

# CMU students' design used to develop Aqua Pavilion



A local Pittsburgh community garden has offered to bring the design assignment of two architecture students to life. Pictured above is a rendering of the Aqua Pavilion design.

**RAHEELA AHSAN**  
*Staffwriter*

The Carnegie Mellon School of Architecture has been granted the privilege to contribute to a community garden here in Pittsburgh. Located in Uptown, the Aqua Pavilion will function as a structural water-catching device, while also standing as the attractive centerpiece for the local garden. Professor of architecture Joshua Bard, along with senior architecture major Jack Fogel, and junior architecture major Brandon Darreff, were contacted for their insight into this unique opportunity.

The Aqua Pavilion project has been a design assignment for second year architecture students for the past few years. However, it was not until the Class of 2019 was contacted by Grow Pittsburgh that their designs came into fruition. Professor Bard elaborated on

the process of being selected to work with the volunteer organization. As part of their coursework, students had one week to design an outdoor functional pavilion in teams of four back in 2015. That year, the instructors had reached out to partnering communities in Pittsburgh to find some traction for the application of these designs. Grow Pittsburgh then reached out to the School of Architecture in May of this year and offered funding should they choose to participate in the project. In September, nearly 15 students from the Class of 2019 volunteered to design and construct the pavilion before Christmas.

The design was a collaborative effort between the students and Grow Pittsburgh. Several iterations were presented, including ideas from last fall, until the final design was decided on this year. The Aqua Pavilion will

catch and store water in a large cistern and will water the plants in the Martin Luther King Jr. Community Garden in the Hill District. The overall design is “compelling” and “relatively simple to construct,” explains Fogel. Given that students are building it, the project should not be overly complicated. Fogel describes that the completed pavilion will be a rectilinear structure with beams and columns, while having a series of trusses that hold up the roof. For aesthetic appeal, the trusses will each progressively rotate at 15 degrees to create a “ruled surface.”

The onsite structure will be easy for the contractor to build. Jennifer Lucchino, an adjunct professor and co-founder of inter\*ARCHITECTURE, a local contracting firm, is partnering with the students. Students will construct the various pieces on campus,

and then transport the trusses to the garden. The materials and supplies are all paid for by Grow Pittsburgh. The architecture students who are participating in this project, Darreff points out, are purely volunteering this semester in addition to their existing coursework.

Given that the Aqua Pavilion will be both a functional and enjoyable aspect of the garden, students hope their work will integrate into Pittsburgh’s community expansion. Grow Pittsburgh intended for the pavilion to operate also as an event space, in faith that the community garden will serve more as a gathering space. Unfortunately, the university’s exposure to the project has not been extensive. The entire undertaking has been kept within the School of Architecture with little chatter amongst other Carnegie Mellon students. However, Bard hopes that the

completed pavilion will be published as a positive impact on behalf of the university for the community.

Seeing their designs come to life and having the opportunity to contribute to real work in the community is an incredible opportunity for the students. Both Fogel and Darreff are exceptionally proud to participate in such an integral aspect of Pittsburgh, and see their studio work being applied outside of the classroom. For Bard, this opportunity has been a work in progress. The instructors have been attempting for a couple of years to find partnerships and engage in projects like this. The Pavilion will be the largest project constructed outside of the studios. In ten years, both the students and professors hope the garden grows and adapts the pavilion to their needs through community engagement from both the university and the city.

# Fall 2016 Town Hall reopens dialogue

**YIYUAN CHEN**  
*Staffwriter*

On Nov. 3, Carnegie Mellon president Subra Suresh hosted the second annual Town Hall at Rangos Ballroom. Over a hundred community members attended the event, while five thousand viewed the hour-long meeting online through Facebook Live. The first town hall meeting took place on Sept. 30 last year. The event aims to begin a transparent dialogue between university administration and global Carnegie Mellon community. Select questions from both the attendants and the online audience were answered by President Suresh after an opening speech which summarized the changes that have happened since the last meeting.

In the opening remark, Suresh announced that the recent \$10 million endowment made by K&L Gates Foundation will be used toward promoting scholarship throughout the university as well as to initiate a bi-annual conference focusing on artificial intelligence and ethics. In addition, Suresh introduced the President’s Advising Board, an external group of higher education professionals convened recently to improve the wellness of all community members.

The brief opening speech was followed by an open Q&A session with the audience. Felicia Evans, a current staff member at Carnegie Mellon’s Software Engineering Institute, initiated the dialogue with a question concerning the specific

See **TOWN HALL**, A3

# Alumnus Andrew Tesoro shares his experience working for Trump

**SHLOK GOYAL**  
*Staffwriter*

Carnegie Mellon Class of 1975 School of Architecture graduate Andrew Tesoro spoke outside the University Center on Nov. 3, encouraging students to vote for Hillary Clinton by explaining his poor experience with Donald Trump.

Tesoro runs a small architectural firm that Trump contracted in 2006 to design the Trump National Golf Club in New York. Initially, the project was for a 20,000 square-foot clubhouse, for which Tesoro’s firm charged \$800,000. However, the project grew to be a 55,000 square-foot clubhouse in four years. Tesoro charged \$140,000 extra for the changes Trump had demanded he make to the original design to create a larger building.

Tesoro, however, was told once construction was completed by a Trump Organization executive that “Mr. Trump ‘didn’t want to pay.’” After complaining, he was invited to the clubhouse he had designed to meet with two executives. There, he found “the lobby packed with dozens of vendors and professionals — all invited for the same reason: to plead for their overdue money!” Eventually, he went into the ballroom

to find approximately 15 members of Trump Organization, who offered him \$50,000 instead of the \$140,000 he had been seeking. After acquiescing to this payment, Tesoro made an invoice with the new amount and sent it to the organization. Again, Trump’s organization refused to pay.

At this point, Tesoro said, “I am beginning to recognize that is a game and I am losing.” He then met Trump, who said that because Tesoro “was such a nice guy and such a good architect,” he would give Tesoro \$25,000 instead of \$50,000. Trump’s attorney informed Tesoro that while he was likely to win a lawsuit, Trump Organization’s legal team would drag the hearing “out for at least five years and it will cost me more than it will be worth,” Tesoro noted in an email. Thus, he accepted the \$25,000 for his work on the project.

Since he has a small business, Tesoro says that this shortchanging “was really painful.” The Trump campaign has not commented on this story, even though a video where Tesoro shares this experience has been viewed on Facebook more than seven million times, according to Forbes.

Tesoro said he is sharing his story because he doesn’t want the American public to be duped by the promises

Trump is making, as he was duped ten years ago. Trump often told him that the project would make him famous and would lead to numerous new projects for his business, none of which happened. “It has become very clear that he can’t be trusted, can’t be believed to follow through and even try to make his promises happen,” Tesoro said.

Tesoro maintained, however, that he doesn’t hate Trump and found him congenial to work with. In fact, he told Forbes that Trump was “nice and decent to me on an individual basis.” He also believes that Trump’s current demeanor is merely a ploy to garner attention from the public rather than a reflection of Trump’s true personality. “He’s an actor. He’s a fraud,” Tesoro said.

Based on his meetings with Trump, Tesoro simply finds him unfit for the presidency, if not a despicable human being. He emphasized Trump’s impatience, saying two minutes into the interview, “If he were sitting just as long as you and I are, he would start getting antsy.” According to Tesoro, he found Trump to be egotistic, whimsical, insistent on unreasonable schedules, and intolerant of anyone disagreeing with him.

Tesoro concluded that Trump “doesn’t have the



Carnegie Mellon alumnus Andrew Tesoro spoke to students about his experience building a Golf Club for Trump.

patience to deal with the complexity of a golf clubhouse building. God knows he doesn’t have the patience to deal with the complexity of governmental challenges.”

Tesoro’s story came to light when he met a mother at his son’s elementary school and emailed her the story. One of her colleagues had a nephew who worked for the Clinton campaign. The campaign videotaped him for an hour, according to an interview he

gave in Forbes, and released a three-minute video labeling Tesoro as one of Trump’s victims.

The primary reason Tesoro came to Carnegie Mellon was that Clinton is vulnerable in western Pennsylvania and he felt “that any good energy on behalf of the Clinton campaign here would be beneficial,” said Tesoro.

In addition to studying architecture at Carnegie Mellon, he also taught at

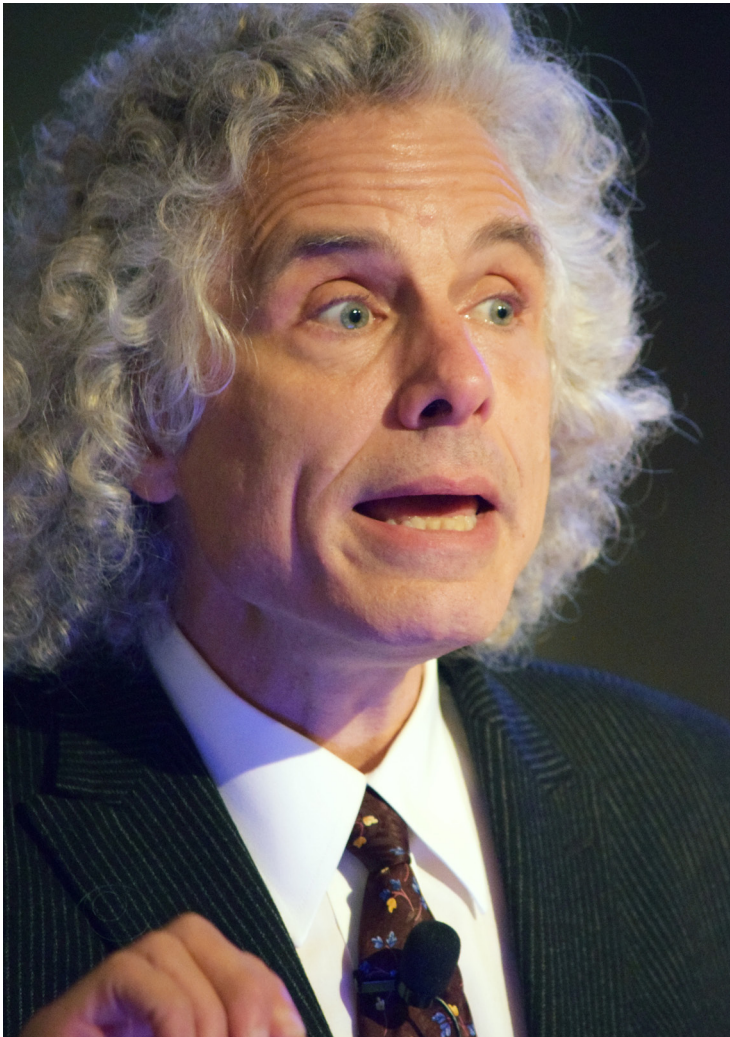
Carnegie Mellon for three years, earning a Teacher of the Week award from the Student Senate in 1984. “I have a special feeling for CMU and a special relationship with Pittsburgh which makes me want to be here,” Tesoro said.

While Tesoro’s dealings with Trump has at least enabled him to be somewhat influential in the presidential election, his business has only been harmed. “I am still paying for it,” Tesoro said.



FEATURE PHOTO

# Carnegie Mellon’s Humanist League hosts their annual Carl Sagan Fest



On Nov. 2, Carnegie Mellon University’s Humanist League hosted the Carl Sagan Fest. At this year’s event, Steven Pinker received the inaugural Sagan Award. Pinker discussed which historical changes have reduced violence in the past and which of these changes will be able to reduce it in the future.

## Campus Crime & Incident Reports

### Assist Outside Agency/ Underage Drinking

Oct. 29, 2016

University Police assisted the City of Pittsburgh Police with two intoxicated Carnegie Mellon students on Beeler Street. The students were issued citations for underage drinking.

### Robbery

Oct. 29, 2016

A Carnegie Mellon student was the victim of a robbery while walking on Fifth Avenue. University of Pittsburgh Police told University Police that the thieves were

placed under arrest. The Carnegie Mellon student was unharmed.

### Assist Outside Agency

Oct. 29, 2016

University Police assisted City of Pittsburgh Police with a Carnegie Mellon student who was struck by a bicycle. The student was unharmed in this incident.

### Harassment

Oct. 31, 2016

A Carnegie Mellon staff member received a phone call stating that a family

member had been kidnapped. The claim was found to be false and an investigation is ongoing.

### Robbery

Nov. 1, 2016

A Carnegie Mellon student was the victim of a robbery while walking on Ellsworth Avenue. University Police are assisting City of Pittsburgh Police with this investigation.

### Criminal Attempt/Theft by Deception

Nov. 1, 2016

A Carnegie Mellon staff

member reported that he received several fraudulent emails requesting he send large sums of money by wire transfer. An investigation is ongoing.

### Harassment

Nov. 1, 2016

A Carnegie Mellon staff member reported that he received a phone call claiming a family member had been kidnapped. The claim was found to be false and an investigation is ongoing.

Compiled by  
VALENE MEZMIN

NEWS IN BRIEF

### Two Carnegie Mellon faculty members receive funding for scientific research

Two faculty members of Carnegie Mellon University, B. Reeya Jayan and Hayden Schaeffer, have been granted research funding for three years by The Air Force Office of Scientific Research through the Young Investigator Research Program (YIP).

Jayan, who is an assistant professor of mechanical engineering, received a three-year grant. She received the award for her work with electromagnetic fields in materials synthesis. Jayan leads a multidisciplinary lab at Carnegie Mellon University. According to a Carnegie Mellon Press release, the lab is devoted to “molecular scale engineering of everyday materials” to uncover new properties of existing materials as well as discovering new materials. These discoveries could potentially lead to innovation in fields such as sensing and energy, and “the grant will help

Jayan focus her research on ceramic materials.”

Schaeffer, who is an assistant professor in the Department of Mathematical Sciences, is also a member of Carnegie Mellon’s reputed Center for Nonlinear Analysis. He received a three-year grant “to support his work on sparse modeling, partial differential equations and machine learning,” according to a university press release. In Schaeffer’s project “Sparse Modeling and Machine Learning for Nonlinear Partial Differential Equations,” he will be creating mathematical tools that will help scientists analyze and extract important information from experimental data.

The Young Investigator Program is open to all scientists and engineers across the nation who demonstrate exceptional ability and promise in conducting basic research.

### Martin Gaynor selected to be a member of the National Academy of Medicine

Martin Gaynor, the E.J. Barone Professor of Economics and Public Policy at Carnegie Mellon University, has been selected to be a member of the National Academy of Medicine. This membership is one of the highest distinctions awarded to scholars and professionals.



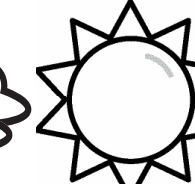



Gaynor is the former director of the Bureau of Economics at the Federal Trade Commission. According to a Carnegie Mellon press release, he also conducts research which focuses on “competition, antitrust policy and health care markets.” He has testified before Congress and “worked with the state of Pennsylvania on its health innovation initiative.” He has also

advised the governments of the Netherlands and the UK on “competition issues in health care.” Gaynor says that he finds enjoyment in the public service part of his work, as well as “pure intellectual satisfaction and joy that comes from discovering something, figuring something out” in his research.

As Ramayya Krishnan, dean of Carnegie Mellon’s H. John Heinz III College, comments in a university press release, “It would be impossible to overstate the impact Dr. Gaynor has on his field and on our community.”

Compiled by  
CHRIS SHENG

WEATHER

TUESDAY	WEDNESDAY	THURSDAY
		
66° / 47°	54° / 41°	59° / 47°
FRIDAY	SATURDAY	SUNDAY
		
51° / 35°	43° / 35°	48° / 35°

Source: [www.weather.com](http://www.weather.com)

### Corrections & Clarifications

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

STUDENT GOVERNMENT COLUMN

### DOMINIQUE ESCANDON

Special to The Tartan

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

If you happened to notice individuals on campus on Oct. 25 with purple paint on their hands or face, then maybe you were also aware that October was National Domestic Violence Awareness Month. SAFE CMU, Spark the Movement, Vaasavi Unnava (Student Body President) and Aaron Gutierrez (Student Body Vice President), and CMU Student Senate organized the Paint for a

Purpose event. The event aimed to bring awareness to domestic violence in America where 20 people will experience physical abuse in some form per minute — amounting to 10 million men and women per year according to the National Coalition Against Domestic Violence.

While statistics are always needed on issues like this in order to understand the magnitude of the problems at hand and to begin to construct plans to reduce these rates, their pure grandeur can take away from the humanity of its victims. For this reason, Jess Klein, coordinator of Gender

Program and Sexual Assault Violence Prevention on campus, organized the exhibition titled “It Happens Here.” This exhibit centered around the survivors of sexual assault, detailing the stories of individuals and making sure we don’t forget the facts such as that one in four women and one in seven men will experience physical violence in their lifetime. This directly translates to individuals in our communities, dorms, family, and friends. In Klein’s own words, “domestic violence does not discriminate — it can happen to people of all races, genders, social

classes, ages, and religions.”

Finally, Srishti Jain, Student Government’s Sexual Assault and Violence Prevention advocate, recently released a video project titled Survivor to Survivor. In this video, survivors of sexual assault and relationship violence anonymously submitted words of hope, advice, and love they would give to other survivors in their communities and beyond. Students all across campus, including members of the Student Body President’s Cabinet and Unnava, came together to share the survivors’ messages. The result was posted online

with the hopes that these words would reach those who needed it the most.

