, "If we want robots to help us do things, it's not very efficient to have a different one for each task... With this metamorphosis-inspired approach, we can extend the capabilities of a single robot by giving it different 'accessories' to use in different situations."

At a very basic level, these robots are composed of a metallic core that is made of magnetic coils of wire called solenoids, in a cube that is only a few millimeters in length. These solenoids are used to control these tiny machines.

The core is then wrapped in origami sheets, that are basically made of heat-shrinking material placed between two layers of polyester. The heat-sensitive material in between the polyester sheets is exposed along the fold-lines. Thus, when this robot was placed on a heating pad at a temperature of 65 degrees Celsius, the heat-shrinking material behaves according to its folds and folds into the shape of a skin; it walks, glides, rolls, or sails, depending on what skin it has on.

Researchers then combined these Walk-bots, Wheel-bots, Boat-bots, or Glider-bots into bigger bots, with more sophisticated exoskeletons using water-soluble claps that the bots could use to move through or discard the exoskeletons.

The origami robots have a lot of potential due to their adaptable nature. Be it minimally invasive surgeries, space travel, natural disaster response, or deep-sea mining operations these robots open up opportunities for a revolution in human-robot partnerships.

# Write for SciTech scitech@thetartan.org

SCITECH BRIEFS

#### **Bubbling of ice** could explain the beginning of life on Earth

Scientists at the Hokkaido tion and temperature on a mixture of water, ammonia and methanol. This combination of compounds is typically found in birthplaces of stars - comets and interstellar clouds.

They experimented at the temperatures at which ice forms, negative 263 degrees Celsius and negative 258 degrees Celsius, and then irradiated the ice to create conditions closest to that of a young star.

From negative 208 to negative 123 degrees Celsius, they found that ice undergoes bubbling, similar to that of champagne and carbon dioxide, only with hydrogen whose levels had increased as the bubbling occurred. The amount of ammonia, methanol and radiation affected the amount of bubbling.

Also, from about negative 185 degrees Celsius and negative 161 degrees Celsius, the ice seemed to flow like refrigerated honey. After both of these effects, it has become possible to explain chemical reactivity at very low temperatures and hence, it has become possible to explain the formation of molecules that are essential to life, which could potentially be crucial to understanding how life as we know it, started on Earth.

Source: Science News

#### **SpaceX presents** mega-rockets for point-to-point travel on Earth

At the International University in Sapporo, Japan Astronautical Congress (IAC) studied the effects of radia- in Adelaide, Australia, on Sept. 28, Elon Musk, entrepreneur, business giant, inventor and visionary, proposed using the BFR for point-to-point travel on Earth, at the price of an economy air-line ticket.

> The BFR is a type of rocket that would, in addition to doing all the work that current SpaceX vehicles do and interplanetary travel, would make what people consider to be long-distance journeys on Earth to be much shorter. The advertisement video for the BFR states that the London to New York journey which is typically eight to nine hours long would take only 29 minutes. These ships are insanely fast, flying at 18,000 miles per hour. From the time that the BFR was first pitched, it has grown much smaller in size at 106 meters in length and 9 meters wide. Though that still seems to be large, Musk says that, with the second presentation, it has become more cost-effective.

> He explains, according to an article on the BBC website, that cost-effectiveness was increased by focusing on a single system that could fulfill all the different needs of the company. In an article on Verge, he hopes to begin production on these rockets in six to nine months.

Source: BBC

#### 2011 tsunami carried new aquatic species to the U.S.

In 2011, Japan was struck by a devastating tsunami triggered by a 9.0 magnitude earthquake that occurred only a short while before the tsunami. The 125 foot tall wave swept many objects, debris into the ocean.

Clinging to the debris was coastal and aquatic life off the coast of Japan, which floated all the way to the coast of the U.S. and Hawaii.

The study of these species new to the U.S. Coast started in 2012 and ended recently. Even as the study was concluded, scientists were counting new species into the 289 discovered ones.

Scientists found types of mollusks such as mussels, and forms of sea-anemone and jellyfish on the coast. These species typically wouldn't be expected to venture on or survive a transatlantic trip.

In an article in Science Daily, Greg Ruiz, a co-author and marine biologist at the Smithsonian Environmental Research Center explains, "I didn't think that most of these coastal organisms could survive at sea for long periods of time... But in many ways they just haven't had much opportunity in the past. Now, plastic can combine with tsunami and storm events to create that opportunity on a large scale."

Source: Science Daily

Compiled by **NAVIYA SINGLA** 

Carnegie Mellon University

FamilyVeekend



**Friday** October 13, 2017 8 p.m.

**Wiegand Gymnasium Cohon University Center** 

Enjoy an evening of comedy with performers who really know Washington!



For ticket information visit cmu.is/capitol-steps



SPORTS BRIEFS

#### **Football**

The Carnegie Mellon football team traveled to Bethany, WV, on Saturday to play the Bison and came away with a 45-14 victory in a Presidents' Athletic Conference (PAC) contest. Carnegie Mellon improves to 5-0 over and 3-0 in the PAC while Bethany is now 0-5, 0-3. The Tartans' 5-0 start to the season marks its best since 2006 and is just the 12th time in program history a team has started the season with five straight wins.

Senior wide receiver John Prather tied the school record for most receptions in a game, finishing with 10 catches for 122 yards and added a career-best four touchdowns, all in the first half. This marked Prather's eighth 100-yard career game and third this season. Junior quarterback Alex Cline threw for a career-best five touchdowns and passed for 127 yards on 11-of-22.

Senior Stanley Bikulege moved into third on the school's all-time tackle list after totaling five tackles. He now has 240 tackles for his career. The defense was led by junior cornerback Ethan Anderson with nine tackles, five solo. Senior linebacker Quentin Wolfe recorded eight tackles including five solo, and first-year safety Chandler Stacy ended with seven tackles, four solo. The first-year also added a 40yard interception return for a touchdown early in the fourth quarter.

Bethany outgained the Tartans 296-238, but Carnegie Mellon capitalized on the Bison's three turnovers and 20 penalties for 205 yards. The Tartans were also perfect from inside the red zone, converting all five opportunities.

Cline tossed five first-half touchdowns, four of them going to Prather. The tandem started the game's scoring with a 28-yard strike at the nine minute mark of the first quarter. Four minutes later, the Tartans made the score 10-0 on a 33-yard field goal by senior punter and kicker Tyler Kohman.

On the first play of the second quarter, Cline hooked up with senior wide receiver Tommy Mansfield on a five-yard touchdown reception, which made the score 17–0. The sevenplay, 37-yard scoring drive started following a fumble recovery by senior defensive lineman Neal Baranosky which was forced on a sack by Anderson and sophomore Michael Lohmeier.

Carnegie Mellon senior linebacker Sean Graff intercepted the ball on the first play of the Bison's ensuing possession which led to Cline and Prather's second scoring connection of the game, 9-yard strike to make the score 24-0. The two struck again for scores from 14 yards and 5 yards out before the end of the half, as the Tartans went into the half with a 38-0 lead.

Bethany held the Tartans to a three-and-out on the opening possession of the second half and then marched 80 yards on six plays for its first score of the game. Two minutes into the fourth quarter Stacy's interception return made the score 45-7 before Bethany's backup quarterback threw a 20-yard touchdown for the final score of the game

Carnegie Mellon will return to Gesling Stadium on Saturday, Oct. 7 to face 17th-ranked Washington & Jefferson College.

#### Volleyball

10th-ranked Carnegie Mellon volleyball team opened University Athletic Association (UAA) play with a mark of 1-1 on Saturday at Case Western Reserve University. The Tartans are now 17-1. The Tartans opened the UAA Round Robin with a 3–1 (26-24, 25-19, 11-25, 25-16) setback to the host Spartans before topping New York University 3–1 (25-18, 23-25, 25-19, 25-

Against Case Western Reserve, four Tartans tabbed double digit kills with junior Lauren Mueller leading the

way with 20. Senior Eliza Donohue totaled 13, senior Heather Holton had 12, and junior Sarah Jurgens ended with 10. Sophomore Maia So-Holloway tallied 32 assist while junior Amanda Thiele had 23.

Defensively, sophomore Kayla Yew recorded 27 digs and Mueller and junior Sydney Bauer had 19 and 12, respectively.

In the win over NYU, Mueller again led the team with 20 kills. Donohue and Jurgens again also totaled double digit in kills with 11 and 10. So-Holloway and Thiele each had 23 assists apiece. So-Holloway and Yew recorded three service aces while Yew led the defense with 35 digs.

The Tartans continue UAA play on Sunday with a 12 p.m. start time against 18th-ranked Washington University in St. Louis.