It’s always sobering to remember that Carnegie Mellon, which takes form as a home for so many, is currently being investigated for a Title IX violation — meaning, at some point, a student has experienced discrimination after reporting a sexual assault on campus. So again, I must highlight the absolute relevance of all these amazing events and projects occurring on campus. Sexual assault must always be taken seriously, not only because of its indiscriminate nature, but

because we as a community must strive to ensure that our members always feel safe, or feel comfortable in expressing their discomfort.

If you have ever felt that these most basic requirements were not being met, please never hesitate to reach out to loved ones, or any of the members of Cabinet, many of whom are in the Survivor’s Support Network. Have any ideas of other Sexual Assault and Relationship Violence (SARVP) events that you would like to see on campus? Please contact Srishti Jain at [srishtij@andrew.cmu.edu](mailto:srishtij@andrew.cmu.edu).





# The HistoryMakers tells the story of 2,700+ African-Americans

**CHRIS SHENG**  
*Junior Staffwriter*

The HistoryMakers is an online African-American oral video archive. With more than 9,000 hours of searchable interviews and stories from more than 2,700 African-American individuals in the nation, it is the largest of its kind in the world. It was initiated by Julieanna Richardson, the executive director of The HistoryMakers, who started collecting interviews in 1999.

The content of the project is diverse: it relates to the fields of science, education, entertainment, art, history, and many others. It is available for students and scholars at subscribing institutions; interviews are available to the public at the Library of Congress, which is The HistoryMakers' official repository. Carnegie Mellon University was granted access to the archive as recognition for the university's contribution in making the project. According to Richardson, "Carnegie Mellon University can

single-handedly take credit for opening this collection for research and study ... I can't say enough about Carnegie Mellon."

The HistoryMakers is a major work in recording the history of African-Americans. According to Richardson, "Everybody who has seen the work has been blown away." Professor Trotter from Carnegie Mellon University's History Department became acquainted with the project in 2008. In an interview conducted with The Tartan, Trotter stated, "we sometimes overlook our recent history when we are thinking about the future. In the underground, even as we are speaking, there are outstanding individuals doing incredible things, and we ought to be about recording both the older generation as well as the newer generation." According to Trotter, the oral history record of lives of people in the late 20th century will offer extraordinary insight and legacy for the study of history as well as for future generations.

Erika Linke, Associate

Dean of Carnegie Mellon University's school library, upon which the archive is endowed, states "I loved HistoryMakers from the first time I used it. Resources like HistoryMakers connect us with the past by hearing people in their own words, to see their expression and demeanor. We can read words but to hear the voice and to see an individual speak is special. Valuable today but in future, it will become a vital record."

One important feature of The HistoryMakers is that it is searchable electronically by an index name. In the archive, each video is briefly presented as segments with transcripts; work done by Carnegie Mellon University enables users to directly jump to corresponding video references that are mentioned in the transcription.

Trotter states "In the past, historians would need to listen to hours of tapes to identify particular topics or themes." Trotter stated that this searchable feature is a dimension of the project that

wasn't thought of as possible when the project started. Carnegie Mellon University's Entertainment Technology Center got involved in the project and helped to produce the technology that made these interviews searchable. He said that this feature is an "amazing innovation," in that it "not only allows you to search for a particular topic" in a way that the archive is a tool that can be used by anyone on any subject instantly, "but also allows you to analyze it through various lenses," such as through regional differences, time differences, gender differences, and so on. "You can get into a lot of different variations on the African American experience," Trotter stated.

This dimension of the project "does underscore that technology is transforming the research that we do," Trotter said. "Digital humanity is becoming a big field ... It's just good to have African American wrapped in it among those projects that are employing these tools."

He believes that technology will unpack graduate training, teaching, and many other aspects of the study of history.

According to a university press release, in April, \$725,000 was awarded to Brandeis University by the Andrew W. Mellon Foundation for it to work with The HistoryMakers and Carnegie Mellon University, to modernize the digital archive. "Previous funding has come from the Institute of Museum and Library Services and the National Science Foundation."

As for the future and development of The HistoryMakers, Michael Christel, who is a teaching professor at Carnegie Mellon working on digital humanities projects and games, says they aim to make the site responsive for mobile devices in February 2017. Also, they want to engage more students with the resources of The HistoryMakers and "make it more visible through the experiences the ETC can offer."

Professor Trotter stated that "The HistoryMakers

project, as it stands, is national. You can look at people from all areas of the country, which means that you have only a few representatives from each area." His goal is to integrate the local oral history projects into the national body of oral histories. According to him, right now they have over 180 interviews with local Pittsburgh African-American people in their history project, which is a great resource for this national archive: in this way Pittsburgh is represented more fully. He believes that if this could be done across the country, it would enrich teaching, research, and even social services in history.

The CAUSE Remembering African Americans in Pittsburgh Oral History Project was originally directed by Benjamin Houston, who is a senior lecturer in modern U.S. history in Newcastle University in the UK. Professor Trotter says that they are "still collaborating on projects that brings programs at Newcastle and at CMU together."

# CMU's new Swartz Center for Entrepreneurship is officially open

**ROSEMARY HAYNES**  
*Junior Staffwriter*

On Oct. 25, Carnegie Mellon opened the Swartz Center for Entrepreneurship. The event took place in Rangos ballroom, on the second floor of the University Center. The launch of the center is a highlight of this year's biannual LaunchCMU event which showcases entrepreneurial achievements at Carnegie Mellon University. The center was made possible by the gracious \$31 million donation by James R. Swartz. Through

classes and activities, the Swartz Center will provide an opportunity for collaboration across a range of disciplines through education and engagement.

This year's LaunchCMU event was focused on the theme of "Smart Cities" and showcased how this idea came through business achievements and through innovation by students, faculty, and alumni.

A place for ideas of students, alumni, and faculty to connect and grow, the Swartz Center will foster

business growth on our campus. Carnegie Mellon already sets a great example in business; just last year, an impressive 38 startups were created from Carnegie Mellon University students and faculty members.

The Swartz Center can be a resource for students at any point during their time at Carnegie Mellon to begin the journey to creating a startup. There are programs designed for first-years, such as Entrepreneurship Bootcamp, which could act as a catalyst to creating a startup.

Professors can also benefit from the resources of the Swartz Center to build connections to continue research or receive grants. This is a useful resource for those interested in entrepreneurship as it is meant to be useful to students of all disciplines, not just those focusing their studies in business.

In charge of running the center is executive director Dave Mawhinney as well as faculty co-directors Lenore Blum and Jon Cagan. Additionally, a board of members of the national

entrepreneurship community has been put together to provide their knowledge and guidance on the Swartz Center's path to success. Known as the Swartz Center Advisory Board, the members were also revealed at Tuesday's event.

James R. Swartz is already a greatly appreciated member of the Carnegie Mellon community. He is also a venerable entrepreneur and a founding member of Accel Partners of Palo Alto, California. For the work he has done as member of Accel partners, a global venture capital firm,

Swartz received the Lifetime Achievement Award from the National Venture Capital Association.

At Carnegie Mellon, Swartz is a member of President Suresh's Global Advisory Council and the Tepper School of Business' Board of Advisors. Also, in 2013, Swartz received yet another lifetime achievement award, specifically the Lifetime Alumni Achievement Award from the Tepper School of Business. He received this in honor of his professional attainment and his dedication to education.

# President Subra Suresh discusses university policies at Town Hall



On Nov. 3, over 100 community members gathered in Rangos Ballroom for President Suresh's second Town Hall meeting. President Suresh focused the talk on university policies, gender parity, and diversity at the university.

**TOWN HALL, from A1**

steps Carnegie Mellon takes to ensure diversity within the institution. "In academic units," remarked Suresh, "we make sure that we attract the best and the brightest representing different perspectives, different life experiences and different viewpoints." Moreover, Suresh mentioned a sensitivity training program for the faculty members initiated last year to reinforce the respect and equality among members of the Carnegie Mellon community.

Diversity was a recurring theme of this open dialogue,

and was brought up later in a question from Facebook regarding the rising undergraduate tuition cost at the university. "The reason we cannot make [need-blind admissions] a policy is because we do not have the resources to make it possible for all [qualified students with demonstrated needs] to attend Carnegie Mellon," said Suresh. He stressed that, because of the size and history of the university, Carnegie Mellon's endowment at the moment is limiting its ability to achieve the same level of diversity as its peer institutions, but diversity at Carnegie Mellon has improved

gradually over time.

The second question came from Daniel Gingerich, a Ph.D. student studying engineering and public policy at Carnegie Mellon, who raised a question about gender parity in the graduate school of Carnegie Mellon. Gender parity was repeatedly mentioned by Suresh in his opening speech: female students made up an unprecedented 49.8 percent of Carnegie Mellon's Class of 2020, and 48 percent of the first-year students in the traditionally male-dominated School of Computer Science.

In response to Gingerich's question, Suresh claimed that

the Carnegie Mellon faculty and staff were "taking a proactive role" to include more women into fields such as engineering and computer science since women's participation in these fields is lacking. He stressed that this issue can only be resolved on a case-by-case basis, and that it requires the university "to have over a billion dollars" of funding to attract the more capable female scholars to the institution.

The settlement of the patent infringement lawsuit between Carnegie Mellon University and Marvell Technology Group Ltd., which

resulted in a \$750 million payment to the College of Engineering earlier this year, was brought up in the Q&A session. Suresh explained that about one-third of the payment went towards the College of Engineering, benefiting departments such as Electrical and Computer Engineering and its sub-department Data Storage System Center (DSSC), where the invention took place; the rest would become part of the university-wide endowment used mainly towards supporting students instead of on infrastructure of the university, such as the Tepper Quad. The \$200 million funding required

to complete the Tepper Quad project would come entirely from fundraising.

Topics such as the physical and mental fitness of Carnegie Mellon students and the university's relationship with their indirect employees through vendors were also discussed during the hour-long dialogue. At the end, President Suresh encouraged all members of the community to partake in improving the university as a whole. "We very much welcome you to join in this conversation," said President Suresh at the end of the dialogue, "not just today, not just once a year, but continuously."





# Presidential race looks close as Election Day approaches

**ZEKE ROSENBERG**  
*Layout Manager*

As the 2016 presidential election descends upon us, the polling in the election is beginning to tighten but not everyone thinks it will be enough to save Republican candidate Donald Trump’s failing campaign. Most of the six major presidential forecasts put Democratic candidate Hillary Clinton up by a substantial margin. The Huffington Post, Princeton Election Consortium, and Daily Kos all peg Clinton’s chances of topping Republican candidate Donald Trump above 90 percent. The New York Times and PredictWise are not too different, placing Clinton’s chances of winning in the mid-80s.

FiveThirtyEight, the most popular forecast, puts Clinton’s odds closer to two out of three. FiveThirtyEight had Clinton’s chances sitting around 85 percent before the FBI Director James Comey sent a letter to lawmakers saying that the FBI might have uncovered relevant evidence to the investigation regarding Hillary Clinton’s private email server. Trump’s odds began to rapidly rise after this when his polls began to improve. The reason given by FiveThirtyEight editor-in-chief Nate Silver for his forecast’s aggressive reaction is twofold.

The first is that the unusually high number of people who are undecided or voting

third-party indicates a high level of volatility in polling results. Silver is always careful to mention that, for this same reason, FiveThirtyEight also predicts a higher chance of Clinton winning in a landslide than other models.

The second is that FiveThirtyEight’s model is programmed to react very aggressively to late trends in polling because polling runs out of time to capture changes in the electorate’s mindset before Nov. 8.

Similarly, outlets like CNN and Rothenberg and Gonzalez say that states where Clinton has a safe lead no longer make up more than the 270 electoral votes needed to win the presidency.

The New York Times’ forecast places 268 electoral votes in the “likely Democratic” category. Those states are not a guarantee — Clinton’s lead continues to shrink in Colorado and Pennsylvania — but if they end up going blue on election night, Hillary Clinton will need to win only one of nine competitive states or the second congressional district of either Maine or Nebraska. Trump’s leads in those congressional districts as well as Ohio, Iowa, Utah, Arizona, and Georgia indicate that if those states go blue, there was probably some sort of polling error in Trump’s favor, and one of the four remaining competitive states also likely went blue. This means that the battleground for

this election is likely in New Hampshire, Nevada, Florida, and North Carolina.

Currently, all major forecasts but FiveThirtyEight and the Princeton Election Consortium give Clinton more than a 65 percent chance to win each of those four competitive states. FiveThirtyEight gives Trump between a 50 and 55 percent chance of winning each of North Carolina, Florida, and Nevada while they give Clinton an edge in New Hampshire. The Princeton Election Consortium gives Clinton a nearly a three in four chance to win each of North Carolina and Florida while they consider New Hampshire and Nevada tossups.

Backers of both candidates are convinced that they have edges that the polls cannot capture.

Some of Trump’s supporters feel that the polls are underestimating him for a variety of reasons. The most common are that the likely voter screen takes out Trump’s deepest pockets of support and that the media coverage of Trump has been so negative that people are embarrassed to say over the phone that they will vote for Trump.

Trump consistently underperformed his polling in the primaries when likely voter screens and telephone interview polling were used. Further, Politico and Morning Consult released a study saying that over the telephone interviews do not suppress

Trump support. However, it’s no guarantee that general election polling would have the same errors as primary polling.

In Clinton’s corner, her campaign infrastructure gives her backers confidence that she will manage the victory. Clinton has far more campaign offices and a much more robust turnout operation than Trump, which could help her get more of her supporters to the polls.

Clinton also had a superior ground operation to her primary opponent, Senator Bernie Sanders (I-VT). While Clinton frequently outperformed her polls, she was also on the wrong side of several large polling errors. Iowa was essentially tied and Sanders won Oklahoma by a double-digit margin despite Clinton leading both states in late polling. Most notably, Clinton seemed to be a lock in Michigan where late polls had her up by margins ranging from 11 to 37, but Sanders ended up narrowly taking the state. Michigan is among the states Trump is actively campaigning to turn red to give himself some breathing room in the electoral map.

Clinton is anywhere from a heavy to an overwhelming favorite depending on who you ask, but the election is not quite over yet. Polls open on Tuesday, Nov. 8 and results will trickle in beginning at 6 p.m. when polls close in Indiana and Kentucky.



Top: Courtesy of MrX Bottom: Courtesy of Anythingyouwant Both: via Wikimedia Commons  
Top: Hillary Clinton hopes to maintain her lead going into the election.  
Bottom: Donald Trump is hoping polls are underestimating his support.

# Republican Senate majority in jeopardy as Dems close in

**JADE CROCKEM**  
*Operations Manager*

This election season has been one of the most polarizing and eventful seasons that America has seen in a while. With the presidential race taking a front seat, it is important to remember that Congress can either help or hinder the president. Of all the senate races happening in 2016, the most important are Nevada, New Hampshire, North Carolina, Missouri, Wisconsin, Indiana, and Pennsylvania.

### Nevada

In the wake of Senate Minority Leader Harry Reid’s retirement, Nevada is looking for someone to fill his spot. On the Democratic side, it could be former Attorney General of Nevada, Catherine Cortez Masto. Cortez Masto’s platform puts an emphasis on capitalizing on Nevada’s abundance of solar, wind, and geothermal energy. This not only puts an investment into clean energy, but into new jobs for the state. She also plans to push for immigration reform and make the path to citizenship easier in order to keep families together. Cortez Masto has previously fought against the Yucca Mountain nuclear waste repository, a dumping site for nuclear waste in Nevada’s Yucca Mountain, and plans to continue this fight. If elected, she would be the first Latina to serve in the U.S. Senate. Her fate now lies in how many of Nevada’s

780,000 Latinos show up to the polls.

On the Republican side, there is two-term representative, Joe Heck. Heck is the candidate that Nevada Republicans have been looking for to reclaim a Senate seat. He’s spent 35 years as a physician and brigadier general in the U.S. Army Reserve. As a previous small business owner himself, Heck promises to fight for small businesses and rid them of government regulations. Like Cortez Masto, he is in favor of clean energy and plans to advocate for this by pushing a bipartisan bill that streamlines the process of starting renewable energy projects. Heck is also a strong supporter of the Second Amendment. Similar to Cortez Masto, he also calls for immigration reform, but in a way that will increase border security. Nevada has been slow to bounce back to economic stability, and the answer for some voters might be a change in party and a vote for Heck this election season.

### New Hampshire

Incumbent Kelly Ayotte has some competition as New Hampshire has steadily become a more Democratic state. Ayotte, however, is a more moderate Republican that has steadily tried to distance herself from the right. Unlike many of her Republican counterparts, she believes that climate change is real and has formed the Energy and Environment working group to combat it. She’s also working

to fight New Hampshire’s growing heroin and prescription drug abuse epidemic. She helped co-author the Comprehensive Addiction and Recovery Act of 2015 which provided incentives to communities to implement strategies to combat addiction and she has a hand in several other projects that work to fight this issue.

Ayotte’s moderate efforts might not be enough to fend off her challenger, Democratic New Hampshire Governor Maggie Hassan. She is heavily focused on bipartisanship and spent her time as governor passing two bipartisan budgets that kept New Hampshire sales and income tax free while cutting taxes for small business research and development. She also froze tuition at state universities and lowered it for community colleges. She plans to approach the Senate the same way she’s led New Hampshire, by reaching across political line and putting the issues first.