#### Men's Tennis

The Carnegie Mellon men's tennis team began play at the Intercollegiate Tennis Association (ITA) Southeast Regional on Saturday, Sept. 30 with three singles players and four doubles pairs advancing to the round of 16.

Junior Daniel Levin the top-ranked player at the tournament and he breezed through the first two rounds with a 6-2, 6-2 win against Dickinson College and a 6-1, 6-0 win against the University of Mary Washington. Fellow junior Chaz Downing also won his first two matches as the fifthseeded player. Downing topped Christopher Newport University's singles player, 6-2, 6-4, and Salisbury University's singles player,

4-6, 6-1, 6-2. First-year Ray Boppana was the third singles player to win twice Saturday. He won his first match of the day against Averett University, 7–5, 6–4. The first-year player then topped Haverford College in the round of 32, 6-2, 6-0.

Three of the four doubles teams had first round byes while senior Tommy

Cheng and first-year Kailas Shekar won twice. Cheng and Shekar opened the day with an 8-1 win against Shenandoah University. The pair then upset the number one seed of Christopher Newport with a 9-8 (7-4) victory.

Downing and Levine worked together as a fourseed to win 8-2 in the round of 32 to top the University of Mary Washington while first-year Ben Ash and sophomore Robert Levin, seeded fifth, won 8-3 against Goucher College's pair.

Boppana and sophomore Nicholas Calzolano are seeded ninth and picked up an 8-2 win against Virginia Wesleyan University to advance to the round of 16.

Both singles and doubles play will continue on Sunday, Oct. 1 on the campus of Mary Washington.

#### Women's Tennis

Carnegie Mellon women's tennis was well represented on the final day of competition of the ITA Southeast Regional Championships, owning the doubles final with two players competing in the singles semifinals. Sophomore Vinaya Rao and first-year Melissa Strome were crowned winners of the doubles championship after topping their own teammates in a third set

super tiebreaker. Senior Cori Sidell and sophomore Courtney Ollis won the first set against Rao and Strome, 7-5. The winning pair then forced the third set tiebreaker with a 6-2 second-set victory. In the tiebreaker, each pair traded points until Rao and Strome came through with a 10-8 win.

In singles action, firstyear Hannah Rosenfield was ousted from the tournament in the semifinals after a hard-fought two-set match against University of Mary Washington's player, 7-5, 6-3, who eventually was crowned champion. Sophomore Vinaya Rao also played in the semifinals and fell to Johns Hopkins

University's player in three sets, 6–1, 6–7(3–7), 6–1.

Rao and Strome move on to the ITA Oracle Cup to be played at Berry College in Rome, GA on Friday, Oct. 13 through Sunday, Oct. 15.

#### **Women's Cross Country**

The Carnegie Mellon women's cross country team competed at the Paul Short Invitational hosted by Lehigh University on Friday, Sept. 29 and finished sixth in the non-Division I race. Senior Aparna Alavilli paced the Tartans with a secondplace finish.

Alavilli's time of 21 minutes and 24 seconds across the 6K course was second only to the winner of Amherst College. It was the second race of the year Alavilli finished in the top two. Behind Alavilli for the Tartans was sophomore Abigail Levine in seventh place in 21:47. Sophomore Kate Reilly was next to finish the course for the Tartans, in 22:42 for 32nd place.

First-year Parvathi Meyyappan ran the race in 23:28 for 71st place while sophomore Emmalyn Lindsey was 78th in 23:34. Not far behind was first-year Isabelle Chickanosky in 94th place in 23:56 with senior Rhiannon Farney placing 104th overall in 24:10.

The Tartans will be in action next on Saturday, Oct. 7 at home for the Carnegie Mellon Hampton Inn Pittsburgh Invitational. The race will be in Schenley Park and is set to begin at 10 a.m.

#### Men's Cross Country

16th-ranked The Carnegie Mellon men's cross country team finished third in the non-Division I race at the Paul Short Invitational hosted by Lehigh University on Friday, Sept. 29.

Junior Aadi Mhatre paced the Tartans by finishing the 8K race in 24 minutes and 59 seconds. His time put him 17th overall. Fellow junior Jared Moore was 26th overall in 25:15 while sophomore Liam Walsh closed the race in

25:18 for 29th place.

Junior William Mitchell finished the course in 25:19 for 31st place before senior Jordan Safer finished in 25:26 and 35th place. Sophomore Evan Yukevich wasn't far behind Safer, as he finished the race in 25:29 for 37th place and junior Andrew Harter was two seconds behind Yukevich in 39th place.

The Tartans will next race at the Carnegie Mellon Hampton Inn Pittsburgh Invitational on Saturday, Oct. 7 in Schenley Park.

#### Women's Golf

The Carnegie Mellon women's golf team placed third at the 2017 Allegheny College Invitational after carding 36-hole score of 646 (332-314) while first-year Charlotte Simpson claimed individual medalist honors on Monday afternoon. The two-day event was hosted at the par 73 Country Club of Meadville.

Simpson ended the invitational with a 149 after she carded a collegiate-best round of one-over par 74 on Monday to go with her 75 from Sunday's opening round. Her 149 is the program's lowest tworound school record by four strokes. The Tartans' 646 is the third lowest two-round score in the program's

Senior Summer Kitahara carded a two-over par 75 on Monday and ended tied for fourth individually with a 160 (85–75). Sophomore Yedin Lui shot a 165 (85-80), sophomore Lavonca Davis fired a 172 (87-85), and first-year Cristina Pullen ended with a 183 (87-96).

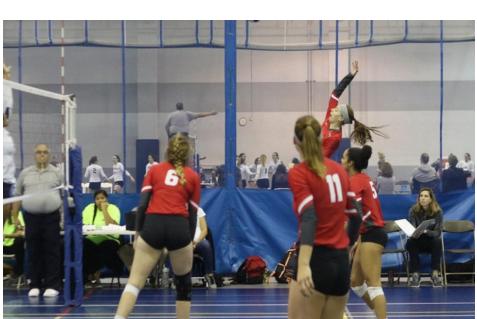
The Tartans had one individual enter the invitational, as first-year Shanice Lam shot a 174 (89-84).

Carnegie Mellon will travel to Lexington, VA on Oct. 2-3 to play in the Generals Invitational. The two-day event is being held the Lexington Golf and Country Club.

> Compiled by IAN TANAYA



Junior quarterback Alex Cline identifies an open target. The Tartans dominated on offense and defense.



October 2, 2017 « The Tartan thetartan.org/sports » A10

# Women's soccer ready as Men's soccer opens UAA UAA competition begins play with win against NYU

Junior Staffwriter

As junior defender Emily

Tolmer sprinted down the soccer field after a day of classes, she realized her exhaustion. After the ordeal, she sat on the benches and looked over at her similarly exhausted teammates and knew they were the reason she pushed herself so hard. The new fitness standards that the women's soccer team implemented this fall force players to train harder both mentally and physically — in order to make the team.

"This year, there was more of a mindset that everyone was to earn their position on the field. It wasn't based off of any of your past achievements or anything that you've done; it was basically a clean slate where you had to come in and work to earn your position," said Tolmer.

The new fitness standards made training more competitive this year. The standards consisted of shorter times for traditional training requirements, including the beep test, full-field sprints, long sprints, and shuttle sprints. The challenge of these new standards forced players to overcome both physical and mental barriers and helped foster the respect they had for each other.

"I think having respect for each other is just trusting different players on the field and every teammate. I know in the past our team has dealt with a lot

of injuries or just personal change on the field and I think that everyone is working so hard [that] it makes you comfortable playing on the team and knowing that anyone who steps on the field has earned their position on the team. We demanded so much more from each other than in years past," said Tolmer.

While, of course, every team's goal is to win nationals, the women's soccer team believes that their new training standards will help them to accomplish this goal. In order to make it to nationals, the team has to first either win their conference or, when compared to other teams, perform well based on their record, schedule, and teams played. If these requirements are met, the team is able to play in the NCAA tournament and has the opportunity to make it to the final four.

"The goal is to win a national championship. This season [when] we were expected to come in a lot more fit than... in the past, we could immediately start training at our top speed and level, which has led into our game speed," said first-year midfielder and defender Hannah Anderson.

While the team has found the new standards to be helpful in preparing for both their games and the championship, they believe that fitness is only one of many aspects players need to grow.

"We're holding each other accountable to a higher level of play in all aspects:



Tolmer in a game against Emory.

fitness is just one. We always say we're not a track team, we're a soccer team that just happens to work really hard on fitness because that enables us to focus more on our play," said Tolmer.