### North Carolina

Incumbent Richard Burr isn’t exactly guaranteed a third term in this purple state. Low approval ratings have left Democrats with the opportunity for a steal. However, in a state like North Carolina that has seen several Senate changes, anything is possible. Burr had previously served on the U.S. House of Representatives for five terms before being elected to Senate. During his time in Senate, he was

Chairman of the U.S. Senate Select Committee on Intelligence and sat on the Health, Education, Labor, and Pensions Committee and also the Finance Committee. He’s a strong advocate for military families and plans to hold the government accountable and not allow them to interfere with state legislation, a mindset that is integral to Republican ideology.

Burr’s challenger, Deborah Ross, is no stranger to Washington. This former state representative is highly focused on education because she believes that her public school education in North Carolina laid the framework for her to be who she is today. Ross believes in investing in the public school system and striving to make college more affordable. Despite being a second choice for most North Carolina Democrats after former Senator Kay Hagan decided not to run, she still has a chance with Burr tied up in a scandal over PAC money.

### Missouri

Incumbent Roy Blunt has been a Senator for Missouri since 2010. This former history teacher was elected to be Majority Whip much earlier than other members of Congress. Despite starting with this momentum in Congress, his recent block of Supreme Court nominee Merrick Garland left many Missourians unhappy with his performance.

Blunt still has the slight edge in the polls over his competitor, but definitely has some work to do if he plans to keep his seat. He has some of the worst approval ratings in Congress, leaving most Missourians with a taste for something new.

Missouri Secretary of State and challenger Jason Kander seems to be the solution those unhappy with Blunt have been looking for. At 35, this military veteran is the youngest statewide elected official in America. He’s taken a bipartisan approach to pass the first major ethics reform Missouri has seen in almost 20 years and turned human trafficking legislation in Missouri into

some of the strongest in the country. Missouri has not voted for a Democratic president since 1992, but the state’s governor, Jay Nixon, and other senator, Claire McCaskill, are both Democrats. Kander could help bring Missouri Democrats to the polls once again on Tuesday.

### Wisconsin

With incumbent Ron Johnson barely winning his seat in 2010 and not performing to Wisconsin’s expectations for him, his reelection is anything but guaranteed. He’s publicly known for confronting Hillary Clinton during the hearings on Benghazi. He’s also been known to call those who take out student loans lazy as he skipped his senior year of high school and worked full time while getting his degree. Johnson believes that the solution to most of Wisconsin’s problem is reducing the cost and scope of the federal government and that is what he went to Washington to do.

After losing to Johnson in 2010, Russ Feingold is back for redemption. After advocating for campaign reform in the form of the McCain-Feingold Act and declining outside funds in 2010, he’s left that mindset behind in an attempt to win the seat that he held from 1993–2011 back. Contrary to Johnson, Feingold has invested in Pell Grants and works to make college more affordable. His Achilles heel however, could be a scandal involving his lack of response to veteran deaths due to overprescription in Tomah, WI.

### Indiana

The retirement of Senator Dan Coats has left way for two new challengers to rise. House representative Todd Young on the Republican side and Secretary of State, two-term governor, and two-term senator Evan Bayh on the Democratic side. Young, a former marine, says that what prompted him to run for office was President Obama’s 2009 stimulus package and Obamacare in 2010. He promises to fight for small

business owners, supports the second amendment, and is highly favored by the NRA. George W. Bush has also been campaigning for Young.

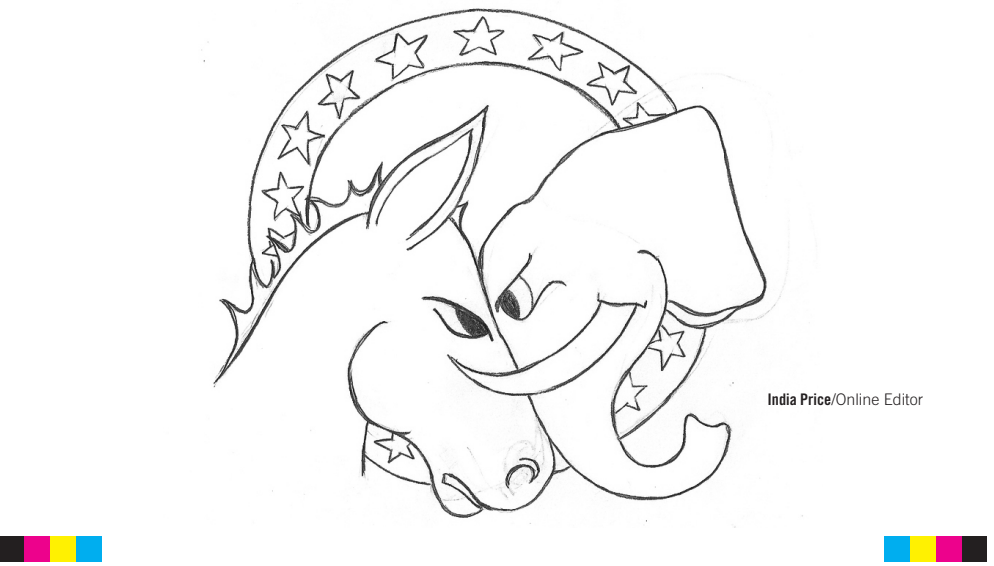
His challenger, Bayh, has very contrasting views. After Rep. Baron Hill (D-IN) dropped out of the race, the job fell to Bayh who has not disappointed Indiana Democrats. As the son of former senator Birch Bayh, he has a well-known name in Indiana. As governor, he was passed a large tax cut and reformed welfare programs. He plans to try and control government spending and strengthen our military if elected.

### Pennsylvania

In a race that is very familiar to most of us here on campus, incumbent Pat Toomey is up for reelection against Democrat Katie McGinty. Despite trying to take a more socially moderate position moving forward, Toomey blocked the bill that would have placed restrictions for buying guns on those on the FBI’s no-fly list. Toomey has also been under heat for blocking Garland’s nomination to the Supreme Court. During his time in Congress, he also had a hand in the Jumpstart Our Business Startups (JOBS) Act in 2012. Many Pennsylvanians have been dissatisfied with his recent performance, however, and are starting to wonder why they elected him in the first place.

McGinty is new to elected office. This environmentalist and leader in clean energy could be Pennsylvania’s first female senator, a fact that many Democrats hope will draw women to polls to vote for her and Hillary Clinton. After college, she worked with former Senator Al Gore (D-TN) on the Clean Air Act.

She also previously chaired the White House Council on Environmental Quality in 1993 in the Clinton administration and as the Secretary of the Department of Environmental Protection. She plans to continue her environmental efforts from Washington and to bring jobs to Pennsylvania through renewable energy.





# Democrats look to slim down Republican House majority

**SINEAD FOLEY**  
*Forum Editor*

As Nov. 8 approaches, the nation’s attention is fixed on the controversial, and some would say apocalyptic, presidential election. On the rare occasions that people can tear their eyes from the dumpster fire of a presidential election they usually focus on the competitive race for the Senate, where the Democrats have a shot at taking back the majority. In the midst of all the chaos, it’s easy to forget that the entire House of Representatives is also up for re-election.

To be fair though, this oversight is understandable. Republicans have a relatively safe majority in the House. The current balance is 247 Republican seats to the Democrats’ 188. Considering that, according to FiveThirtyEight, in the last election cycle two

years ago all but 16 of those 247 Republicans won their seats by at least 10 percentage points, giving Democrats a hard uphill battle if they want to reach the 218 seats needed for a majority. Back in 2010, when the last round of redistricting took place, Republicans gerrymandered the heck out of Congressional districts across the country, guaranteeing themselves a comfortable position for the next few elections. Redistricting won’t occur till 2020, so their majority seems pretty safe this year.

Even if Democrats don’t manage to pull off a miracle and take back the majority, they could dramatically change the landscape of the House. 270 To Win currently predicts that Democrats will win 194 seats, with Republicans getting 225 seats and 16 races still too close to call. Meanwhile, the Cook Political

Report rates 22 Republican seats as toss ups, likely to turn Democrat, or leaning Democrat, as opposed to only four Democrat seats in danger of flipping.

Of particular interest to Democrats are the races in California’s 49th and Florida’s 7th. The 49th and the 7th both feature high level Republicans suddenly caught in the reelection races of their lives.

Republican Rep. John Mica of Florida’s 7th had a good thing going until last year when Florida’s Supreme Court struck down the congressional district lines drawn by the Republican-led state legislature for unconstitutional gerrymandering. Now he’s facing a district much younger and more Democratic than he is used to. A Democratic win in the 7th could be a harbinger of good things to come on election night.

The 49th features House Oversight Committee Chairman Darrell Issa. Taking out a committee chairman would be a big win for Democrats, and taking out Issa, who has been one of President Obama’s most ardent critics (he once called Obama one of the most corrupt presidents in history) would definitely be satisfying. Issa has won his seat by double digits for the last eight elections, but has suffered from the “Trump effect.” While Issa supports Trump, most Californians don’t. This race highlights the ways Trump has changed the political landscape even down ballot, putting previously safe districts up for grabs.

Of course, it’s not all bad news for Republicans. The GOP has a chance to pick up a seat in Nebraska’s 2nd district, where freshman Rep. Brad Ashford is facing off against

Republican Don Bacon. The 2nd is about as purple as it gets, with Obama taking the district in 2008 but Romney carrying it in 2012 according to the Cook Political Report’s Partisan Voting Index. A Republican win here would help shore up the Republican majority against losses in other districts. Still, Ashford is a moderate Democrat with a history of working across the aisle in a district that is leaning towards Clinton on the presidential level, so it’s a hard fight.

All in all, things are looking good for Democrats. Putting a dent in the Republican majority would force Republicans to reach across the aisle more, particularly considering how fractured the Republican Party is these days. If a fragment of their party refuses to support a bill, Republican leadership will no longer be able to push

it through anyway and will have to bend to some Democrat requests to get bipartisan support.

So, what does this all mean for people voting in Pittsburgh? To be honest, not much on the House level. Pittsburgh is in Pennsylvania’s 14th district and is represented by Mike Doyle, a Democrat running for his 12th term in Congress. He is running against Lenny McAllister. McAllister ran in the Republican primary for Illinois’ 2nd congressional district in 2013 but lost and has now shifted his sights and his residence to Pennsylvania. This race is rated as safely Democrat by almost every major poll. Still, it’s worth keeping an eye on how House races play out across the country since legislation is all about compromise, and it matters who our representatives are compromising with.

# Voter suppression remains prominent in U.S. elections

**RUTH SCHERR**  
*Assistant Copy Manager*

Title 18, section 594 of the United States Code specifically states that voter intimidation at any election in which a federal position is being determined is punishable by fine, jail, or both. This is why different groups of states have banned firearms, prohibited partisan advocacy, and, in Montana, banned the offering of alcohol or tobacco near or inside a polling place. This is also why the Democratic parties of Arizona, Ohio, Nevada, and Pennsylvania can sue the Trump campaign for advocating for voter intimidation — it is unequivocally illegal. Voter intimidation is a relatively easy to identify example of voter suppression. The other methods of voter suppression are much less clear-cut and much more legal.

Legal voter suppression is something of an American tradition. The Constitution may have been written of, by, and for the people, but until 1870 “the people” was more or less synonymous to “white men.” Eventually, of course, the 15th and 19th amendments gave the constitutional right to vote to women and people of color.

A year after enfranchising black men, in the midst of reconstruction, Congress passed the Ku Klux Klan Act of 1871, a law over 100 years old and still relevant. The Colfax Massacre, where the Ku Klux Klan (KKK) attacked and killed up to 153 lawmakers and freed African-Americans at a courthouse, sparked the bill, which authorized the prosecution of the KKK and anyone else who violated the 15th amendment. These prosecutions dropped significantly as federal troops drew out of the south at the end of Reconstruction. Voters of color continued to be subject to suppression in the form of the poll tax, the literacy test, and the danger threatened and realized against them and their families. This, along with the

continued effort of the civil rights movement, lead to the passing of the Voting Rights Act of 1964.

Half a century later, at least twenty states have passed legislation that enable voting restrictions. Fourteen of these states have passed stricter legislation since the 2012 election. This summer, Arizona passed a bill restricting mail-in ballot collection. The argument that accompanies these laws is almost always that they are there to stop the epidemic of voter fraud. The Republican nominee’s recent call to arms also follows this argument.

A study affiliated with Arizona State University found that, between 2000 and 2012 there were only 500 cases of in-person or absentee voter impersonation, or 1 in 300,000 votes. Applied to the 146,311,000 Americans registered to vote in this election, that would predict 487 instances of voter fraud. The largest actual example of voter fraud in recent history was the purging of 12 thousand names, 44 percent of which were African-American, from Floridian voter rolls due to the fact that the named matched listed felons in other states. The year was 2000, and George W. Bush won the presidency by 537 Floridian votes.

It is effectively impossible to rig the U.S. Presidential election, no matter how much voter fraud is committed. This is not due to restrictive laws, but to the fact that the election is actually, between all 50 states, their multitude of counties, and the District of Columbia, a few thousand elections. These laws have no significant effect on voter fraud, but they do have an important effect on voting. Restrictive laws calling for stricter voter identification requirements, early voting cutbacks, and registration restrictions overwhelmingly affect voters of color.

After the 2008 election, which had unprecedented

turnout from people of color, the country saw the rise of voter suppression laws. A University of Massachusetts study found that the greater the rise in minority and low-income voter turnout, the more likely a state was to pass restrictive laws. The Brennan Center for Justice found that seven of the eleven states with the highest African-American turn out and nine of the twelve states with the largest Hispanic population growth established new restrictions to voting by 2014.

This disparity of impact is important because of what happens when people vote — politicians actually listen to them. Politicians pay attention to who votes because they want to stay in power, and catering to the people who have shown that they actually vote gives them that power. Take, for example, the years following the Voting Rights Act. Unprecedented numbers of African-Americans voted and, as a result, politicians noticed, and African-American communities got public funding for their roads to be paved and their stoplights to be fixed.

The United States likes to pride itself in the pure-hearted nobility of its democratic process. This year, however, the Republican nominee has spent a lot of energy claiming that the election is rigged, and has made a number of comments calling for voter intimidation and suppression. This parallels the acts of discrimination and injustice mentioned earlier. Pennsylvania, as one of the states the Republican nominee singled out in his calls to “watch your polling booths,” has already seen and will undoubtedly see more voter intimidation until tomorrow is over.

Tomorrow, there will be people who did not vote who were eligible to. It won’t be because they didn’t want to vote, but because they couldn’t. At this moment in the United States, voting is not a right — it is a privilege.

# FBI reviewing new evidence in Clinton email investigation



Courtesy of the FBI via Wikimedia Commons  
FBI Director James Comey sent a letter to lawmakers about potential new evidence relating to Hillary Clinton.

**IAN TANAYA**  
*Assistant Sports Editor*

On Oct. 28, the Federal Bureau of Investigation (FBI) began reviewing new evidence in its investigation into the email scandal that has dogged Democratic presidential nominee Hillary Clinton during this election cycle.

The FBI’s decision stems from the discovery of new emails that had not turned up during the course of the FBI’s initial investigation. “In connection with an unrelated case, the FBI has learned of the existence of emails that appear to be pertinent to the investigation,” FBI director James Comey said in a note to congressional committee chairs. “I am writing to inform you that the investigative team briefed me on this yesterday, and I agreed that the FBI should take appropriate investigative steps designed to allow investigators to review these emails to determine whether they contain classified information, as well as to assess their importance to our investigation.”

The decision to look further into the investigation of Clinton’s emails stems from the discovery of these emails during the bureau’s investigation into one of the former New York congressman Anthony Weiner’s sexting scandals. During their investigation into allegations that Weiner had sent sexual messages to a 15-year old girl

in North Carolina, the FBI seized a laptop that contained emails exchanged between Huma Abedin, Weiner’s estranged wife and a top Clinton aide, Clinton, and other members of the Clinton campaign. While many contend that most of these emails will be duplicates of those already turned over to the FBI, the FBI will go ahead with investigating the new pieces of evidence.