This mentality was important to keep in mind as the team opened University Athletic Association (UAA) play against New York University on Saturday. The Tartans earned a 1-0 victory against the Violets.

Senior forward Haili Adams put in the game winner and her seventh goal of the year in the third minute. Senior defender Katie Strycharz played a ball along the sideline to sophomore forward Ryan Casey who raced down to the goal line. Adams was there to loft a shot over the keeper to the far post.

First-year goalkeeper Carolyn Botz was credited with the win and shutout after making two saves.

The women's soccer team remains confident in their ability to make it to the final four. Until then, the team is taking this season weekend by weekend but keeping the championship in the back of their minds.



The men's soccer team pressures New York University's defense, keeping the ball away from their side.

Sports Editor

12th-ranked The men's soccer team opened up University Athletic Association (UAA) play against New York University (NYU) on Saturday. The Tartans won 3-1, advancing to 7–1–1 for the year (1–0 in the UAA) while the Violets move to 5–2–1.

Both sides started the game aggressively, with NYU taking their first shot within the first minute of play. In the third minute, junior forward Anthony Guili attempted a shot blocked by NYU's goalkeeper. On the rebound, junior midfielder Zack Masciopinto successfully scored his fifth goal of the season on a header to give the Tartans the early 1-0 advantage. Shot attempts stopped until the 29th minute after an NYU

shot went wide. In the 32nd minute, junior midfielder Jamie Wheaton's shot was blocked by the goalkeeper. In the 34th minute, sophomore midfielder Elliot Cohen also made a shot that was saved by the opposing goalkeeper. No further shots were attempted in the

In the second half, the Tartans regained the offensive. In the 51st minute, a corner kick from Guili was deflected by junior defender Greg Bellwoar into the net for his second goal of the season, putting the Tartans up 2-0. In response, NYU proceeded to make a goal in the 56th minute, cutting the Tartan lead to 2–1. The Tartans then went back to pressuring NYU's defense, with Masciopinto attempting a shot that hit the post and sophomore midfielder Jack Painter following up on a shot that had to be saved by the goalkeeper. In the 66th minute, Masciopinto managed to get the ball around the goalkeeper to make his sixth goal of the season, putting the Tartans up 3–1. The Tartans continued to keep up the pressure with Masciopinto attempting another header off a corner kick in the 73rd minute and Wheaton having an attempt go wide in the 74th minute. Senior forward Ryan Stinebaugh's header shot in the 81st minute missed, as did sophomore midfielder Cooper Tubiana's header shot in the 83rd minute. NYU attempted to rally for a comeback, shooting in the 87th, 88th, and 89th minutes. The first went wide, the second was saved by junior goalkeeper Alec Lam, and the final one went high.

The Tartans will next host Penn State Behrend on Tuesday, Oct. 3 at 7 p.m.

# Villanueva shows backlash over NFL anthem protests

**MEL KERBER** 

Junior Staffwriter

Alejandro Villanueva is many things to the people of Pittsburgh: starting left tackle for the Pittsburgh Steelers, a part-time graduate student at Carnegie Mellon's Tepper School of Business, and most recently, the focal point of a media storm launched on Friday night by President Trump. Prior to the Pittsburgh Steelers game last Sunday, head coach Mike Tomlin released a statement confirming that he and his players would remain in the locker room during the anthem after the National Football League (NFL) released a statement of unity and support. When it came time to start the anthem, the Steelers dutifully began to exit the field — save for Villanueva. He was photographed standing at the front of the tunnel to the locker rooms, the only Steeler participating in the anthem.

NFL players kneeling during the anthem is comparatively old news, as Colin Kaepernick began kneeling at the start of the 2016 season to protest police brutality and racial injustice. Various other players participated, but the focus remained on Kaepernick. Now out of the league, Kaepernick's protests and motivations have fallen behind the words of Trump, NFL owners, and sports reporters nationwide.

Within hours, Villanueva became a symbol against the protests, which were performed in some form at every single Sunday game. The Army veteran's jersey swiftly became the highest



Left tackle Alejandro Villanueva became a counterprotest symbol.

selling jersey in the NFL. Yet in an interview after the game, Villanueva claimed he was following his teammates when he got stuck behind other personnel on the field. Although his plan was to remain hidden in the tunnel, he found himself still on the field as the anthem began, and chose to remain. Later, Steelers quarterback Ben Roethlisberger was quoted that he regretted the team's decision to remain in the locker room.

On a weekend where the NFL tried to push unity, the tension between Steelers teammates reflects the tension now brought between fans of the NFL. The protests were never about unity at the beginning, or the flag, or disrespecting the military. They were, and always have been, focused on the real issues of racism in the United States. After the Steelers game, a fire chief in Washington County, PA leveled a racial slur at Tomlin on Facebook, and people were reportedly covering Steelers flags in swastikas. In the span of a weekend, professional football dramatically reflected the state of race relations in America right in the faces of the general public. Outcries of keeping politics out of sports persist,

as if including the anthem

in and of itself is not a political statement. But sports fans were not prepared to face the harsh reality that came to light. By exercising their first amendment right to free speech, the black athletes kneeling for the anthem were defamed in the media by the President of the United States.

And yet the original focus has been lost. Postgame interviews speak of protesting the anthem or protesting the flag, ignoring Kaepernick's original statements when the protests first began. The NFL, similarly, cushioned themselves in stating that any actions during the anthem would be in solidarity and unity, as if they were not protests

Surely it was not the Steelers' intention to reflect centuries of turmoil in the few minutes it takes to sing the national anthem. And yet, as the displays continue into the newest weekend of football, it does not seem that any of this is going to stop quietly. The President inserted himself into sports, and now sports are responding. Like it or not, the NFL can no longer be depoliticized, but even as it strives to be a singular league, it does not look like it will ever truly be united either.

# Fantasy football: turmoil matches eventful reality

**MARIKA YANG** 

Assistant Sports Editor

The third week of the football season was quite eventful — both in real life, and in The Tartan's fantasy football league. With some performances stunning from unexpected players, and several disappointments, we had both a blowout and a nail-biter. My team still has not managed to win a single game, living up to its name. I started the season confident, but now I'm contemplating if I should make it my goal to lose every single game in attempt to keep my dignity. Here are the highs and lows of this week of fantasy football.

Team Andah over Third-String Team 182.7-106.4

This week I faced off against staffwriter Josh Andah's team, getting handed not only my third consecutive loss, but easily the worst one, getting blown out by a whopping 76.3 points. Maybe I need to start using Andah's strategy, which is no strategy at all. Andah's hands-off approach has proven effective. After lackluster performances last week from Seattle Seahawks quarterback Russell Wilson and Chicago Bears running back Jordan Howard, Andah's commitment to them payed off, giving him 65.1 points between just the two of them. All of his roster performed well, earning him the most points by any team

On the flip side, my team was hindered by an underwhelming week from many of my key players, including

so far this season.

Atlanta Falcons quarterback titular player underper-Kelce, who carried my team last week, and Oakland Raiders wide receiver Amari Cooper, who has failed to live up to my expectations. But worst of all was a detrimental negative six points from the Baltimore Ravens defense, my hometown team. The blowout wasn't as bad as it could have been with breakout weeks from wide receivers A.J. Green of the Cincinnati Bengals and Brandin Cooks of the New England Patriots. I suppose there's always next week.

Yes We Cam over Justin Tucker Must (not) Die 125.9-124.8

Getting her third victory to stay undefeated and at the top of the standings, Editor-in-Chief India Price won by 1.1 points, and needed fantastic performances across the board to pull past Contributing Editor Lula Beresford's team. New York Giants star wide receiver Odell Beckham Jr. had his first great game of the season, with nine receptions, 79 yards, and two touchdowns, adding 28.9 points to Price's total score. Despite throwing two interceptions, Giants quarterback Eli Manning still earned 22.6 points.

After losing in week one with the lowest league score, Beresford has become a real fantasy football threat, putting up a fight against the reigning champion. Her team was bolstered from point-performances from four players, including Green Bay Packers quarterback Aaron Rodgers with 24.8 points. However, her

Matt Ryan, Kansas City formed, with one sole point. Chiefs tight end Travis Beresford's team is a force to be reckoned with when the roster plays to expectations, and it's definitely one to watch out for.

> Easy Breesy over Drop it like it's Crock 134.5–114.2

This week, Sports Editor Ian Tanaya triumphed over Publisher Jade Crockem with consistent scores from several players. In a smart strategy, Tanaya replaced his starting running back from last week, DeMarco Murray of the Tennessee Titans, who scored a measly 3.8 points last week, with Chiefs rookie running back Kareem Hunt, who has been a breakout star in real life and in fantasy football. The only negative statistic in the box score was Raiders wide receiver Michael Crabtree in the flex position with 1.7 points. Many of Tanaya's bench players put up better numbers, and I expect a roster shuffle next week.