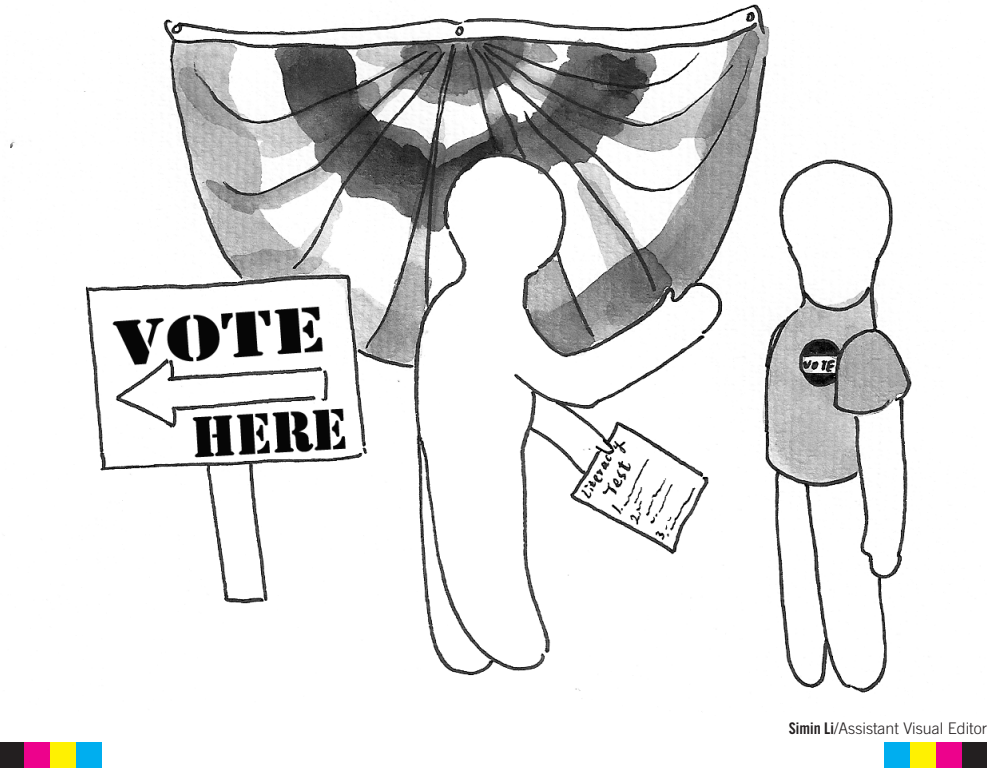
Further compounding headaches over the email scandal include continued releases from Wikileaks. One email from then-CNN contributor and current DNC interim chairwoman Donna Brazile gave Clinton aides a question that would be asked in advance of a Mar. 6 debate against Senator Bernie Sanders (I-VT). A later email showed that Brazile intended to “send a few more.” Wikileaks has vowed to publish 50,000 hacked emails before the election concludes, though it is unlikely the FBI will take them into consideration in its investigation.

What remains to be seen is if this October surprise will dramatically impact the election tomorrow. An October surprise is something that happens the month before the election that can change the race or cement a candidate’s victory. The term first came to use in 1972 after National Security Advisor Henry Kissinger held a press conference saying “peace is at hand,”

referring to the Vietnam War. In 2004, a video from Osama bin Laden put the spotlight on the War on Terror, helping President George W. Bush win reelection. In 2012, Hurricane Sandy served as the October surprise, as President Barack Obama immediately went to work doing what he could to help mitigate the disaster, drawing praise from New Jersey Governor Chris Christie. Americans then decided that the president could be trusted with four more years in office.

Republican presidential nominee Donald Trump has pushed the narrative that the Democrats can’t be trusted, specifying Clinton’s emails and an average 25 percent increase in health insurance premiums for midlevel benchmark Obamacare plans before subsidies. The polls have tightened up, as shown by the changes in the Real Clear Politics national average from a 4.6 point Clinton lead on Oct. 28 to a 1.6 point Clinton lead on Nov. 4.

Still, early voting may mitigate the damage done to the Clinton campaign, and at this point, most voters have already come to grips with either accepting Clinton’s flaws over Trump’s, refusing her in support of Trump, or opposing both major party candidates. It is not likely that any major revelations will come within such a short time frame that can dramatically change anyone’s mind on who the next president will be.





# Forum

FROM THE EDITORIAL BOARD

## Important issues hang in balance of Nov. 8 election

This electoral season is probably one of the most important to vote in. Pennsylvania has been the site of several different campaign visits, with both Hillary Clinton and her running mate Tim Kaine visiting Carnegie Mellon and First Lady Michelle Obama visiting the University of Pittsburgh on the campaign trail. There have been several voices telling our student body about how important it is to vote in the presidential election, but The Tartan wants to remind everyone that your vote can also have an impact on issues that are a lot closer to home.

One important issue that Pennsylvanians need to look out for on Nov. 8 is the Mandatory Judicial Retirement Age, which The Tartan wrote about in last week's issue. This ballot measure proposes to change the retirement age for state judges from 70 to 75 years old. The measure is worded in such a way that it implies that there is not currently a retirement age. Extending the age by five years only serves to allow justices to hold onto their seats longer than necessary. It is important for the population at Carnegie Mellon to pay attention to this measure because these justices will make decisions that they might not live to see, but will have an impact on the younger generation. Pennsylvania Republicans are capitalizing on the fact that people will read the measure and think they're enacting a voting age rather than extending one. A vote against this mandate could turn into a judicial ruling in favor of those who will be around to see it in the long run.

Another important reason to vote is because of the Senate election between Katie McGinty and incumbent Pat Toomey. The Tartan previously called for Pat Toomey to do his job and allow Merrick Garland's nomination to the Supreme Court to go to a vote in the Sennate. Toomey has continued to be a disappointment to Pennsylvanians with his vote against a bill that would have blocked suspected terrorists from buying guns. McGinty is an environmentalist that has long been an advocate for clean energy. With the poll numbers in this election changing almost daily,

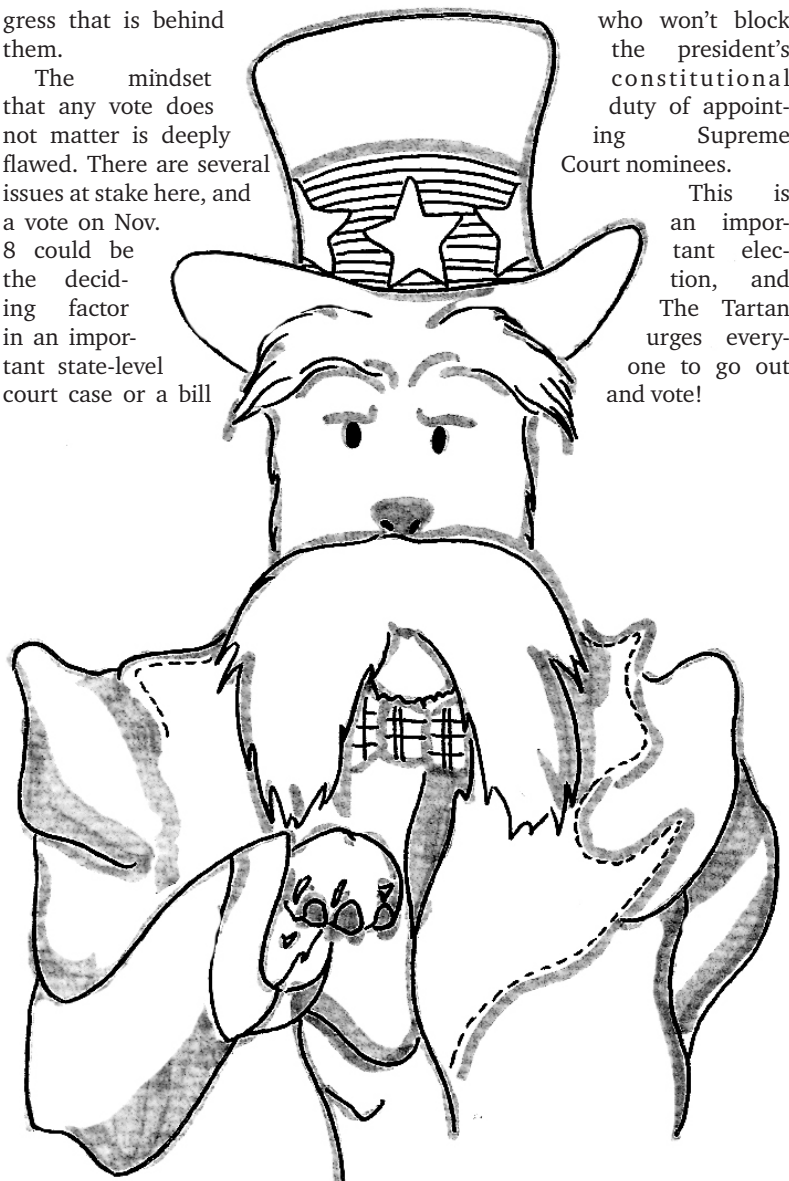
it is still anyone's guess who will join Sen. Bob Casey (D-PA) in Washington. A vote for Senate is almost as important, if not more important, than a vote for president. No matter who wins the presidency, they can only be as active as the Congress that is behind them.

The mindset that any vote does not matter is deeply flawed. There are several issues at stake here, and a vote on Nov. 8 could be the deciding factor in an important state-level court case or a bill

passing through Senate. Pennsylvanians have been unhappy with Toomey's decisions, but he didn't get to his position on his own; voters put him there. If voters want to see change, they have to get out

and vote for someone who won't block the president's constitutional duty of appointing Supreme Court nominees.

This is an important election, and The Tartan urges everyone to go out and vote!



## THE TARTAN WANTS YOU TO VOTE

Simin Li/Assistant Visual Editor

## Pittsburgh public schools steamroll humanities, arts

On Oct. 21, Pittsburgh public schools officials released a report that included official K–12 enrollment information for public schools in the Pittsburgh area. The report showed that overall Pittsburgh public school enrollment, as of Oct. 1, has fallen by 353 students in 2016, a 1.49 percent drop in enrollment. The losses came from all three divisions of K–12 education — 242 in K–5, 122 in middle school, and 37 in high school.

The report also explains that this dip in enrollment is not an isolated problem. Pittsburgh's low 2016 public school enrollment fits into a general trend in Pittsburgh's public education. Over the last five years overall enrollment has steadily dropped each year, falling 6.97 percent decrease in total.

Despite these overall decreases, however, the report also showed several individual schools with significant enrollment increases. Pittsburgh Schiller (6–8) gained 19 students, and Pittsburgh Lincoln's total enrollment (K–5) increased from 217 to 227. Pittsburgh Woolslair (PreK–5) showed particularly significant increases. In 2013, Woolslair was the smallest school in the district, not including special/online programs, with only 110 students.

Since then, however, Woolslair's enrollment has increased 74.5 percent, putting Woolslair's enrollment above other previously larger programs, such as Pittsburgh Manchester (K–8) and Pittsburgh Weil (K–5).

These increases could be attributed to several factors, but many have linked these successes with the integration of STEAM — science, technology, engineering, arts, and mathematics — programs. After initial plans to close Woolslair due to poor enrollment, the school board voted in September of 2014 to turn the school into a partial STEAM magnet school, with STEAM curricula taking effect during the 2015–2016 school year. Nearly \$900,000 was granted to the project, which also involved the implementation of STEAM programs at Schiller and Lincoln and an eventual extension to Perry High School the following year. The plan involved hiring two STEAM instructors for the four schools and developing a STEAM curriculum for each school.

Shaun Tomaszewski, the district's STEAM coordinator, explained that the grant money was used “to renovate existing physical spaces, to provide faculty with professional development and to purchase instructional materials they might need to

implement the curriculum.”

The STEAM curriculum, an extension on the traditional STEM curriculum, is centered around project-based learning, with students completing extended modules in newly-installed STEAM labs. “Our current vision for STEAM education is to provide experiences where kids will eventually not just participate in the economy as consumers of things, but have the capacity to really be makers of things,” Tomaszewski said. “We're ... committed to spreading this innovation to all of our buildings so these STEAM mini-grants will be available for individual teachers or principals so that they can develop STEAM activities and learning experiences for kids in their own spaces.”

The implementation of STEAM curricula in these schools follows previous implementation of STEM programs in both public and private schools throughout Pittsburgh.

Schools such as the Summer Gaming Academy have already benefitted from the integration of STEM principles. In 2011, a \$10,000 grant from the Grable Foundation was awarded to the Summer Gaming Academy to upgrade the school's computer lab and develop an Entertainment

See STEAM, A7

## Both Dems, GOP offer unsatisfying candidates

Brandon Schmuck

BRANDON SCHMUCK

After Staffwriter Caleb Glickman's response to my defense of the independent millennial, I continue to hold my stance that voting third party is a plausible choice that stretches far beyond what he describes as “idealism.” In fact, in many ways it could be a more rational decision than voting from the cesspool of choices that the two party system has provided us with.

Glickman credits the three branches of government as a solution that “brings many political dimensions and ideals to the table.” He continues, “...they do not form their own parties just because they disagree on a few issues. They find common ground with their fellow lawmakers.” In this sense, he is entirely correct. In fact, the rate at which they find common ground is so high, that the idea that they are representing multiple political dimensions and ideals is ludicrous. It has become taboo to vote against your party as a legislator. This is why our nation has become so polarized, and why according to a USA Today survey, despite the fact that Trump is all that Glickman has mentioned and more, he continues to be endorsed by all but 26 percent of Republican federal lawmakers.

Data compiled by the Washington Post from GovTrack puts into perspective just how

most members of Congress are not strictly tied to any political ideology and will shift positions on issues in order to win back large populations of voters that they have lost.

Perhaps the line that deserves the most attention in Glickman's article is the following:

“On the morning of Nov. 9, how will you feel if your new president-elect is Donald Trump, a racist, misogynist, bullying, thin-skinned, xenophobic, ignoramus ... who has boasted about being a sexual predator.” The length of the quote clearly depicts Glickman's agenda through his articles, not in promoting even a system of two choices, but one with what he believes to be a clear-cut choice: Hillary Clinton or Hillary Clinton.

While I agree with much of this quote and am myself quite scared of a Trump presidency, a quick search through the WikiLeaks Hillary Clinton Email Archive will show you just how I will feel on the morning of Nov. 9 if Clinton is our new president-elect. Her responsibility for Benghazi, lack of understanding of how to handle classified information, close ties with Wall Street, and lies about her mishandling of classified information are as frightening, if not even more frightening than the junk that spews out of Trump's mouth.

All of these actions that have caused obvious security threats to our country make it hard for me to believe that Clinton is “the only person in this race we can trust to lead the land of the free.” While a Trump presidency would be more

## The power that a large group of people can have by withholding votes ... is much more than that of simply voting for a candidate you dislike

often members of Congress vote along their party lines. On the House side, Republican Walter Jones leads with the most votes against his party, with more than 33 percent of his votes against the majority. In the Senate, this number is even less, with Democrat Joe Manchin voting against his party just over 25 percent of the time. This means that the most diverse-in-thought Democrat in the Senate votes with his party three out of four times.

If these numbers were the norm for most members of Congress, the argument could be made that this is not actually that bad. However, when only four senators and 11 Representatives voted against their parties more than 20 percent of the time, the idea that they represent a diverse crowd of thought and decision making could not be more false.

Glickman mentions that “parties can shift in their ideology when more lawmakers endorse a particular idea. If a voter feels left out of a coalition, he should support legislators in the coalition he most agrees with.” I agree that parties tend to shift towards more popular ideologies in order to win votes, but as I mentioned in my previous article, if you want to really change the way a party operates, withholding your vote from it is no doubt the most effective way. The power that a large group of people can have by withholding votes from a political party is much more than that of simply voting for a candidate you dislike that has already been placed in front of you. Because politics is their career,

than damaging, we've seen from Clinton's time as Secretary of State that her presidency could turn out just as badly.

I can sympathize with Clinton supporters and their desire to keep Trump from the White House, but I can also understand why those in rural communities are equally as afraid of a Clinton presidency. According to a Reuters poll in August, 41 percent of those outside of urban areas supported Trump, and only 28 percent supported Clinton. This should be of little surprise when Clinton has directly called out rural blue collar Americans with quotes like, “We're going to put a lot of coal miners and coal companies out of business.” For the small-town American, as jobs are leaving and heroin overdoses and economic issues plague their towns, it is clear why the message “Make America Great Again” is so appealing.

My goal is not to stand up for Trump or any of his ridiculousness, but to put things into perspective. Trump and Clinton are both terrible in their own ways and present a polarization of this nation. I don't wish to present alternative options like Gary Johnson, Jill Stein, or even Joe Exotic as ideal solutions to the problem, but I hope for you to open your eyes and look at the real pros and cons of all options available, whether it's Republican, Democrat, Libertarian, or candidates of any other political affiliation.

Brandon Schmuck (@bschmuck) is a Staff Writer for The Tartan.

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# Clinton slogs through double standards on road to White House



Editor's note: This weekly series highlights stories of women mentioned in the media. Find previous installments @ thetartan.org.

This Tuesday, the country will once again cast their votes for president, following an election season that has had U.S. citizens up in arms. The decision should be an easy one. After all, when given a choice between a former Secretary of State and New York Senator who has spent a lifetime advocating for families and women's rights and a business mogul who has faced bankruptcy four times, repeatedly made racist and sexist comments, and is best known by the general public for firing people on reality TV, it is obvious who would be able to better lead this country.

So why does Donald Trump still hold 43 percent in the polls, according to the New York Times? Hillary Clinton is currently leading, sure, but why is Trump even enough of a thought in the minds of U.S. citizens to potentially challenge her?

The answer is sad and simple: there is inherent sexism in U.S. politics, a dangerous double standard

that has tainted the political sphere since its inception.

In terms of this election, we are far past talking about issues. Of course, the U.S. population is divided on the issues. Yes, Trump represents the Republican Party and the Republican platform, and U.S. Republicans probably are more likely to agree with Trump's stances on the economy, gun control, health care, etc. If this was another election, another candidate, a question

of Democratic vs. Republican platforms, this could be a conversation about issues.

This year is a conversation is about how a racist, sexist man who runs his campaign through a combination of fear-mongering and outright bullying is actually being considered for president. This is a conversation about how if Clinton had said or done even a fraction of the things that Trump has said and done, she would no longer be considered for president.

Imagine a world where Clinton was recorded on tape saying

that she forced herself upon men. Or a world where Clinton had been sued for racial housing discrimination. Or a world where Clinton blacklisted major newspapers from getting press passes to her rallies because they spoke poorly of her in their publications. She certainly would not have 43 percent of the vote, nor be considered fit to run this country by anyone.

Yet somehow, Trump, who has done

all of this and much more, is still in the running. Somehow, these scandals are overlooked by almost half of the country. Trump is not held to the same moral standards as Clinton.

In the public eye, Clinton has to pull off a balancing act. She must be seen as strong enough to run the country, but warm enough to be relatable and trustworthy. She has to fight Trump and take power of the debates but she cannot react to the yelling and outright insults that he throws out at her. Meanwhile, Trump supporters applaud him for "speaking his mind" or for "taking charge." Trump never has to worry about appearing "relatable."

The difference here is that Clinton is not only being judged for her campaign or for her knowledge — she is also being judged on the fact that she is female. In the minds of a fair portion of the country, she is being judged on if she makes a good president and if she makes a good woman. Trump, meanwhile, does not face this type of scrutiny. He is judged on his presidential potential, of course, but there is no one comparing him to what he should be as a man.

As a country, we are far from being able to vote gender-blind. It will still be years before people will stop marrying someone's political potential to their gender. But we can start by realizing that, no matter his gender, Donald Trump cannot be allowed to be president.

Sydney Roslin (@sroslin) is a Staff Writer for The Tartan.  
Icon by Ashley Chan, Staff Artist.



# Internet of Things puts data at risk

ARUSHI MISHRA  
Junior Staffwriter

Are you aware that your beloved computer or laptop can be used as a weapon to abet a cyber-crime? Without your knowledge, your system can become a part of a botnet!

Hang in there for a moment — a botnet?

While I am sure that by now the tech geeks might have understood the reference I am trying to make, for others I will just let the cat out of the bag. It has already been four sentences! A lot of suspense here.

Well, a botnet is a network of infected computers that is controlled as a group by someone who does not have authorized access. This happens when computers on the internet are infected with some malicious software which compromises the security of the systems, thereby letting the attacker take the advantage of the vulnerability.

The severity of this kind of situation (where you are not in control of your computer) cannot be understated. It not only causes massive damage to the internet but also poses a security threat to the systems that are connected to the internet. For example, your personal information can be leaked.

With the advent of Internet of Things (IoT), which is a concept of internet where everyday objects have network connectivity for their communication, we have started relying more on the internet. Our dependency has increased to such an extent that today we are not just limited to using the internet on computers or cell phones; we use the internet in CCTV cameras, DVR players, coffeemakers, and even toasters!

The point here is that as the digital devices that use internet capabilities keep increasing, the user base keeps growing. Every user adds a little more information to the pool of information that is already out in the open waiting for a hacker to break-in.

The power of IoT is vested in the 'things' that are the devices we keep adding to the internet space. But, can IoT always be this powerful? I guess the answer is no!

On Oct. 21, major parts of the U.S. suffered a massive internet outage because of a severe distributed denial of service attack (DDoS). DDoS exploits the capabilities of the botnets to flood a server with hundreds and thousands of page view requests impairing the server's ability to function properly and hence causing the server to fail and collapse.

Experts claim that this attack was one of the largest cyber-attacks in history. What makes it remarkable is its source, the Mirai botnet, a new weapon which is not based on

computers, but on the devices that make up the (IoT).

The Mirai botnet was comprised of the devices present in the IoT. If each device in the IoT was a data point, the Mirai Botnet had 100,000 data points! Imagine these data points coordinating and operating in cohesion to carry out an attack on a server, the strength of the attack and its impact would be significantly large.

With an extraordinary attack strength of 1.2 TBps, the Mirai botnets brought down the Internet single-handedly by attacking the servers of an Internet Performance Management company called Dyn. This company is the Domain Name System (DNS) provider for a large number of websites in the U.S. and acts as a switchboard for the internet. DNS translates a website's address into a numerical address that allows systems to communicate with

**It is scary how every day we become a little more dependent on IoT, and a little more prone to the risk of losing our very personal data.**

each other. DNS makes the internet operable.

Popular sites like Netflix, Spotify, Twitter, and the Financial Times use the services from Dyn and they all crashed because their DNS provider was under attack. When users sent requests to the access those sites (Netflix, Twitter, etc.) no response was generated. There was a huge disruption in their services. Another software company called Dynatrace also suffered this attack and out of 150 websites that it monitors, 77 were affected. According to CNN, this disruption has caused the companies a loss of up to \$110 million in revenue and sales.

According to me, Mirai Botnet can be one of the worst nightmares in the world of internet and information security. Mirai Botnet harnesses the power of a network that has almost 5.5 million new things getting connected to it every day.

Can you imagine how powerful this botnet is?

Before you start to think hard, let me provide you one more item to your thought palette.

On Nov. 3, Mirai Botnet launched an attack on a small African country, Liberia. Seems like the Mirai Botnet

attackers are onto something big! According to a security researcher, targeting a small nation might be the best place to conduct tests for cyber-weapons and check their effectiveness for larger attacks.

The real motives behind any of these attacks are not known. The Mirai attackers have launched their two main attacks very wisely. The first on Dyn had so many data points that it is a tedious task to track and investigate each data point, the second on Liberia had to few data points to arrive at any concrete conclusion. There is no information available on the internet about the reason behind these attacks except for the fact that the investigation is ongoing.

While no personal data has yet been compromised by any of these attacks in the U.S. or Liberia, the concerns of information privacy and security have re-surfaced. There is no assurance that our information on the web is safe and the thing that concerns me is that we are helpless.

It is scary how every day we become a little more dependent on IoT, and a little more prone to the risk of losing our very personal data. It is a case where there is no perfect in-between. You cannot be more dependent on the internet without being less likely to be cyber-attacked.

According to David Fidler, adjunct senior fellow for cyber security at the Council on Foreign Relations, the insecurity of IoT devices is a grave issue and there are no effective measures to deal with it.

One might say that adding security features to the devices in IoT might work. Well, agreed! But to what extent? The world will have 50 billion connected devices by 2020 and with the next 1 million devices coming online, formulating a security measure for each device would be a tedious task. A decent approach would be to have the right knowledge about handling these devices, but we cannot expect everyone to be proactive or efficient in learning and handling.

Technology has made almost everything simpler for the humanity, but I believe that IoT is a case where simplicity has brought in complexity that is difficult to simplify.

Until there are strict strategies to combat IoT security issues, we are left with two options. Either to not use devices that belong to IoT (Silly? Right!) or to take a leap of faith and take security measures at our end (leaving the rest to fate).

With the frequent cyber-attacks by Mirai botnet, I just hope that we do not come across a new Mirai attack in next few weeks. Mirai has revealed the vulnerabilities in the IoT framework and I feel that these should be fixed or attended to before Mirai hits us again, making us weaker than we already are.

## FROM THE EDITORIAL BOARD

### K-12 education needs liberal arts

STEAM, from A6

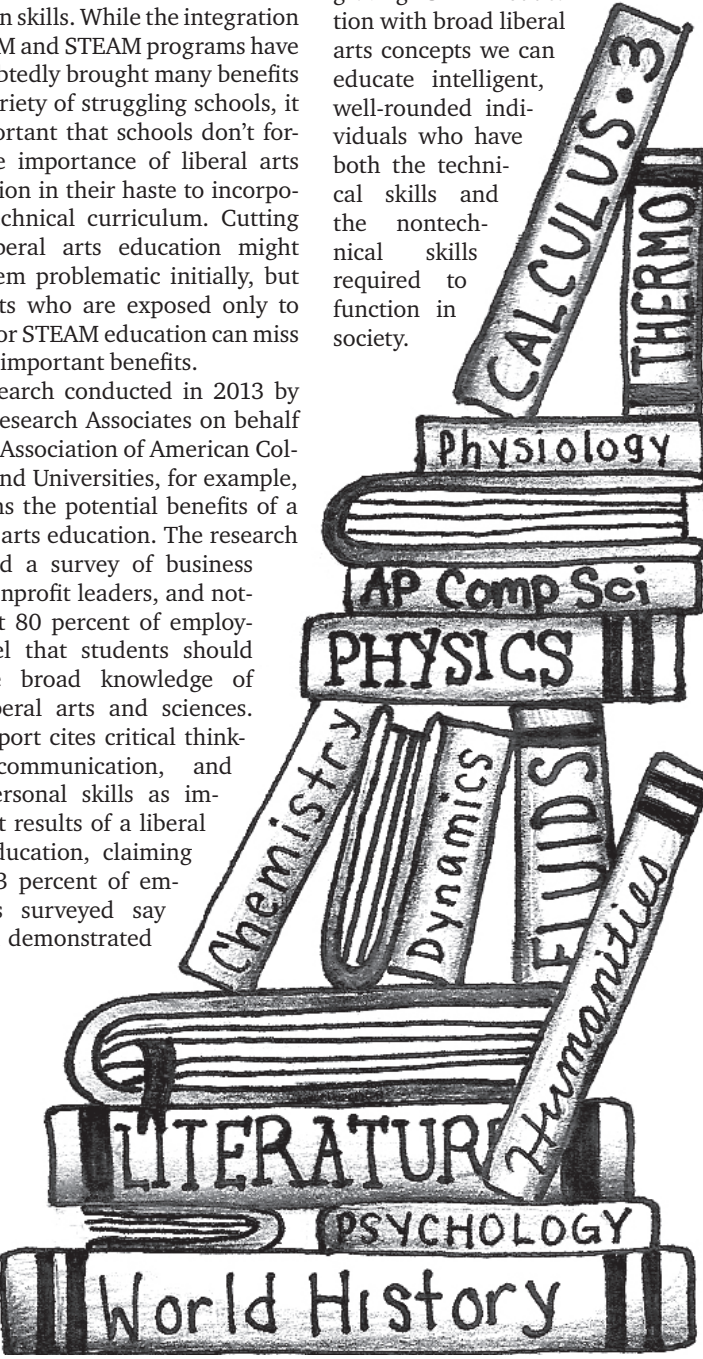
Technology Center. Similar to Woolslair, the Summer Gaming Academy, which initially started at approximately 30 students, had a projected enrollment of 170 students the following year due to the implementation of new technology. Other developments within the Elizabeth Forward School District also exhibit the growth of STEM education, including the development of the YOUMedia center, which lets students interact with digital media, and the SMALLab (Simulated Media Arts Learning), which incorporates motion-capture cameras and wireless controllers to let students play games with images projected onto surfaces throughout the lab.

This increased presence of STEM-type programs represents a general shift away from liberal arts education, which teaches students general skills including critical thinking as well as written and oral communication skills. While the integration of STEM and STEAM programs have undoubtedly brought many benefits to a variety of struggling schools, it is important that schools don't forget the importance of liberal arts education in their haste to incorporate technical curriculum. Cutting out liberal arts education might not seem problematic initially, but students who are exposed only to STEM or STEAM education can miss out on important benefits.

Research conducted in 2013 by Hart Research Associates on behalf of The Association of American Colleges and Universities, for example, explains the potential benefits of a liberal arts education. The research entailed a survey of business and nonprofit leaders, and noted that 80 percent of employers feel that students should receive broad knowledge of the liberal arts and sciences. The report cites critical thinking, communication, and interpersonal skills as important results of a liberal arts education, claiming that 93 percent of employers surveyed say that "a demonstrated

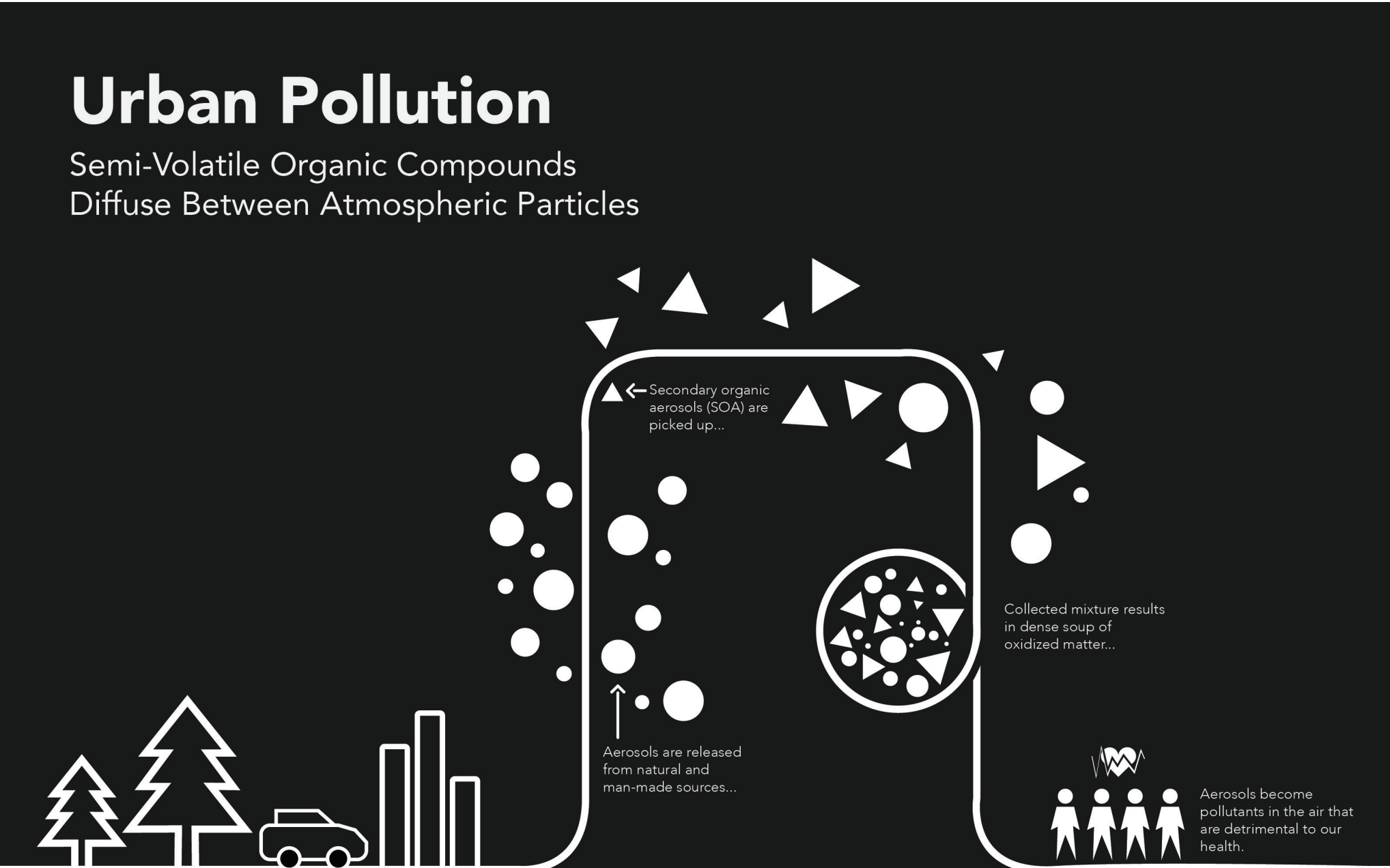
capacity to think critically, communicate clearly, and solve complex problems is more important than [a candidate's] undergraduate major" and 95 percent say that they want to hire individuals with "ethical judgment and integrity; intercultural skills; and the capacity for continued new learning."

These results demonstrate the desire for non-technical skills, which points out the problem with purely technical education. Students who are technically intelligent, but lack important skills such as written and oral communication, are at a disadvantage. Even in technical jobs, individuals are required to interact with others and present their ideas, which requires strong communication and interpersonal skills. The increased focus on STEM education in K-12 schools is providing promising benefits, but we need to make sure that schools aren't completely abandoning the liberal arts. By integrating STEM education with broad liberal arts concepts we can educate intelligent, well-rounded individuals who have both the technical skills and the nontechnical skills required to function in society.





# Science & Technology



Yoon Young Kim/Junior Staff Designer

## EVANGELINE LIU

Staffwriter

Recently Carnegie Mel-lon’s Lord Professor of Chem-istry Neil M. Donahue and his group publishe a study in the early online edition of the *Proceedings of the National Academy of Sciences* showing that semi-volatile organic compounds (SVOCs) can dif-fuse into “glassy” atmospheric particles, which means they are chunky like glass. Under-standing these processes for how atmospheric particles grow and react is crucial to

understanding topics such as how pollutants spread and the impact of pollutants on climate change and human health. The word “volatile” means that a compound has high vapor pressure at room tem-perature and thus evaporates into gaseous form very easily. By extension, semi-volatile means that the compound is not as volatile as a compound that would be considered volatile, and has a generally bigger molecule than a com-pound considered volatile. The atmosphere naturally

contains billions of aerosols. Aerosols are small, non-gas-eous particles from natural sources, such as fires or sea spray, or artificial sources, like car emissions. The afore-mentioned semi-volatile com-pounds can react and diffuse into the naturally-occurring aerosols that inhabit the air. The density of all of this at-mospheric organic matter increases as more and more chemical reactions proceed. As the density increases, so does its potential to contrib-ute to climate change and harm human health.

The bulk of the actual lab-oratory work in this study was done by Qing Ye, a chemistry doctoral student. She used single-particle mass spec-trometry to look at a mixture of two compounds that are both formed from the oxida-tion of organic compounds: toluene, often found in gaso-line and industrial solvents, and alpha-pinene, a molecule naturally given off by pine trees. One of the compounds was isotopically labeled, and the populations of each compound were measured over time. The experiments

showed that both compounds diffused easily, but toluene only diffused easily if the hu-midity was above 30 percent. “Our work shows that some glassy particles are kind of crunchy when they are dry, but they turn gooey when they get wet; under most conditions, the semi-volatile compounds will diffuse into particles quite easily,” said Donahue in a university press release. Before this study, it was not scientifically conclusive as to whether SVOCs were able to diffuse onto “glassy”

atmospheric particles. This study has demonstrated that the SVOCs are indeed able to travel under certain con-ditions, which are dependent on the origin of the SVOC par-ticles themselves. In many parts of the world, air pollution is an increasing concern in addition to hav-ing the potential to cause an-thropogenic climate change, it also poses a more direct risk to health. The results of this study are a key step to achiev-ing greater understanding of these issues that affect our en-tire planet.