Though this was the second loss in a row for Crockem, her team has some bright spots to give some hope for the rest of the season. Packers wide receiver Jordy Nelson returned to form after his injury last week, scoring 23.2 points. Arizona Cardinals wide receiver Larry Fitzgerald had the team's best performance of the week with 13 catches, 149 yards, and a touchdown, totaling 33.9 points. If some of her other players, like Dallas Cowboys tight end Jason Witten and Miami Dolphins running back Jay Ajayi, can rebound next week, Crockem has a chance to salvage the season.



10.02.17 • B5 Susan Perabo Reading • B6 Tyler Bates • B8 The Holiday

#### table of contents

4

**Banned Books** 

5 Q&A with Tyler Bates

10 Holiday: A Dinner Party

Advice for Awkward People: On friend crushes

Bar Buddies: Gooski's

The Fall of Lisa Bellow, Susan Perabo

CMOA: 20/20

Puzzles: Your weekly mental warmup

Comics: Love potions, good friends, and relaxing

Horoscopes: The signs for October

#### Ruth Scherr | Copy Manager

## Advice for Awkward People

On friend crushes

Hi Ruth,

I have a serious question that needs answering.

Most people are familiar with the scenario of liking someone romantically and having them not feel the same way back. You're either casually friendzoned or just straight up rejected. It's totally not fun, but at least it's not nearly as confusing as the less common conundrum that I'm currently experiencing.

What do I do when someone I just want to kick it with doesn't feel the same? Like c'mon, man. I don't want to fluff your nut, I just want to be your friend, so why don't you feel the same way?! I might be coming off a bit too strong, but I just want them to know I think they're really cool! Or maybe I'm not coming on strong enough? I just can't figure it out... I mean, who wouldn't want to be my friend? I give good hugs and I'm always down to buy you a cookie from ABP. Anyways, please help. I just want to be friends!

XOXO, Platonic Admiration Only

Dear PAO,

You know, I've been writing this column for nearly a year now, and I'm honestly surprised that I haven't yet had to answer "how do I make friends." Which, if we're honest, is not exactly what you're asking, but hang in with me for a bit.

The big secret on making friends, or at the least getting people to think positively about you, is to find a connection. Literally any connection. That old smalltalk joke about how people just complain about the weather? That counts. Is something happening on the Cut? Counts. Do you both have a shared professor who neither of you like? Definitely counts.

Look, people like people that they have things in common with, especially if it's easy to hold a conversation with that person. Of course, you ideally won't just talk about the weather for the rest of your acquaintance, but that's what being an interesting human being is about. (You're an interesting human being, I promise. Everybody has something they're passionate about, and passion is what makes people interesting.)

Once you're ready to move past the small-talk phase, assuming you guys haven't already sort of fallen into a friendship, all you really need to do is start inviting them to things. Things you think they'd be interested in, obviously, but don't be discouraged if they say no.

The first time they might think you're just being nice, so you might want to invite them to a few things before you rule them out. (If they keep saying no and not offering to reschedule or don't have any legitimate excuses, then maybe you should give

them the space to come to you. They could just be going through a busy period in their life, but you shouldn't be putting in all the effort.)

But here's the thing — it sounds like you've already done all this. You've chatted with them, you've asked them to hang out, and they just seem... uninterested. Well, I hate to break it to you, but you can't force anyone to be friends with you. I know, I'm sorry.

Even if they seem really cool, and you really want to hang out with them, if they don't feel the same, there's really nothing you can do. Friendship isn't all that different from love in that way.

If someone doesn't want to befriend you when you've been nothing but a decent person to them, it's going to feel like a rejection of you as a person, but it's really not. It can't be, not if they don't know you that well. Sometimes that's just how life plays out. It's kind of a bummer, but you shouldn't waste effort on someone who you're getting no response from. You deserve better.

Keep hugging, Ruth

Need advice? Submit a question at https://goo.gle/xk23wd

#### Bar Buddies: Gooski's

A tragic story of love destroyed by distance and bus times

Part of becoming part of the over-twenty-one world is finding your bar aesthetic. Are you a classy wine bar person? A clubbing kind of person? Me, I'm a dive bar person. Give me cheap drinks, smokey air, and a pool table, and I'm a happy camper.

This week we trekked out to Polish Hill for what Pittsburgh Magazine has labeled the best dive bar in the city, Gooski's.

**The location:** The location was my least favorite part of this bar. What looks like a long but doable trip on two busses from campus during the day turns into an odyssey at night when busses run less regularly. Also, the trip there was a little nerve wracking as a girl traveling alone. Once in Polish Hill, Gooski's is tucked away on an otherwise unassuming street.

There's not much else going on in the area, but that gives the bar a "hidden gem" feel. It's a smokey hole in the wall with graffitied walls illuminated

with dusky red lights. A chalkboard behind the bar reads, "Southside called, they want their douchebags back."

**The drinks:** They're cheap, they're strong, and they're served by a no-nonsense bartender with a dry sense of humor. What more could you want?

This is not the place for fruity cocktails with a dozen ingredients. The bar is fully stocked but the only menus (written on the walls) are for their plethora of microbrews, so this isn't really the place for exploring drinks. Go in knowing your go-to cocktail. This bar is cash only, so that's another way you'll need to come prepared.

**The vibe:** We were at Gooski's on a Thursday, so the crowd was mostly from the neighborhood and pretty relaxed. Gooski's is divided into two rooms, a slightly cramped front room with the bar, and a larger back room with ping pong and a pool table, as well as a stage for music acts on the weekends.

#### Sinead Foley | Pillbox Editor Lydia Green | Operations Manager

As the night wore on, the front room filled up and became more boisterous, though the back room remained pretty empty and quiet. On a weekend, the place seems like it would get pretty rowdy.

The music is all jams from the '80s, the walls are covered in sassy commentary, and the bathroom graffiti is downright hilarious.

At the end of the day, Gooski's is a classic dive bar, with all it entails. You're gonna be around some fun and eccentric folks, might play pool with some new friends, and you're definitely going to reek of smoke by the time you get home.

**Lit or Nah:** We're going to go with Lit. It's got a very clear vibe, and it does it well. If you want a no-nonsense dive, this is it. Unfortunately, it's a bit too out of the way to justify the trip. If you happen to be out the way in Polish Hill, it's 100 percent worth hitting up. But, alas, it's not the convenient neighborhood dive I've been dreaming of.

# BANNED BOOKS

We need to be more accepting of those who "turn the world to glass." Like Ralph Waldo Emerson says in his essay, "The Poet," the ideal individual in society is unconventional and deviates from the norm in order to expose society to the realities of the world. However, people like these, including the authors of many controversial yet important texts, are people we often need but do not want in our lives, so we try to silence their voices and society's access to their bold claims.

Last Sunday, Sept. 24, marked the beginning of the 35th celebration of Banned Books Week. Started in 1982 by Judith Krug, a past employee of the American Library Association (ALA) and former director of ALA's Office of Intellectual Freedom (OIF), the goal of the week is to bring awareness to the books that are challenged or banned in public libraries in America.

But books aren't banned anymore, right? Many people probably assume this to be true, especially living in the United States, a country so proud of its Constitution and the freedoms declared under the First Amendment. However, if anything, book challenging and banning are becoming more prevalent and problematic.

Challenges, filed by people trying to prohibit books and other materials in their libraries or mandatory school curricula, mostly stem from concerns including "sexually explicit" content, "offensive language," age inappropriateness, LGBTQ representation, and "religious viewpoints," according to studies conducted by the OIF on reported book challenges. Of the hundreds of challenges filed and reported in 2016, more than half of the materials that were challenged were actually banned and removed from those particular libraries' circulation. According to OIF data, bans previously were only implemented, on average, for 10 percent of total yearly challenges. The book bannings of 2016 are a concerning escalation from the norm.

With arguments about how society is becoming too "politically correct," free speech and censorship have been the focal point of many discussions. People are worried about their ideas being suppressed in favor of more diverse and inclusive perspectives, yet fail to realize that they themselves often treat opposing people in the same way. In fact, the OIF reported that, "of the 2015 Top Ten Most Frequently Challenged Books, nine of them contained diverse content... includ[ing] content by or about people of color, LGBTQ people and/or people with disabilities."