# Carnegie Mellon, Yale develop new gene-editing system

## NAVIYA SINGLA

Assistant SciTech Editor

Researchers at Carnegie Mellon University and Yale University have developed a new, minimally invasive, gene-editing system that can be used to cure genetic blood disorders in live mice. As op-posed to other gene-editing technologies such as clustered regularly interspaced short

palindromic repeats (CRISPR) and zinc-finger nucleases, this technology uses an IV treatment and does not mu-tate genes that weren’t meant to be mutated. This system uses peptide nucleic acids (PNAs), synthesized poly-mers comprised of a protein backbone with DNA and RNA nucleotides attached to it. CRISPR has been hailed as the “most important

innovation in the synthetic biology space in nearly 30 years” and the interest in it as measured with respect to pat-ents, scientific publications, and government funding has skyrocketed since 2013, ac-cording to a *Washington Post* article. However, CRISPR’s method of using the immune systems of bacteria to identify and modify certain DNA se-quences at a specific site has

its drawbacks. It uses DNA-cutting en-zymes to cut open a slice of DNA and then change it. First, these enzymes cannot be in-serted effectively into a living body, unlike PNAs. CRISPR involves taking the affected cells outside the body, treating them, and then placing them back into the affected region. Second, while treating the cells, the enzymes might affect

cells with similar sequences and create sporadic, unwant-ed mutations.In an official uni-versity press release, Danith Ly, a professor in the Depart-ment of Chemistry at Carnegie Mellon, explained, “We have developed a system that uses FDA-approved nanoparticles to deliver our PNA molecule along with a donor DNA to re-pair a malfunctioning gene in living mice. This has not been

achieved with CRISPR.” The system developed by Carnegie Mellon and Yale overcomes both of these prob-lems using PNAs. The system is comprised of nanopar-ticles that are safe to inter-act with living tissue, which contain PNAs and donor DNA. PNAs are also synthe-sized nanoparticles that are

See **GENES**, A9

## SCITECH BRIEFS

### Heart cells can be regenerated in low-oxygen environments

A healthy heart is normally supplied with oxygen-rich blood. However, the heart muscle cells of adult mam-mals, or cardiomyocytes, typi-cally do not divide because exposure to oxygen damages these cells. Using this infor-mation, researchers at the University of Texas South-western Medical Center found that after placing adult mice in a controlled, low-oxygen environment for two weeks, their heart muscle began to regenerate. The cardiologists lowered the oxygen level from the normal 21 percent to 7 percent, which is similar to the oxygen level at the top of Mount Everest. They found that over time, the number of cardiomyocytes increased, and heart function improved. Scientists could potentially generalize the findings to oth-er organs as well. The entire study can be found in *Nature*.

Source: Science Daily



### High-speed 2D and 3D printing improved

New technology developed at Pennsylvania State Univer-sity’s College of Engineering has improved printing speeds by a thousand-fold — 3D printing that used to take an hour takes seconds, and print-ing 20,000 pages in 2D takes a minute. The researchers used “a space-charge-controlled KTN beam deflector,” which is a crystal that, at an extremely high temperature, can in-crease scanning speed from microseconds to nanoseconds. The lead researcher and professor of electrical engi-neering, Shizhuo Yin, stated that this new technology would immensely benefit the medical field by making real-time high-speed imaging possible. The complete find-ings were published in the September issue of *Scientific Reports*.

Source: Science Daily



### Patient treatments personalized with biological datasets

Scientists are developing tools to link the information a genome provides with large biological datasets to pin-point gene activity and output at specific times and places. While useful in many aspects, a genome by itself only pro-vides a simplistic map of our genes that tells us what could happen. However, in combination with the proteome, or the set of an organism’s proteins, the metabolome, or the set of an organism’s metabo-lites, and many other omes, scientists can predict how individuals will respond to certain treatments under cer-tain environments. This will help the medical industry personalize treatments for individual patients, and can help the agricultural industry to engineer crops to survive harsher conditions.

Source: Science News



### Turning plants into explosive detectors now possible

Scientists at the Massachusetts Institute of Technology turned a spinach plant into an explosive de-tector by placing tiny carbon tubes in its leaves. As the plant takes up water through its roots, the chemicals found in landmines, or nitro-aromatics, are absorbed as well. The scientists then shine a laser onto the leaves to stimu-late the nanotubes to emit fluorescent light detectable by an infrared camera, or even a smartphone camera without the infrared filter. Currently, the reach of the signal is limited to one meter, but the researchers are work-ing to increase the distance. Its applications include monitor-ing terrorist activities in public spaces. The results are published in the journal *Nature Materials*.

Source: BBC News



### New model of the Earth-moon system explains degrees

Scientists have been attempting to rationalize the oddly far orbit of Earth’s moon and its unusually large orbital tilt, but so far, the models have not completely explained the current state of the Earth-moon system. Past research has suggested a mod-el in which the moon smooth-ly transitioned away from Earth’s equatorial plane to the “ecliptic” plane after the ex-plosion that created the moon, but does not explain the five-degree tilt of the moon from the ecliptic plane. A recent paper suggests that the explo-sive impact that created the moon also tilted Earth to a 60- to 80-degree angle. As time passed, the Earth stabilized to its 23.5-degree angle we ob-serve today, and the moon, as it abruptly shifted away from Earth, oscillated about the ecliptic plane, explaining the five-degree tilt.

Source: Science Daily



### New warnings released about e-cigarettes

Public health authorities in the United States have long stood by the claim that vap-ing, or smoking electronic ciga-rettes (e-cigarettes), is dan-gerous. This, in addition to the fact that e-cigarettes are not as effective in satiating the ad-diction to nicotine, has led to a decline in sales of e-cigarettes. The warning is meant to pre-vent young people from start-ing the habit of vaping, but as a result also discourages peo-ple from using e-cigarettes to quit smoking. A British medi-cal organization claimed that e-cigarettes are 95 percent less harmful than cigarettes, but many Americans are under the impression that e-cigarettes are equally, or even more, harmful as cigarettes.

Source: *The New York Times*

Compiled by  
**STEPHANIE YOU**





HOW THINGS WORK

# Shazam phone app redefines music

JOSH ANDAH  
Staffwriter

In years past, if you heard an amazing tune playing, you would rush to the closest person to you, with one question: “What’s the name of this song?” Others would alternatively type as many lyrics as they could discern into Google’s search bar, only to realize with much dejection that they had heard the wrong words altogether. Nonetheless, technology, as it so often

every time, but it is very much grounded in the realm of computer science. Shazam was founded in 1999 by Chris Barton and Phillip Inghelbrecht, both University of California, Berkeley students, along with Avery Wang, who was a digital signal processing Ph.D. student at Stanford University. Dhiraj Mukherjee also joined the team from a firm located in the U.K. In 2002, before smartphones picked up, a user had to dial “2580” on their

A fingerprint is the distinct sound wave pattern of an audio excerpt. Next, the user records whatever it is he or she wishes to be identified, then the sound wave of the recording is compared to the database of stored fingerprints until a match is found. When a match is found, the information connected to that correlation in the database is returned to the user. If a match is not found, as is often the case in noisy environments and for obscure

detects songs by having users hum and Amazon’s Firefly. Shazam is, however, the most successful and ubiquitous of the bunch. Its service has expanded beyond detection of only music, to movies, TV shows and adverts. Shazam offers a glimpse into an exciting future for portable technology. Security, the internet of things, user interfaces, and voice commands are areas that could benefit from Shazam’s model. Today,

# New gene-editing method developed

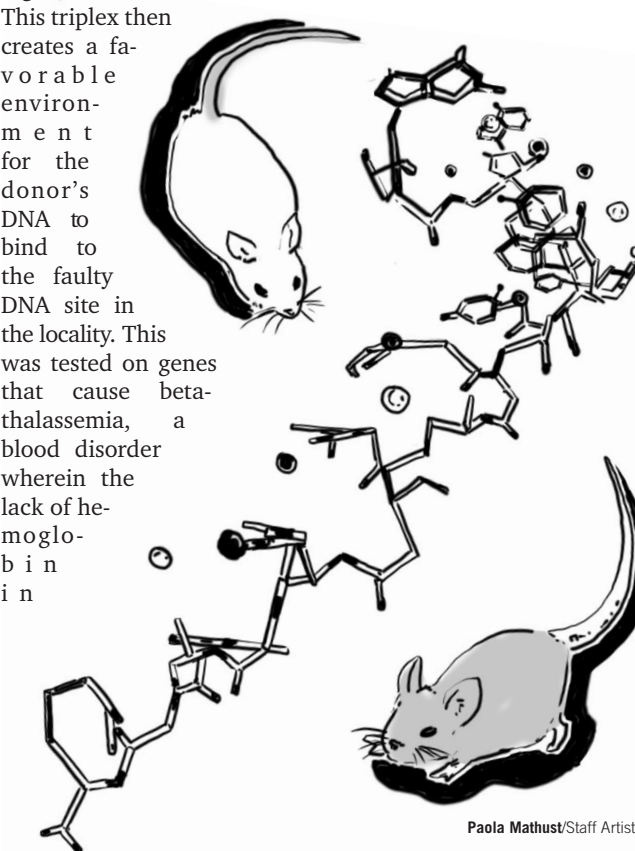
GENES, from A8

basically the nucleobases of DNA and RNA attached to a protein backbone. This allows them to bind to the DNA in the affected region with high affinity, without actually cutting the DNA at the site. It simply opens up the double-stranded DNA and performs its function. The nano-particle delivery system that PNAs can be used with has been approved by the United States Food and Drug Administration and used successfully to treat neurodegenerative diseases in humans.

Ly and Raman Bahal, a former graduate student, together with Peter Galzer’s team from Yale University, created the nano-particles that contained the PNA which, on binding to the target site, created DNA-PNA-DNA triplexes after displacing a DNA strand. This triplex then creates a favorable environment for the donor’s DNA to bind to the faulty DNA site in the locality. This was tested on genes that cause beta-thalassemia, a blood disorder wherein the lack of hemoglobin in

the body creates acute oxygen shortage throughout the body and induces fatigue, weakness, and other severe issues. This resulted in increased hemoglobin levels for several months after treatment and a success rate of 7 percent in gene-editing. This is significantly higher than the current commonly used methods, which report a success rate of only 0.1 percent.

In the press release, Ly, referring to the results, said “The effect may only be 7 percent, but that’s curative,” He explains. “In the case of this particular disease model, you don’t need a lot of correction. You don’t need 100 percent to see the phenotype return to normal.” The reports of this research were published in the journal *Nature Communications*.



does, has solved this recurring problem of the unknown song with an app called Shazam. When a song is playing and a person wants to discover its name, they pull out their phone, launch Shazam, and start recording. After five to ten seconds, the title of the song pops up on the screen, accompanied by other information pertaining to it such as the artist, album, artwork, and year of release. Admittedly, this process elicits awe

phone while holding it up to the music, and the user then received an SMS text with the song title and artist name. In 2008, Shazam became one of the first apps on Apple’s new App Store. Shazam employs a four-step process to detect audio picked up by a phone’s microphone. Firstly, according to their website, Shazam Entertainment Ltd. keeps a large database of 11 million songs and their unique “fingerprints.”

music, an error is returned. The fingerprint of a song’s audio is saved as a spectrogram, which is a time-frequency graph of a wave. This is a crucial step in converting the analog sound wave into a digital format that Shazam’s scripts can read and compare. Shazam is not the only nor is it the first app to perform this function. Several competitors exist, such as Google Sound Search, SoundHound — which

similar technology is already being used to unlock phones using voice. Shazam is an indispensable utility on phones for millions of users. It has been downloaded ten million times, and correctly identified songs over 15 billion times. The modern marvel that is Shazam exemplifies and is a reminder of the power of ingenious computing. Now, there’s no need to ask that nearby person for the name of a catchy song: one can just Shazam it.

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PUGWASH

# DDoS attack noticeably compromises mainstream websites



**ROB MACEDO**  
*Special to The Tartan*

Last week, a wide scale Distributed Denial of Service (DDoS) attack struck the internet, shutting down major websites such as Twitter for small, yet noticeable, periods of time.

The DDoS attack was aimed at Dyn, an internet infrastructure company based in New Hampshire. Dyn is a Doman Name System (DNS) services company. The incident took place in the form of three repeated attacks in one day, which flooded Dyn’s internet directory servers with malicious requests from millions from servers. These attacks lead to internet disruptions over the East coast and some parts of the West coast. In an article on the popular technology magazine Wired, Dyn described the attack as “very sophisticated and complex.”

A DDoS attack is characteristically simple; it involves simply overwhelming

a server with requests, much like blocking an entrance to a building by sending too many people through the door at once. Usually, large companies with formidable firewalls can prevent such simple raids. Thus, DDoS attacks are effective because they attack channels of communication such as routers and servers as oppsoed to attacking a single website.

Yet, the fact that a DDoS attack successfully disrupted so many mainstream websites raises concerns regarding the safety of the internet. If such a simple attack — when executed artfully — can shut down major websites, how much damage could a more sophisticated hack cause?

Consequently, how should we conduct ourselves online when web security protocols are vulnerable to the most forceful of breaches?

Furthermore, the recent attcks on Dyn have been reported to be of a class of DDoS that infects objects on the IoT (Internet of Things). Thus, as the world begins to move towards greater IoT connectivity, it becomes harder to monitor what information we put out over the internet.

The current design of the

internet may be inherently insecure, as the web was not built with air-tight security in mind. Perhaps the only way to be safe is to take security into your own hands, and not to rely on the security provided by others to protect you.

Furthermore, fully securing the internet may be detrimental to one of the most critical functions of the web: increasing our freedom of information.

The security vs. freedom tradeoff is an old debate, but perhaps it is no more prevalent than when considering the consequences of a “100 percent hack free” net. For example, a fully secure internet would require some sort of authority to decide what may be allowed and what is not.

Is this truly what we desire the internet to be? Access to boundless information may, by its very nature, give others endless access to our own information.

Technology may not be the ideal solution to internet vulnerabilities. We may have a social problem, rather than a scientific one. If individuals do not take responsibility into their own hands, technologically securing online interaction without sacrificing freedom of information may be futile. In this sense, internet security can be considered a social engineering problem.

We must teach people how to be vigilant online, and how to protect their information. These practices can be very simple, such as not opening emails from unknown senders with hundreds of recipients. Yet, many of these protocols are far from common sense. Furthermore, online resources could be designed to ease the process of securing one’s data.

Nonetheless, even if these procedures are widely adopted, it is still naive to assume our

information would be impenetrable. How should our government communicate critical and confidential information, which could have catastrophic repercussions if leaked?

The recent email scandal involving Hillary Clinton only underscores the tremendous vulnerabilities in networked systems. Linking servers together on isolated networks, not unlike the “ARPANET,” is most likely the solution our government currently implements.

Yet even these networks are vulnerable, though it is perhaps a step in the right direction. Asking our leaders to fully isolate their information to non-networked devices could simply be too infeasible for realistic implementation, and we must accept that there is a small, but certainly present, chance that our country’s most crucial security can be stolen.

A solution may lie within the benevolence of major software corporations.

For example, Google will alert users if it appears that their computer has become a “zombie,” i.e. a computer that has been maliciously hijacked to execute attacks such as DDoS on other systems. In this sense, the future may belong to “white-hat hackers:” an almost priest-like group of individuals who

bestow knowledge of technological security unto the masses, and who alert the populace when cyber evils

are present.