While people may have conflicting viewpoints, none really have the right to silence others' voices or restrict access to materials just because they clash with their values or beliefs. This year, Banned Books Week's theme was appropriately named "Our Right to Read," and encouraged people to express their opposing views on problematic literature, instead of immediately pushing to ban.

In the divided and

polarized society we

live in, we must learn to

recognize our differences and the rights granted to us

under the First Amendment.

Most, if not all, of the concerns leading to book challenges are subjective, merely a matter of differing opinions. Everyone should be able to freely choose to read as they please and not restrict others' access to education and broader perspectives.

Several years ago, the Library of Congress created an exhibit entitled, Books that Shaped America. Among the 100 titles included on the list, 30 of them have been challenged or banned. Truthfully, this makes a lot of sense. The most influential works are typically the most controversial — they make such a big impact because they leave us reeling from their words and the messages within. They open our eyes to new perspectives and make transparent the bitter truth of our reality (or the

Alexandra Yu | Junior Staffwriter art by Bernice Yu | Staff Artist

harsh realities of the past), which we try so desperately to ignore or forget.

Restricting books is not the solution. Facing conflict and dissent is easier said than done, but it's the only way society will ever come close to being where it should be. Because even if we have differing views and our ideal societies don't seem to align, we all essentially want the same things: respect and acknowledgement. Whenever we shut others down, nobody wins — resentment only grows, and the chasm between each side widens

As Banned Books Week comes to a close, we must remember that although officially over, the celebration doesn't have to stop. We should continue to carry out the values that the week has taught us and become well-informed, vocal members of society. Rather than shutting each other down and shying away from dissonant

opinions, we must strive to educate ourselves through literature and conversation.



LOCATED ON CAMPUS

OPEN FROM 8 AM TO 8 PM

- Printing
- Finishing
- ShippingBinding
- Passport Photos
- Posters

**SUBMIT YOUR JOB ONLINE:** webcopy.campusservices.cmu.edu

Cohon University Center Lower Level 83 (412) 268-4828 tartanink@andrew.cmu.edu With a delivery both straightforward and dynamic, author Susan Perabo read the second chapter of her latest book The Fall of Lisa Bellow to a rapt audience in Danforth Conference Room last Monday. A Professor of English and Writer in Residence at Dickinson College, a small liberal arts college about a three-hour drive away in Carlisle, PA, Perabo has published numerous works of fiction over her career, in both literary magazines and as four books. The Fall of Lisa Bellow is her second novel, and her other two published books are short story collections.

Prior to her reading in Danforth, Perabo visited an introductory fiction course where she talked to students about her craft, her writing process, and her experience as an author. In her introduction to the students in the course, Perabo mentioned her surprising evolution into being the author she is today. She was initially interested in film, and in the course of studying film at college took a writing course to help with her screenplay skills. From then on it became a passion, and she eventually went on to get her MFA.

Her work, particularly her short story work, seems a little at odds with her confident, no-nonsense demeanor. Her work in Why They Run the Way they Do, a recent short story collection, explores deeply emotional themes of infidelity, loneliness, and coming to terms with a life one might not have envisioned for oneself. Her characters are always complex, and a bit acerbic, and their emotional lives seem to pop off the page. Perabo said it herself that she wouldn't define herself as an "emotional person," or a person who wears their heart on their sleeve. This contrast between her more stoic public persona and the intimate and vulnerable character portrayal in her writing makes reading these works all the more fascinating.

Her newest novel seems to continue her thoughtful and emotional examination of her characters' lives and ways of thinking. The Fall of Lisa Bellow follows a middle-school aged girl Meredith and her mother Claire as they recover from the abduction of Lisa Bellow, a classmate of Meredith's who was kidnapped in front of Meredith in a sandwich shop. Due to the use of these two protagonists, the book is as much about Meredith's process of coping with the tragedy and her coming-of-age story wherein the horrific event of the abduction features so prominently as it is a thoughtful rendering of a mother who is trying to navigate the process of supporting her daughter through a life so completely altered by something out of her control.

The chapter she read to the audience on Monday – an audience made up of English professors, students,

and other interested parties — mapped the inner dialogue and thought progression of Claire. In the chapter, Claire is thinking back to when Meredith's brother Evan was being bullied in elementary school, and how angry and overwhelmed it made Claire feel. How does Claire handle it when her children encounter adversity? What are her instincts? How does she cope with the challenges facing her offspring?

The chapter essentially took place solely in Claire's head. She feels the urge to curse at the students who called her son a "porker," despite Evan's assurances that he's fine. She demonstrates restraint, but it is not without significant effort. The chapter ends with a scene where Claire has her son's bully as a dental patient, and causes him unnecessary and profound pain during a superfluous dental examination. The scene made me viscerally uncomfortable, a sentiment shared by audience members during the question and answer portion of the event after the conclusion of the chapter.

When asked about her use of individuals from her life as a basis for fictional characters, Perabo stated that no person on the page was a representation of someone she knew, and that it is very difficult, if not impossible, to do justice to a living individual through a fictionalized account. However, she mentioned, she remembers feeling intense anger and confusion when her children faced undeserved nastiness in school. While she never went to the lengths that Claire did, in developing the character of Claire Perabo tried to imagine what type of person would actually act on her feelings of frustration with a stranger's child. Thus the dentist section was born. In imagining what sort of person might have the opportunity to lash back out to a young offender, she fell upon dentistry as this sort of opportunity for her character.

During the question part of the afternoon, Perabo talked further about her writing process, such as having an ending in mind prior to beginning, or at least close to the beginning of a narrative, as well as her first published piece, and her editing process. Unlike some fiction writers, Perabo does very little research, and instead likes to get the story on the page, and then during revisions, fill in the vague depictions with accurate descriptions and terminology. Though of course an endlessly challenging endeavor, Perabo's visceral, thoughtful, and introspective narratives seem to demonstrate a more clinical process than an overwhelmingly emotional one.

When thinking about flighty and emotionally unstable authors of fame and fortune, getting to see Perabo's genius coming from a place of intense thoughtfulness and non-neuroticism was a privilege.

# THE FALL OF LISA BELLOW

# with Susan Perabo

Lula Beresford-Banker | Contributing Editor



# Q&A with Tyler Bates



Julianna Schnerr | Junior Staffwriter Neethi Jayachandran | Junior Staffwriter

Friday night I found myself backstage at Stage AE surrounded by black leather-clad, heavily makeup-ed, world-class musicians. These were not just any musicians, they were the members of Marilyn Manson's band. Among them was Tyler Bates, a highly sought-after rock guitarist who has proven himself a master at creating astounding musical narratives.

Bates is a life long musician who transitioned from the world of touring and live performances into a prolific career composing television and film scores. He has created musical landscapes for films such as Dawn of the Dead, 300 and more recent blockbusters including Guardians of the Galaxy Vol 1. and Vol 2, John Wick, and Atomic Blonde. Throughout his career, Bates has forged partnerships with countless artists, including film directors Zack Snyder and James Gunn, and musician Marilyn Mason. Currently on tour with Manson in support of their latest album, Heaven Upside Down, Bates spends his time delivering killer guitar performances, composing music in makeshift hotel room studios, and trying to get some sleep. Humble, immensely talented, and fully enamored with his craft, Bates hopes that this new album will excite and impress fans and that he can continue to craft stories through composition both on screen and on stage.

# You've worked on numerous projects as a producer, composer, and musician. How do you see those roles as similar to or contrasting each other?

I would say all three roles overlap. For film composition I need a serious degree of production skills and for production, my work is informed by my experience as a musician. Everything has started to intersect in my life, so all of my projects, no matter what role I'm approaching them from, are about understanding my collaborators and telling their story through music. The core is about storytelling and emotion, and that carries into every space I inhabit.

# What does the physical process of composing for the screen look like? Is the score informed by the movie or is the movie informed by your music?

Every single project is a triathlon. And each one is constantly evolving, with certain scenes getting compressed or drawn out and the score changing to fit those adjustments. So it might end up being a 90-minute score, but there were well over 100 minutes of composition that changed as the process went on. And that's the crazy thing; I might end up producing more hours of music for one film than most musicians produce in their entire career.

And the give and take between the visuals and the composition differs project-to-project and person-to-person. For Guardians of the Galaxy, I worked with James Gunn who I've known for years and collaborated on tons of projects with, so we were able to approach the process a bit differently. I actually composed the score based off the script and certain pre sketches, so I was writing to the film sequences before they even existed. The actors would act with ear buds in so every one would move to the tempo and the emotion of the composition.

"Everything has started to intersect in my life, so all of my projects, no matter what role I'm approaching them from, are about understanding my collaborators and telling their story through music. The core is about storytelling and emotion, and that carries into every space I inhabit."

# You've worked on incredibly distinct and unique projects with talents in both the film and music industry. How would you describe your creative process, and how is that process informed by collaboration?

I'm always open. My creative process is never the same twice, and it's never about just making music. It's about creating a conversation. It's about understanding people. Music is a vehicle, it's how I get through things, so I'm always looking for projects that teach me and challenge me where I can continue to grow and maintain some relevance.

I never really know what to expect because there's always some new direction I'm able to take my work. Recently I worked on the composition for the Guardians of the Galaxy attraction at Disney California Adventure, and I got to work with their team of Imagineers. The spirit they brought was definitely not Hollywood, and I found it really refreshing. We got to work in a team, so I knew that I needed to bring my skills and point of view to the work but that ultimately we had a job to do and we would do it together.

So when it comes to collaboration I would say it depends on what you're working on. If you're working on an indie film versus a project for a large studio, the experience is completely different. The size of the team changes, so the whole process and feeling changes. But I try to make my collaborators feel comfortable so that they can feel what I'm trying to convey even if they don't have a technical understanding.

#### What do you look for in a collaborator, and how do you go about forming those partnerships?

I just ask the universe to bring good people into my life. I don't know if life is too long or too short to work with people you don't like, but I have had the good fortune of working with people who elevate my game. I mean, James Gunn is a genius. Zack Snyder, Rob Zombie, both geniuses. And I've been lucky enough to work with them on multiple occasions. Ultimately, I like to work with people who are excited and striving.

That's why I'm so appreciative of all my time working in film and television. That process of iterating and meeting deadlines is what gave me the ability to articulate ideas quickly, and that's what has allowed me to collaborate with people like [Marilyn] Manson. Those experiences gave me the stamina and capabilities needed for us to work well together, and I didn't have that before working in the film industry.



"Rock music is hurting so badly right now, and Manson is the last bastion of real icons, so I want to do my part to help the cause. We're like brothers; the first time I met him I never would have expected to be writing or playing with him, but somehow it works."

#### Could you elaborate on what it's like working with Marilyn Manson and how it may be different from other collaborations?

Well, [working with Manson] is different because there's nobody else like him. And it's different than my film score work because no matter what, I will always love to write, record, and play rock music. Rock music is hurting so badly right now, and Manson is the last bastion of real icons, so I want to do my part to help the cause. We're like brothers; the first time I met him I never would have expected to be writing or playing with him, but somehow it works. He challenges me and we feed off each other's energies.

You've worked on such a diverse range of projects across different mediums and genres. Is there a certain tone you're trying to convey in all your work, or does it change depending on the project?

I think the me of it, whatever project it is, is identifiable. People who know me can recognize my guitar playing or sense it's my work immediately. So in a sense I think there is a signature in all my work. I'm looking through the lens of my life experience, and that authenticity and sincerity is what I hope is transcendent to the audience. I'm trying to convey emotion, not an impression of emotion, in all my work.



#### What advice do you have for young artists?

Be in touch with your spirit, and pursue your art for that reason and purpose it gives you. It's easy to get jaded to the value of your work, especially when certain industries aren't paying as much or there isn't as much demand. But you can't pander to the climate of the industry. You can change things. You just have to be willing to do whatever it takes so you can do what you love. Music has been my whole life; it's all I've known. I've had other jobs, but they were never instead of music, they were so I would be able to keep doing it. Ultimately, I would say a backup plan is a bad idea. Because if you have one, you'll take it.



# NOW ACCEPTING PLAID CASH!

Receive free upsize on coffee and fountain beverages with student I.D.



4400 Forbes Avenue 412.622.3225 thecafecarnegie.com

#### 20/20 at CMOA

Questions on how we consume and present art on the oppression of people of color have moved to the forefront of conversation in the art world as a result of the election and the turbulence of our current global climate.

Recently, white artists such as Dana Schutz have come under scrutiny for their use of the history of violence against black bodies in their art. Turning non-black audiences into spectators of people of color and excluding artists of color from these spaces can perpetuate the tendency of American society to profit off of racial violence and exploitation. How do we curate and share the work of artists of color without falling into that trap?

While the function of gallery spaces is a place for the dynamic current conversations of art, museums like the Carnegie Museum of Art (CMOA) are a place to learn the visual language to understand art as a broader field. Art museums create a cultural history, and the items preserved in museums are what generations to come will reflect on when understanding our current views of our past. And it is the place where future generations will see how we ask questions about the relationships between race, oppression, and art.

This summer, an exhibition entitled 20/20 opened at the Carnegie Museum of Art. The exhibition is a collaboration between the Carnegie Museum of Art and The Studio Museum in Harlem to bring together the work of forty artists — twenty from each venue — created over the past 100 years. The gorgeous, white wall spaces of CMOA are filled with an expansive array of artists from various periods in art history and at different levels of the art industry. Documentary photographers, leading contemporary artists of color, and outsider artists of color are brought together in this exhibition on the narrative of racial politics and black identity in America.

## Gowri Sunder | Staffwriter Theodore Teichman | Visual Editor

With the huge range of work and seriousness of subject matter, the curation is ambitious. Each piece is paired with a longer museum label explanation, and each section of the exhibition comes with a title and explanation of the curatorial choices. The viewer's movement through the gallery is key to the narrative of this exhibition. Although it is not strictly chronological, it feels conscious of an unfolding historical narrative. The subtle growth of strength and subjectivity of black voices in the work as the exhibition progresses serves as the framework for this curation.

The first room open with the centerpiece of Pennsylvanian artist Horace Pippin's "Abe Lincoln's First Book," a piece which paints Lincoln with the visual language of sainthood. The surrounding work in the first two sections entitled "A More Perfect Union" are intended to discuss historical context, with artists of color working to come to terms with the history of slavery and oppression. The inclusion of one of Jasper Johns's American flag pieces was odd, given that Jasper Johns was a white artist, as was the central focus on the glorification of Lincoln, because of their turned focus on White America. The museum states it intended to question national identity and democracy; the voice of the paired statements is anthropological, an outsider looking in. It relies on the idea that the viewer sees American identity and Blackness as exclusive ideas and asks the viewer to explore that conflict.

The jump from this perspective into the sections of "Working Thought" and "American Landscape" was then at once jarring and natural. The work in these spaces was dedicated to the discussion of class, violence, and exploitation. Artists such as Kara Walker, David Hammons, and Titus Kaphar vary in degrees of abstraction and modes of expression, but all in all it is an exploration of trauma perpetrated by the American economy.

Turning non-black audiences into speciators of people of color and excluding artists of color from these spaces can perpetuate the tendency of American society to profit off racial violence.

Walker's folksy silhouettes portray graphic violence against black women while Black Wall Street by Noah Davis is a remembrance of the incredible violence of the 1921 race riots against an affluent black community. This section tries to cover so much, and the matter of factness of violence on black bodies feels uncomfortably contained in these vignettes of history.

This part of 20/20 builds into the central exhibition of the Teenie Harris and James VanDerZee documentary photography segment entitled "Documenting Black Life." Both these exhibitions begin to demonstrate the struggle of building identity through violence and class struggle, but this section focuses on the nostalgia of intimate moments that would have otherwise been forgotten by history. The Pittsburgh and Harlem communities presented in sepia film and older generations of clothing played with this narrative of history lost, hidden, or ignored.

It was unexpectedly startling to enter the final sections, "Shrine for Spirit" and "Forms of Resistance." The enormous portrait of Michelle Obama by Collier Schorr that was published in T: The New York Times Style Magazine was the piece that articulated the feeling of these sections. These rooms were dedicated to the unabashed, intensely personal focus on the self. These works focused on activism, honoring the identity and culture of people of color. They shared the interactions of artists of color and media from their first person perspective. But the Michelle Obama and Kerry James Marshall portraits as end pieces had the biggest impact. Contrasted in the same room with Ellen Gallagher's mixed media pieces with magazines and Lorraine O'Grady's performance stills where she flays herself with a cat-o-nine-tails in a beauty pageant character, these pieces stood out in emotional resonance.

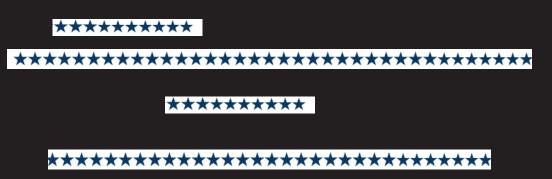
It was because Michelle Obama's portrait had the only black woman given a name and understood as a person and cultural icon who was not in this exhibition because of her connection to exploitation and violence. A regal, accomplished, and beautiful black woman who is so beloved placed so prominently in the exhibition with admittedly complicated symbols of wealth was powerful. In contrast, the vibrant, joyful

portrait "Untitled (Gallery)" by Kerry James Marshall of a black woman relaxed in her own space was important because it allowed for the more intimate, ordinary person parallel to the Michelle Obama photograph.