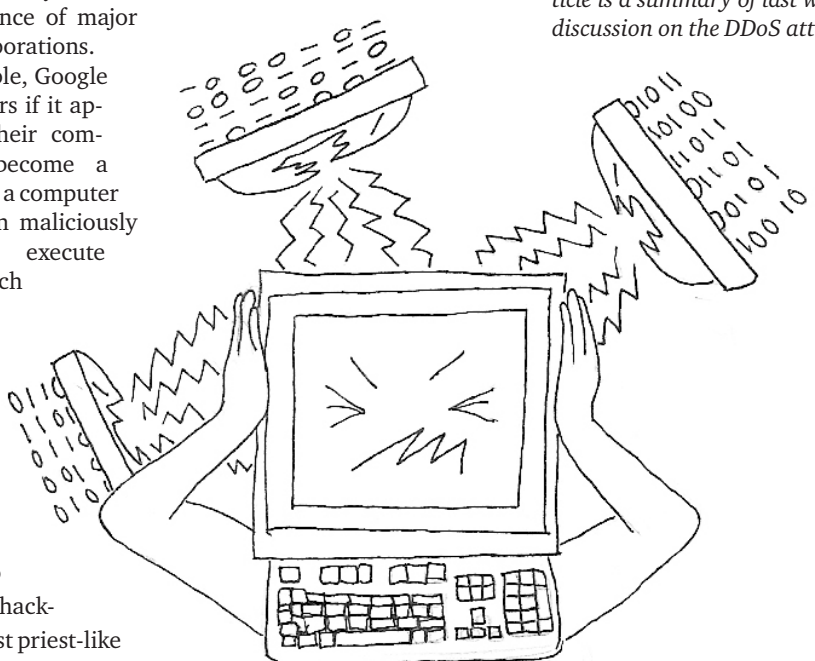
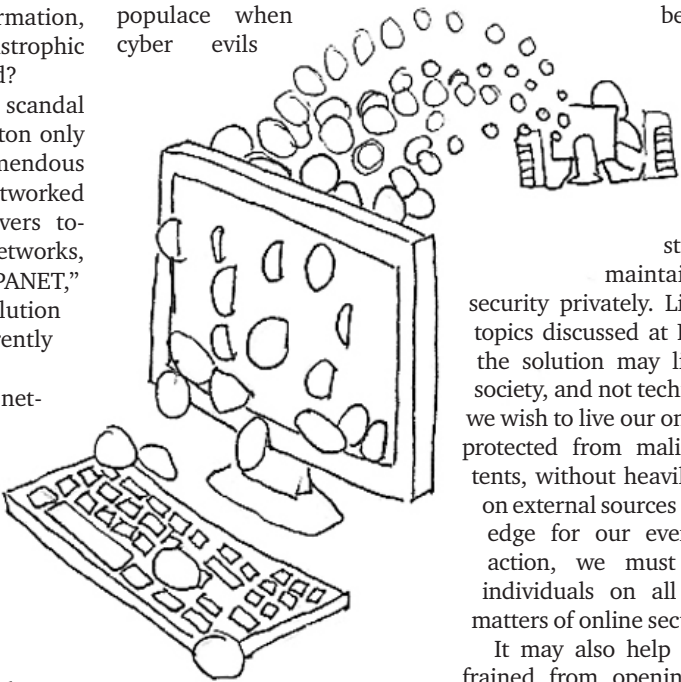
Due to the complexity of internet security, we may have no choice but to surrender our freedoms to these

“anoointed” individuals.

But such a future is far from optimal and will be resisted by those who wish to understand and maintain their security privately. Like many topics discussed at Pugwash, the solution may lie within society, and not technology. If we wish to live our online lives protected from malicious intents, without heavily relying on external sources of knowledge for our every transaction, we must educate individuals on all relevant matters of online security.

It may also help if we refrained from opening emails sent by Nigerian Princes, no matter the potential monetary reward.

*Student Pugwash is a non-advocacy, educational organization that discusses the implications of science. This article is a summary of last week’s discussion on the DDoS attack.*



Isabelle Vincent/Junior Staff Artist





**“Let’s make debt-free college available to everyone. We need to liberate the millions of Americans who already have student debt.”**

*Hillary*

# Vote for Hillary on Election Day.

**Tuesday, November 8** [iwillvote.com](http://iwillvote.com)

[HillaryClinton.com](http://HillaryClinton.com)

Paid for by Hillary for America



SPORTS BRIEFS

**Football**

The Carnegie Mellon football team went on the road this weekend to the University of Chicago where they took down the University Athletic Association (UAA) opponent with a score of 37–24. This win moves the Tartans to 6–3 overall, with a 1–1 record in UAA play and a 5–2 record in President’s Athletic Conference (PAC) play.

Chicago made the first move in this game, scoring halfway through the first quarter on a short run into the end zone. The Tartans answered in the second quarter with a short run of their own by junior running back Sam Benger. The game continued to go back and forth as Chicago scored another ten points in the second quarter after Benger’s touchdown. The third quarter saw each team trade scores, but Benger ended the period with a bang with a long run for a touchdown as the teams headed into the home stretch. The Tartans were still down 14–24 heading into the fourth quarter though, and they had their work cut out for them.

The Tartans were not affected by the score deficit, however. Banger’s touchdown

at the end of the quarter along with the Tartans’ fourth quarter scores add up to 30 unanswered points. The fourth quarter trouncing began with an interception by junior linebacker Kyle Brittain who took the ball 85 yards down the field for the score. Three minutes later, the Tartans found themselves knocking at the door of the end zone again. Banger got the ball on a handoff and punched in a ten yard run to cap off a drive that spanned 85 yards in three plays. The Tartans then got the ball back in the opposing red zone and capitalized quickly with an

11-yard run from Benger. This put the Tartans comfortably in the lead with a score of 35–24, but they weren’t done. With less than two minutes left to play, the Tartans managed to back their opponents against their own goal and eventually made a safety to top off their incredible fourth quarter performance and take the win 37–24. The Tartans will play their final game of the regular season on Saturday, Nov. 12. They will travel to Cleveland, Ohio to take on UAA rival Case Western Reserve University. The All-Academic Bowl is scheduled for 2 p.m.

**Volleyball**

The Carnegie Mellon volleyball team took the court on Saturday to compete in the University Athletic Association (UAA) championship game against Emory University. This was Carnegie Mellon’s third appearance in the UAA championship game, and the 21st-ranked Tartans fell to the eighth-ranked Emory Eagles 3–0. This puts the Tartans’ record at 25–7 on the year.

The Eagles won the first set 25–18, and the final two with a score of 25–17 in each. The Tartan offense was led by senior Jackie Gibbons with nine

kills, and junior Eliza Donahue with six kills. Senior Emily Newton contributed 22 assists on the night while senior libero Molly Higgins recorded 16 digs.

Now the Tartans must wait for a bid to the 2016 NCAA Division III Championship, which is set to begin on Thursday, Nov. 10. The bids are given during the NCAA selection show as an at-large bid. The Tartans can be proud of this season’s performance, even without the NCAA bid.

*Compiled by*  
**ALEX WOOD**

## Upcoming Events

**Men’s Basketball**  
vs. La Roche  
at Carnegie Mellon  
Nov. 17, 7:30 p.m.

**Men’s Swim and Dive**  
vs. Grove City College  
at Carnegie Mellon  
Nov. 12, 11:30 a.m.

**Women’s Swim and Dive**  
vs. Grove City College  
at Carnegie Mellon  
Nov. 12, 11:30 a.m.

**Women’s Basketball**  
vs. La Roche  
at La Roche  
Nov. 15, 6 p.m.

**Football**  
vs. Case Western  
at Case Western  
Nov. 12, 2 p.m.

**Cross Country**  
NCAA Regionals  
at DeSales University  
Nov. 12, 12 p.m.

## UAA Soccer Standings

Men’s			Women’s		
Univ.	W	L	Univ.	W	L
Chicago	16	0	Wash. U.	14	2
<b>CMU</b>	12	3	<b>CMU</b>	11	5
Brandeis	10	5	Chicago	15	3
Emory	10	5	Emory	9	5
NYU	9	7	Brandeis	13	3
Wash. U.	10	4	Rochester	5	7
Rochester	9	4	NYU	10	3
CWRU	5	9	CWRU	6	8

Mark Egge/Staff Photographer  
First-year midfielder John Painter fights his way through two defenders against Case Western Reserve University.

### Summer Employment at Carnegie Mellon: Teaching Assistant and Residential Counselor Jobs in the Pennsylvania Governor’s School for the Sciences

Undergraduate summer employment at Carnegie Mellon University is available with the Pennsylvania Governor’s School for the Sciences (PGSS). The PGSS is a five-week summer school for extremely talented high school students from Pennsylvania. Teaching Assistant/Counselor appointments are available in the areas of biology, chemistry, computer science, physics and mathematics. Academic duties of the TA/Counselor include assisting with lecture and lab courses and mentoring team research projects. Counselor duties of the TA/Counselor include living in the same dormitory as the PGSS students, ensuring that students adhere to the PGSS disciplinary rules, providing tutorial help in the academic program, and arranging and conducting social activities.

Applicants should have finished their sophomore year by the start of the program. Preference will be given to applicants with strong academic records and strong social skills. Prior experience with PGSS or a similar summer program is preferred, but not required. Further information is available at the PGSS web site: <http://sciences.pa-gov-schools.org/>.

**Stipend for five-and-one-half week period:**  
**\$2,500 for new TA/Counselors, \$2,750 for returning TA/Counselors**

**Housing is included (in the PGSS dorm) as well as a food allowance.**

**TA/Counselor duties begin Wednesday, June 28, 2017, end Sunday, August 6, 2017.**

Applications are available from the PGSS Office in DH A301 or may be downloaded (pdf format) from the PGSS web site:  
<http://sciences.pa-gov-schools.org/>

Contact the PGSS Program Office at (412) 268-6669 or e-mail [pgss@cmu.edu](mailto:pgss@cmu.edu)

**Application Deadline: March 31, 2017**  
(Applications may be accepted after the deadline until all positions are filled.)



# Sports

## Pro athletes publicly endorse the presidential candidates

IAN TANAYA  
Assistant Sports Editor

With the U.S. presidential election looming, some might be curious about who their favorite (or least favorite) athletes and sports figures are supporting for president. While curiosity is all well and good, you should not base your vote by who athletes are supporting. They have their political opinions, and you should form your own based on your own values and research. If you're looking for information on who to vote for, don't read this article; try the Election section instead.

With that disclaimer out of the way, here are some noteworthy supporters of the presidential candidates in the world of sports.

### Hillary Clinton

Unsurprisingly, most public votes of confidence are directed toward Democratic nominee Hillary Clinton. Her support from the NBA is solid from the top executives to elite players. NBA commissioner Adam Silver has supported Clinton with donations. Cleveland Cavaliers forward LeBron James gave a strong endorsement for her and campaigned for her in the

crucial state of Ohio, a state in which no Republican has ever become president without winning. Hall of Fame center Kareem Abdul-Jabbar penned an opinion piece in the Washington Post in support of her, and Hall of Fame guard Magic Johnson has helped her with fundraising. Elsewhere in the sports world, retired U.S. Soccer forward Abby Wambach has been campaigning for Clinton in New Hampshire. Hall of Fame running back Jim Brown has been helping Clinton win over Ohioans. Finally, former New York Yankees shortstop, third baseman, and designated hitter Alex Rodriguez has given an individual maximum \$2,700 contribution to the Clinton campaign. Though he had endorsed 2012 Republican presidential nominee Mitt Romney in the last election, it seems like he, like many other Republican supporters, has decided to cross party lines as a result of the tumultuous election cycle 2016 has been.

### Donald Trump

Republican nominee Donald Trump has had a share of sports figures in his corner, many of them coming from the NFL.

New England Patriots quarterback Tom Brady has shied away from a full out endorsement of Trump, but he has spoken about his friendship with Trump and has had a hat in his locker bearing Trump's campaign slogan. For what it's worth, Trump has reciprocated that friendship, lambasting NFL commissioner Roger Goodell's suspension of Brady for Deflategate and the appellate court decision to restore said suspension. Buffalo Bills guard Richie Incognito tweeted out support for Trump, saying he was on his way to a rally before echoing President Ronald Reagan's campaign slogan. Former wide receiver Terrell Owens also gave Trump his support. Former Denver Broncos and Washington Redskins head coach Mike Shanahan hosted a fundraiser for Trump. Bills head coach Rex Ryan introduced the candidate at a rally by saying, "We're all here because we support Donald Trump." Former NFL quarterback and current left fielder for the Scottsdale Scorpions Tim Tebow has indicated support for Trump, though he declined an invitation to speak at the Republican National

Convention in Ohio. Elsewhere in sports, Olympic shooter Kim Rhodes has been in support of Trump, chiefly due to her understandable disdain for restrictions on the Second Amendment. Ex-boxer Mike Tyson gave

a resounding endorsement for Trump, a result of a long-standing professional relationship between the two. Finally, Hall of Fame forward Dennis Rodman tweeted out support for the Republican nominee. The

endorsement is no surprise considering Rodman has been close with North Korean supreme leader Kim Jong-Un, who voiced support for Trump after watching the first Democratic primary debate, a troubling endorsement.



Courtesy of The Department of State via Wikimedia Commons  
Retired NBA legend Kareem Abdul-Jabbar presents Hillary Clinton with a game jersey bearing his former number.

## Tartan soccer teams wipe the floor with Case Western



Mark Egge/Staff Photographer  
Junior midfielder Morgan Kontor winds up to strike a forward pass through the legs of a defender on Saturday.

ALEX WOOD  
Sports Editor

The Carnegie Mellon women's soccer team played their final match of the regular season on Saturday against University Athletic Association (UAA) rival Case Western Reserve University. The Tartans were victorious by a score of 2-0, and they end the season with an overall record of 11-5-1, and 5-2 in UAA play. The game got off to a slow start, but the Tartans controlled the pace of the game despite there being no score for the majority of the first half. The Tartans continued to push into Spartan territory and apply considerable pressure until they finally broke through the opposing defense. In the 42nd minute, first-year forward Sydney Webber scored her first goal of the season after junior midfielder Morgan Kontor sent a pass from the sideline to Webber. Webber connected with the ball as it was in the air and made a quick shot that flew past the Spartan goalkeeper and into the back of the net, earning the Tartans their first concrete lead of the game. This was the only successful goal attempt out of the Tartans' nine in the first half,

but the lack of accuracy didn't matter as the Spartans didn't attempt a single shot on goal in the first half. The Spartans did manage to find two shot attempts in the second half, but senior goalkeeper Katie Liston shot both down. The Tartans continued to stifle their opponent until they broke the game wide open in the 89th minute. The Tartan defense cleared the ball out of their territory and junior forward Sienna Stritter found the ball, taking a long shot over the head of the Spartan goalkeeper and securing the win for the Tartans. Carnegie Mellon places second overall in the UAA standings with this win. The Carnegie Mellon men's soccer team also faced off against Case Western Reserve later that day and found the same result as the women's team, winning 2-0. The men's team ends their season with an impressive record of 12-3-2 and 3-2-2 in the UAA. This game for the Tartans was all about sophomore midfielder Zack Masciopinto, who scored both goals on the night and completely took over the game with the help of his teammates. The Tartans started making plays as early as possible, and they made the

best of their early aggression in the second minute when the Tartans scored for the first time. Senior forward Devin Keane was credited with an assist as he launched a pass across the front of the goal to Masciopinto, who connected with the ball and headed a shot straight past the Spartan keeper. The offense wasn't the only thing dominating for the Tartans, though. Sophomore goalkeeper Alec Lam maintained the one score advantage for the Tartans with two critical saves in the first half, including a save on a free kick in the upper corner of the net. The scoreboard remained the same for quite some time, but the Tartans made another push to score in the 67th minute. The play began with sophomore forward Anthony Gulli making a forward pass to Masciopinto deep inside enemy territory. A defender slid to stop his momentum, but Masciopinto hurdled the player and recovered the ball, immediately taking a shot that went right past the Spartan goalkeeper. The game would end with the score of 2-0, and now the Tartans wait to see if they will get a bid for the 2016 NCAA Division III Championship, set to begin on Friday, Nov. 11.

## The Tartan fantasy football league is still alive and well

ABHISHEK TAYAL  
Pillbox Editor

Seven weeks into the Tartan Fantasy Football League, I was under the impression that I was finally getting the hang of the entire thing. I had a self-inflicted horrible week one, as at that point I was still wrapping my head around the complex minutiae of my first fantasy sports league. Imagine my surprise at learning that you've got to open an app and manually set your team! After a brief sit down with the Tartan's Layout Manager and resident Expert-On-All-Things Zeke Rosenberg, I thought that I understood the basics of this fascinating form of competition. Last week, disaster struck as I forgot to set my lineup Friday morning after a Thursday night out on the town. The Donkeys finished with 43 points, about a third of the previous week. I was a combination of shocked and horrified. I trembled to consider how my league-mates must be laughing at me. It is thus with a humble heart and head bowed, I accept abject defeat in week eight of the Tartan Fantasy Football League. To further acknowledge this moment, I am renaming my team to the Loquacious Losers. Without further ado, here's the recap: **Dreamland Warriors over Loquacious Losers 87-42** The freshly rechristened Losers earned their name with style in a humiliating 45 point loss to Assistant Sports Editor Ian Tanaya's Dreamland

Warriors this week. Alshon Jeffrey of the Chicago Bears, put up something of a fight for the Losers, bringing home 16 of the team's 42 points. That said, the Losers were no match for the Warriors in any other respect. Quarterback Drew Brees, running back Jacquizz Rodgers, and running back Latavius Murray were a quartet to be reckoned with, bringing in 61 points together. The Losers, still licking their wounds, will be eagerly awaiting their next encounter to give back in kind to the Warriors. **Mr. Rodgers's Neighborhood over DeMarco DePolo 135-104** This was one of the closer matchups of the season, and probably the closest matchup of the week. Operations Manager Jade Crockem's team Mr. Rodgers's Neighborhood prevailed over Layout Manager Zeke Rosenberg's DeMarco DePolo after a long and hard match that could have gone either way. Both quarterbacks played really well, with Crockem's Aaron Rodgers edging out Rosenberg's Matthew Ryan 33 to 23. Far from throwing in the towel, DeMarco DePolo put on a valiant showing of their own right. Right back DeMarco Murray, wide receiver Jordy Nelson, and running back Melvin Gordon put up a spirited 19 points each. Mr. Rodgers Neighborhood was preternaturally consistent though, with nobody on the lineup making less than nine points as they carried "The Neighborhood" to victory once more, a familiar sight.