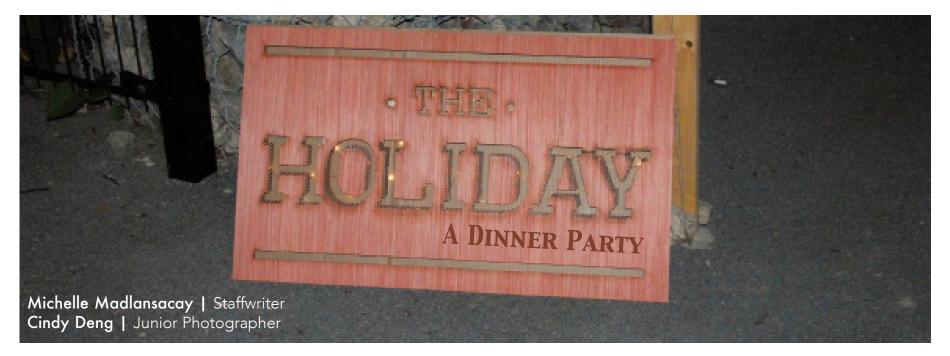
The effect of these portraits in the final room would not have been the same without the documentation of struggle and trauma we saw previously. It was important as well that the ending of this exhibition wasn't through rose-colored lenses, and that it didn't stick to a chronological order — it recognizes that the fight for equality is ongoing. The collections allow the viewer to see how the artists of color choose to play with Western artistic traditions versus to create their own. It parallels the tension of existing within a white dominated society, and the questions of how to move forward.

The Carnegie Museum of Art and all white cube gallery spaces were created with a literal manifesto of whiteness connecting to sophistication. But exhibitions such as 20/20, and society as a whole, are working to transform these kinds of elitist institutions into something more inclusive. The people who come to this exhibition are likely to be middle and upper class individuals open to racial discourse, and some of the messages of industry and oppression feel overly subtle as if trying not to offend. The desire for a nationalistic sentiment is present throughout the gallery spaces, but the question about American identity is presented as confused as we feel it today.

This exhibition, though imperfect, was ultimately successful. The discomfort with these questions of consuming violence and oppression, being a spectator in the room where you learn about the complexities of identity and racial politics in this country, is important. The exhibition is not only about grief and trauma, but also about hope and agency. It allows for the black artist and subject to be the primary voice and announces a commitment to understanding these stories. 20/20 is open until the end of the year. In this time in our history, with the national dialogue about neo-colonialism and NFL protests and class conflict ever-present, it is important to hear the voices of artists of color and sit with your questions.







Attending The Holiday event on Saturday evening definitely helped push me out of my comfort zone. The Holiday: A Dinner Party, was hosted by four Carnegie Mellon students: Daniel Yongxin, Nick Boston, Faith Kaufman, and Sarah Stinson-Hurwitz. It took place in the Art Park, a green space for use by artists, right next to the Carnegie Mellon Integrated Innovation Institute, and across from Chipotle and Orient Express.

The purpose of the event was to commemorate The Holiday, which used to be Pittsburgh's oldest gay bar that opened in 1968 and closed in 2007. The bar was located where the Art Park is now, and it was a popular spot for people in the local LGBTQ community to mingle, hang out, and enjoy themselves without the pressures and judgement from others in society. For about forty years, the bar fostered a safe space for people from all different backgrounds and sexual orientations. These overarching themes of inclusion and freedom of expression were the focus of the dinner party. Several activities were organized, and the setting was decorated to create a very casual and relaxed environment for strangers to get to know one another.

I don't usually go out for large gatherings, and it's been a while since I had the opportunity to meet new people in a single setting. Because it'd been a long time since I attended any mix and mingle event, I'd become more comfortable staying reserved and only spending time with people in my close friend group; I had forgotten the exuberant feeling of getting to know new people. When I arrived at the event, one of the hosts immediately paired me with the person I was standing next to. The host explained that every guest needed a partner to experience event with, and partners must be complete strangers to one another.

I was excited, but also a little nervous to get to know someone new. I didn't know what to expect, and I was afraid that the entire experience would end up being awkward. My partner and I walked into the parklet together, and the first thing that caught our eyes was the event's setup; it was very simple, yet elegant. A bar was set up where people were serving guests apple cider and cookies, blankets and rugs were laid on the ground, and fairy lights along with the sounds of soft music surrounded all of us. The space itself gave off such good vibes, and it helped me to calm down and become more relaxed before getting to know my partner better.

The first activity we participated in involved my partner and I writing down a secret we have and placing it in a jar of other people's secrets. Then, we each had to take out a secret from the jar and talk about them with one another. By participating in this simple activity, I was able to learn a lot about my partner, like where she's from and her opinions on events going on in the world. We were getting along well, and I realized that we had a lot in common.

Another activity during the event encouraged me and my partner to engage in more conversations about random topics, like how do we define a perfect day or whether or not we'd like to become famous. Learning these new and random things about my partner, and vice versa, was exciting and reminded me of how wonderful it is to meet new people. In a way, I was able to learn more about myself and the things that make (and don't make) me happy in life, just by figuring out what my partner and I shared in common. My partner and I agreed that there actually is comfort in the "newness" that comes with new experiences and meeting new people. Because I was only meeting my partner for the first time and she knew nothing about me, I felt like I had this freedom to be my genuine self and not conform to any expectations that she may or may not have of me. Looking around me and seeing other partner pairs talking and laughing with each other, I sensed that I wasn't the only one who felt this comforting freedom.

My evening at The Holiday: A Dinner Party was filled with engaging conversations, good food, and relaxing vibes. These were what The Holiday bar had to offer to the local LGBTQ community, and I have a better understanding now of why it was so beloved by its guests. At the dinner party, partners were also able to draw each other on a mural. Before leaving the event, I looked at the mural, which was almost completely covered with drawings of people's partners. It was amazing to see how partners became friends during the event, and how what looks like an empty lot beside a busy road was able to create such an inclusive environment that fostered these friendships.

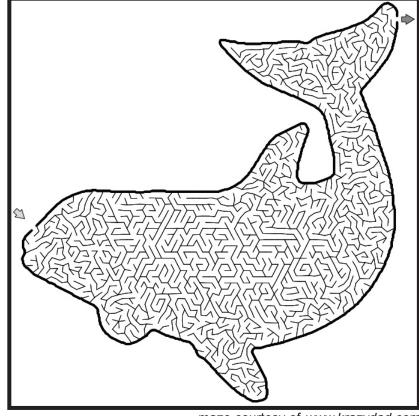


#### sudoku

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

sudoku courtesy of www.krazydad.com

#### maze



maze courtesy of www.krazydad.com

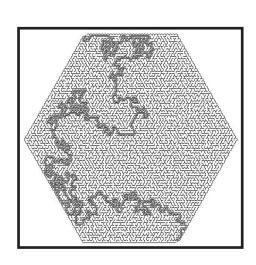
#### Solutions from Sept. 25

_														
R	_	,z	ڻ		٥	ρ.	Α	,⊒	s		A	į	<sub>P</sub> L	s
ΰ	ĸ	Α	J		15 <b>A</b>	ш	Ø	0	Р		ıβ	ш	Α	J
7 В	Α	s	Α	18 L	т	٧	Α	R	Е		19	ø	J	ш
Ŷ	Е	Α	s	Т				<sup>21</sup> D	Е	<sup>22</sup> B	Α	s	Е	D
			28 <b>S</b>	D	24 		25 E	L	D	Е	R			
ĸ	<sup>27</sup> O	28 <b>S</b>	Υ		29 <b>B</b>	30 <b>A</b>	в	Y		₅F	1	32 <b>B</b>	°E	<sup>34</sup> R
ā A	Σ	U		<sup>36</sup> S	Е	ĸ	в		<sup>37</sup> <b>P</b>	0	Ø	Α	۵	Α
Ĵ	Α	1	39 <b>A</b>	L	Α	1		<sup>40</sup> В	0	0	Т	ı	ш	G
Å	z	0	z	Υ	М		42 F	د	L	L		43 <b>M</b>	М	Е
⁴H	ı	z	G	Е		45 S	0	C	к		βD	Υ	Α	D
			47 U	s	⁴ <sup>®</sup> H	ш	R		49 <b>A</b>	<sup>50</sup> <b>P</b>	ш			
s	52 <b>M</b>	53 E	٦	Т	Е	R				<sup>54</sup> O	Р	<sup>55</sup> T	56 E	57 D
o	0	z	Α		59 M	Е	60 <b>A</b>	61 <b>S</b>	<sup>62</sup> U	R	Α	В	L	Е
ů	z	-	Н		ĕE	z	۵	0	N		<sub>ss</sub> κ	Α	-	ш
<sub>6</sub> L	Α	۵	ш		<sup>67</sup> <b>Z</b>	ш	Α	H	0		<sub>®</sub> F	R	ш	ш

crossword

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

sudoku



maze

#### comics

# Love Potion by Charlie Higson









chigson@gmail.com

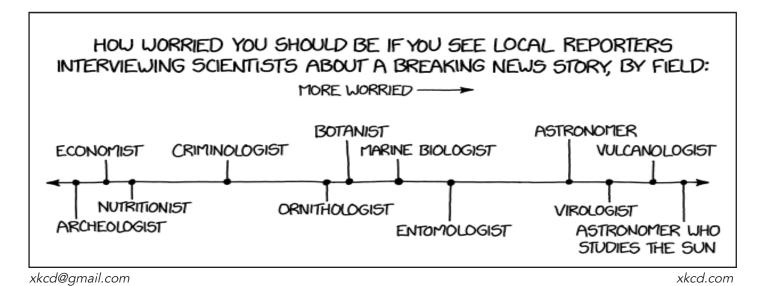
heckifiknowcomics.com

#### You Make My Life Special by Guy Kopsumbut

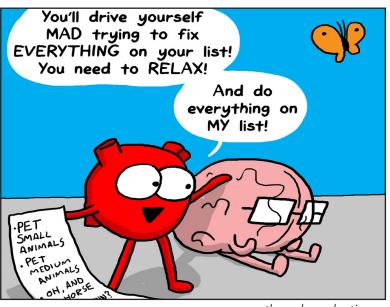


4amcomics.com

# Reporters by xkcd



#### Lists by Nick Seluk



theawkwardyeti.com

# horoscopes

#### horoscopes for October

#### crossword

march 21 - april 19

You are the one person who still screams, "OC-tober!"

**Taurus** april 20 - may 20

Oct. 1, 12:00 a.m.: Halloween mode activated.

Gemini may 21 - june 20

Pumpkin spiced everything is now your entire life.

Cancer

Fright Night at Kennywood!!!

june 21 - july 22

Leo july 23 - aug. 22

WHY DO PEOPLE CARE ABOUT HALLOWEEN SO MUCH?

Virgo aug. 23 - sept. 22 You're going to dress up in matching costumes with your

Libra

You will immediately go watch The Nightmare Before Christmas.

Scorpio oct. 23 – nov. 21

sept. 23 - oct. 22

You eat mounds of candy corn even though you know it's disgusting.

**Sagittarius** nov. 22 - dec. 21 Time for that really ugly pumpkin sweater.

Capricorn dec. 22 - jan. 19 If lost, check under giant pile of blankets.

**Aquarius** 

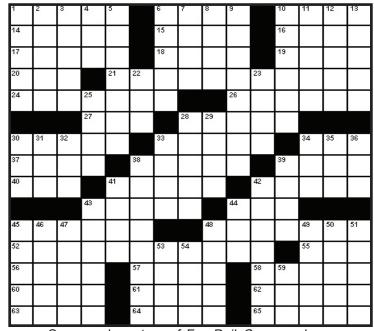
jan. 20 – feb. 18

Infinity scarves for days.

**Pisces** 

feb. 19 - march 20

Winter is coming.



Crossword courtesy of FreeDailyCrosswords.com

#### across

- 1. Opponent of Ike
- 6. Drunkards
- 10. Digits of the foot
- 14. Adult
- 15. Diamond cover
- Word that can precede hygiene, tradition and agreement.
- 17. Tumbles
- 18. Presidential battleground state
- 19. Queue after Q
- 20. Night school subj.
- 21. Causing trouble
- 24. Tried
- 26. Pressed
- 27. "Treasure Island" monogram
- 28. Legumes
- 30. Conical native American tent
- 33. Bar game 34. "\_\_\_ Believer" (Monkees hit) 37. In \_\_\_ land
- 38. Spree
- 39. Mimicked
- 40. Weep
- 41. \_\_\_ Domingo
- 42. Reprimand
- 43. Chilean pianist Claudio
- 44. Cmdr Data's was named Spot
- 45. Certain Muslim; 48- Appendix
- 52. Triangular pyramid
- 55. Sugar suffix
- 56. Jack of "Rio Lobo"
- 57. Switch ending
- 58. Actress Barkin
- 60. \_\_\_ breve
- 61. Neighbor of Sask.
- 62. Native Israeli 63. Crazy as a \_\_\_\_
- 64. Writing table
- 65. Eye sores

#### down

- 1. Be of one mind 2 Refuse
- 3. Takes it easy
- 4. Hole-boring tool
- 5. Fashionable 6. Rose
- 7. Island of Hawaii
- 8. Chicago paper, for short
- 9. Plunder
- 10. Some sculptures
- 11. Director Welles
- 12. Words on a Wonderland cake
- 13. Swung around 22. Hi-\_\_\_ monitor
- 23. Sea birds
- 25. Calculus calculation
- 28. African language group
- 29. Thus
- 30. Pampering, briefly
- 31. Unit of corn
- 32. Layer
- 33. Actress Merrill 34. Wall St. debut
- 35. Singer Torme
- 36. Find the sum of
- 38. Without a hat
- 39. Play opener
- 41. Mex. miss
- 42. Sorrow
- 43. Aviator
- 44. Dove's sound
- 45. Pilfer
- 46. Greeting
- 47. Author Calvino 48. Frog sound
- 49. Mild cheese
- 50. Grenoble's river
- 51. Horne and Olin 53. Author \_\_\_ Stanley Gardner
- 54. Specks
- 59. Back muscle, briefly

#### calendar

#### tuesday

10.03.17

CMU Art Lecture: Shannon Ebner 6:30–8 p.m. Kresge Theater, College of Fine Arts More info: facebook.com

Join the remarkable Shannon Ebner for a fascinating lecture about the evocative symbolism that ties into her artwork. Ebner's work has been on display in the Museum of Modern Art and the Whitney Museum of American Art, amongst others, and is known for its fresh perspective on how we approach the most pressing issues of today.

#### wednesday

10.04.17

Pixies
7–10 p.m.
Stage AE
400 N Shore Dr.
Pittsburgh, PA
Tickets: ticketnetwork.com

The Boston-based alternative rock band is coming to Pittsburgh as a part of its North American tour this fall. Fresh off their latest LP Head Carrier, the band is making rounds of both the United States and Canada. Be on the lookout for hits from Head Carrier such as the title song "Head Carrier," "Might as Well Be Gone," and "All I Think About Now" to prep for this incredible show.

# friday

10.06.17

THALI 5:30-9 p.m. The Frame Gallery 5200 Forbes Ave. Pittsburgh, PA

Join Gowri Sunder, a senior pursuing a Bachelors of Humanities and Arts in psychology and fine arts, for the opening of her show exploring the stories of second-generation Indian girlhood. The eclectic exhibit uses a variety of media to evoke tradition, change, and the collision of cultural worlds. Snacks will be provided. The show will be on display until Oct. 8.

Editors note: Gowri Sunder is a staff artist for The Tartan

# saturday

10.07.17

Fright Night at Kennywood 6 p.m.–12 a.m. Kennywood Park 4800 Kennywood Blvd. West Mifflin, PA More info: kennywood.com

If you love amusement parks and you love being spooked, Fright Night at Kennywood is an opportunity that simply cannot be missed. Experience the joys of the park at night, packed with eerie surprises around every corner. Fright Nights will occur throughout October.

Manor At Midnight: The Fly 11:59 p.m.-1:45 a.m. The Manor Theatre 1729 Murray Ave. Pittsburgh, PA Tickets: manorpgh.com

Catch David Cronenburg's monumental film this Saturday and re-live the classic story of a science experiment gone terribly wrong. What's more, the event kicks off at midnight. This is the perfect way to get into the Halloween spirit. Check out The Manor's website to see their other "Manor At Midnight" films.











# Wind Ensemble

Apeksha Atal | Pillbox Editor



This past Saturday evening, the Carnegie Mellon University Wind Ensemble put on their first performance of the season, featuring soloists junior flute performance major Jennifer Jo, senior trombone performance major Kevin Hannequin, and senior trumpet performance major Matthew Hannequin. With soulful music and a packed audience, the evening was truly one to remember.