**What is going on? over extremely dank team 118-65** Forum Editor Sinead Foley's beautifully named What is going on? continued its hot streak for another straight week. Sports Editor Alex Wood's extremely dank team got a thrashing comparable to the Loquacious Losers at the hands of Foley's hilariously, deceptively, unassumingly named team. Foley's quarterback Blake Bortles was on fire, bringing in 29 points all by himself. Nipping at his heels was Foley's running back Jonathan Stewart with 22 points, who in turn was closely followed by fellow running back David Johnson with 17 points. Wood's extremely dank team didn't stand a chance. Wood's Placekicker Stephen Gostkowski brought in the most points with a thoroughly average 13 points. **Masshole Knickerbockers over Plaidie Daddies 141-107** Online Editor India Price's Plaidie Daddies put up a respectable 107; that is until one takes a look at the competition. Former personnel manager Lula Beresford's Masshole Knickerbockers scored a mind-numbing 141 points. The Knickerbockers' quarterback, and the only player I knew about before I joined this league, Tom Brady, scored a very impressive 29 points. However, even this was overshadowed by Knickerbockers' wide receiver Amari Cooper bringing in a stupendous 35 points all by himself. Much to Price's chagrin, her humiliation would still not be complete. The Knickerbockers' tight end Tyler Eifert brought in 25 points of his own. The Plaidie Daddies played a decent game on a day that they had very little chance of winning the fantasy game. **McManus's Anus over How does this work? 126-109** Publisher Sarah Gutekunst's team McManus's Anus played a good game to beat Foley's second team, How does this work?, 126 to 109. Gutekunst's running back Matt Forte put up a very respectable 23 points. Her tight end Rob Gronkowski scored an impressive 21 points as well. Foley's team played well too, with running back Devonte Freeman running up 21 points That concludes our roundup for week eight. Onward to week nine!



Courtesy of Mike Morbeck via Flickr Creative Commons  
Packers quarterback Aaron Rodgers has been a consistent fantasy pick.





# pillbox

The Tartan's Art & Culture Magazine

11.07.16 • B4 Sichuan Gourmet • B6 Troye Sivan • B8 Diwali



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# advice for awkward people

## about thirsty Tinder men

Dear Sarah,

Aren't dating apps supposed to make dating easier? In my personal experience, things have only gotten more complicated. Tinder is my first attempt to meet guys without actually meeting them.

It's nice to be able to keep someone at arm's length before you let them in. They only know as much about you as you want them to, so you can slowly unravel your story as you feel comfortable. You can stretch the truth, make yourself seem more interesting, more popular, or more easygoing. You could only choose to put on photos from high school before you gained 15 pounds. This is such a delightful arrangement — until you realize anyone could be guilty of this.

Once in a handful of guys, I'm interested. He seems like the kind of guy I could maybe one day consider getting into bed with. But breaking that wall of meeting in person is so scary. I never know what I'll find behind the curtain, behind the screen.

What if he has really long finger nails? What if he tries to tell me he thinks *Lord of the Rings* is overrated? What if he's a catfish? What if he kidnaps me and sells me into human trafficking?! How do I decide if a guy is worth the risk it takes to meet up

with a Tinder Guy? Is there a rubric?

Cautiously,  
Tinder Has Incalculable Risks Surrounding The  
Youths

Dear THIRSTY.

Dating is such a mess, no matter what. And you're right, Tinder can be even scarier and messier because you never know what you're going to get. To start with, it's best practice to just be yourself. Don't spill out your entire life story all at once, but be true to your personality and your history. In order to avoid any unfortunate surprises, ask questions. If you actually want to make a rubric, write down specific questions in order to check up on your unforgivables, like pop culture proclivities, drug or alcohol habits, political or religious beliefs, or blatant misogyny. You don't have to feel bad being direct because he's just a perfect stranger who you'll probably never actually meet in real life.

So what if he doesn't like it? You don't owe him anything. If he happens to pass the initial test and he's still around, that's a pretty good sign. The next evaluative criterion is time. How long can you hold a conversation for? How long does it take him to respond? Does he consistently message you

Sarah Gutekunst | Publisher

past 11 p.m.? Does he want to meet up tonight, or does he ask you when you're free? These questions can help you tell if he's a skeezy perv who only wants you for your lady bits, or if he's at least charming enough to trick you.

But as a foxy lady on Tinder, the world is truly yours. As long as you take appropriate safety measures, going on Tinder dates can be a fun weekend hobby. If he's good enough to pass the initial tests, then he's probably a decent enough guy.

He'll probably give you some say in where you go for the date. Pick somewhere you like! Preferably a very public place where someone would notice if something happened to you! He'll also probably offer to pay because that's what he thinks a gentleman should do, and he's damn right. So maybe he's boring and can't make conversation, at least you've got Fuku Tea. One more safety tip: go in with an exit strategy. Before you leave, plan with one of your friends a code word that you can text them to signal that they should call with a fake emergency.

Protect yourself. Oh baby, it's a wild world!  
Sarah

## V for Vendetta

subterfuge, plotting, and vile villain-ery!

"Remember, remember! The fifth of November," won't mean much to the majority of readers. Some of you might be thinking right now, "Remember what? That the 112 homework was due?" However, random as the date may seem, it forms one of the fundamental pillars of the movie *V for Vendetta*, a fast-paced dystopian flash-forward into neo-fascist London. Essentially, the movie portrays life in the UK in the wake of a devastating world war and various forms of internal strife, including pandemics and national biohazard emergencies. The Nazi-esque Norsefire Party, promising political stability and a panacea for the populace's all-consuming fear, took over and consolidated their power by transitioning quickly to fascist regime. The movie begins by introducing the audience to their protagonist: Evey, portrayed by a young Natalie Portman. Evey is a government employee by day at the British Television Network, which functions as a propaganda puppet of the state. Evey, while out past curfew on the eve of Nov. 5, is brought together through a serendipitous chain

of events with the charismatic and mysterious "V." V not only wears a Guy Fawkes mask and sports a billowing black cape that may give viewers flashbacks to a certain potions master, but it soon becomes apparent that he carries an intimidating array of knives. He's dangerous, witty, and passionate, all qualities that prompt Evey to accompany him to a downtown rooftop overlooking the Old Bailey for what V promises will be the "best orchestra" she's ever heard. In the wake of the explosion, Evey knows little except that V is responsible, but soon she gets drawn into his web of subterfuge, plotting, and revenge. However, soon parallels between Evey's and V's pasts begin to arise, bringing with them more questions than answers. How and why does V select his targets? Can Evey morally condone his methods? How far is Evey willing to go to avenge the people in her life who've been ripped away by the Norsefire regime? As Evey finds herself pulled deeper and deeper into V's world, she must both confront the painful events of her past and uncover the

inner strength hidden in her personality. As both attempt to evade government detection while inciting rebellion amongst London's masses, some members of the government begin to question the "official" history books as well. Admittedly, this movie can feel a tad overwrought sometimes, as the absolute division of all people and organizations into "good" and "bad" often lacks nuance, and leaves some characters as one-dimensional at best. However, despite this cheese-factor, The Wachowski Brothers' *V for Vendetta* ultimately stands as an inspiring testament to the power of one person to spark change. As we nervously skid towards this election season's conclusion, crossing our fingers and biting our nails, this movie serves as an important reminder that we all must take responsibility and stand up together for what we believe in. The very best way to do that, voting, may not make for quite such engaging cinematic fare as cloaked nighttime capers through the streets of London, but it's equally important. Remember, remember! ... The eighth of November.

Katy Dyer | Junior Staffwriter



# Sichuan Gourmet

Unique and authentic Asian food in Squirrel Hill

**Michelle Madlansacay**  
Staffwriter

After a long week of studying and taking midterms, a break is much needed. Whether it's with a couple of friends, or by yourself, taking the time to relax and have fun is important. Of the many possible ways you can spend your breaks, my personal favorite is going out to eat. Not only can you get a break from studying on campus, but also from campus food. Plus, this gives you an opportunity to explore more of the areas around Pittsburgh.

So I haven't been here long enough to locate very many great food places, but the other day I was able to find one! A few of my friends and I decided to try Sichuan Gourmet in Squirrel Hill for the first time. We got there at around six, and the place was pretty crowded with college students and families. The environment was very active with students playing cards at their tables or families chatting with one another, while waiters were running around taking orders or carrying dishes. My friends and I were seated quickly (we luckily arrived somewhat early). As usual, the waiter took our orders for drinks and left us to decide on our dishes. The menu had so many options to choose from, and it was able to accommodate people with a variety of tastes and diets. There was even a "Pittsburgh Flavors" section, which had the typical Chinese takeout dishes.

When it came to deciding on what dishes my friends and I wanted to eat, our orders covered a wide range of flavors. My one friend, who's a vegetarian, ordered the Mapo tofu (without meat), which consists of diced tofu cooked in a sauce made from spicy chili and beans. My two other friends ordered an appetizer of steamed vegetable dumplings, and the Home Style Beef Noodle Soup, which just has noodles and pieces of beef in a spicy beef broth. I ordered the braised beef tendon, which (as it sounds) has beef tendon covered in a sauce mixed with vegetables and slices of ham. All the non-soup dishes came with a cup of white rice.

After ordering, the first dish to arrive at our table was the dumpling appetizer. It had five dumplings on the plate with a dish of what looked like soy sauce. Everyone at the table agreed that the dumplings were very good, especially with the sauce which had a light salty taste. The vegetable filling was cooked just right, and the wonton was perfectly steamed. The only thing was that we wished we'd ordered another serving, because five dumplings was just not enough for us. After finishing our appetizer, it took maybe another forty minutes (fifty for my dish) for our food to arrive. That was a little annoying, especially since all of us were hungry. But when the food finally arrived, they arrived in large portions. All the meals were nicely presented in large glass bowls. For the non-soup dishes we were given serving spoons, and we ate using our appetizer plates and chopsticks.

Overall, I found the food to be very unique. Each meal had a spicy taste to it, which was not overbearing, but just right. My friends and I all tried each other's meals and my favorite had to be the Mapo tofu. I had never tasted anything like it before, and the chili sauce gave it such an interesting spicy flavor that easily balanced out with the white rice. The other meals I thought tasted fine, but my friends who ordered the soup found nothing particularly special about it. My beef tendon dish was great — the sauce was a little salty-sweet, the tendon was chewy, and the vegetables were cooked just right. Eating the meal reminded me of the Filipino dishes my family cooked back home. I was actually surprised to find it on the menu, since I haven't encountered too many restaurants that actually serve beef tendon.

If you like exposing yourself to different foods and flavors, definitely order something from Sichuan Gourmet. There are enough options for you to find something that you may like. Although I would have to say there is nothing really special about the restaurant environment itself, and the food does take awhile to arrive at your table (depending on what you order), it's still a great place to catch up with friends and get away from campus.



# Richard Pell

The Myth of the Great Outright Extraordinary

Coco Allred  
Staffwriter

Richard Pell's works, fueled by curiosity, exist within the intersection of being a maker, storyteller, documentarian, curator, and scientist. The Myth of the Great Outright Extraordinary!, Pell's Artist of the Year solo show at the Pittsburgh Center for the arts, engages within the expected roles at art, science, and history museums. The difference, aside from content, in expected roles is the way they inform; a successful art show leaves audiences with more questions than answers, more aware of their knowledge and experience gaps, while audiences leave a history or science museums with increased knowledge. Pell, a Carnegie Mellon professor of art, presents these found objects and stories in a way that occupies both spaces.

If there is a heart to this exhibition it is Pell's Cabinet of Ambiguities. A quite literal tether between Pell and his viewer; an old-fashioned telephone activates the space. Simultaneously, one of the ten objects compartmentalized within a small glass display case is illuminated when an audience member puts the phone to their ear, and listens to Pell's story about the object inside. Pell talks about how he came in contact with each of these objects, the history behind them, and either hints to or informs its ambiguity. The sincerity Pell conveys through this experience puts the integrity of the show's title, The Myth of the Great Outright Extraordinary! into question. Is this title simply hyperbolic? Or can the objects truly be great and outright extraordinary if the viewer chooses to become invested in their narrative? And does this really even matter?

Objects in Pell's Cabinet of Ambiguities include a tiny framed cursive copy of the Lord's Prayer, gracefully written by Martha Honeywell who created the piece by holding a pen in her mouth since she did not have arms. The sense of awe from this work comes from the process of its creation and the success Honeywell had despite her disability and the sexism she surely faced as a female artist living from 1787 to 1848. Other objects, like the FBI blacked out page in Robert Lansberry's dense surveillance file derives its sense of awe from the absurdity of its existence and aura of mystery.

Ambiguity within these objects ranges, leading viewers to wonder about gaping narrative holes: what conditions brought this young girl to severe illness loops through their mind as they stare at the record inscribed with a dedication from a loving father as a song made by family and friends plays through the telephone. Objects from Pell's family collection, like the metal milk carton holder invented by his great grandfather, sense of ambiguity is simple, and overlooked. As technology and design constantly evolve, why is it that the standard shape of a milk carton has remained the same for over 50 years? In Pell's words, "The stories that an object can tell accumulate and change over time as the world around them changes. Some get better with age. Sometimes you lose the thread." I wonder if the milk carton will maintain its shape 50 or 100 years from now, and imagine how this unseen history will change the way we value the metal milk carton carrier.

The experience of looking through glass-paned cabinets reinforces a science-like objectivity mirrored in the permissive way Pell curiously watches the meaning and understanding of these objects change with time. As the viewers learn of stories about government secret surveillance, brainwashing, and experimentation that conflict with the America painted in history books, the news, and press events they attempt to understand in a state of conflict and ambiguity. Pell's 30 minute documentary on long time Pittsburgh street protester, Robert Lansberry, "Don't Call Me Crazy on the Fourth of July" examines the evidence supporting Lansberry's claim that the government was censoring his mail access. Shedding light onto this untold history, audiences leave questioning what the government might currently be concealing. Perhaps this is Pell's greatest success; the audience leaves more aware, intrigued, and uncertain.

Rich Pell is a founding member of the highly acclaimed art and engineering collective, the Institute for Applied Autonomy. To see more of his work, check out his small museum, The Center for PostNatural History filled with creatures at the intersection of culture, nature, and biotechnology.

STOCK NO 41789  
SEA MONKEYS





# TROYE

From the  
screen to  
the stage

Apeksha Atal | Assistant Pillbox Editor

It was October 2012, and with the steadfast approach of my first Halloween in New Delhi I frantically searched the internet for some stupid costume ideas. After surfing for a good twenty minutes, a video titled "FUNNY HALLOWEEN COSTUME IDEAS" caught my attention. With a click, a blue-eyed Australian boy was staring back at me, and so started my encounter with "So yesterday I got a haircut, and managed to get the perfect quiff."

Friday night, just over four years later, the blue-eyed boy captivated a room full of crying, screaming, and enchanted fans of all ages, sexes, and sexual orientations at Stage AE. "Thank you all for coming," he smiled after opening with the chart-topper, "Wild," "you have no idea how much this means to me."

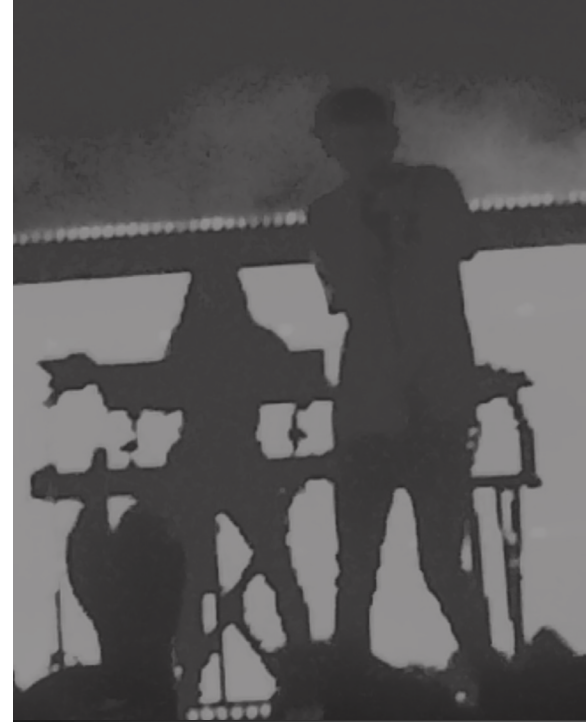
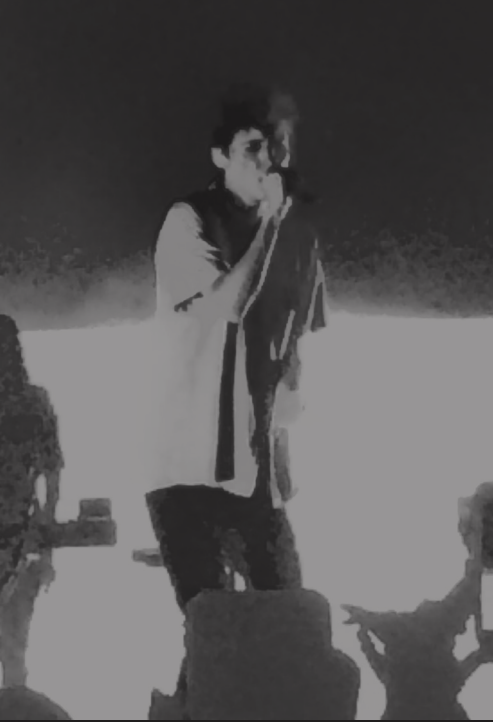
Troye Sivan started out as a child star, starring in the 2009 South African film *Spud*, based off of the novel of the same name. The movie went on to become a part of a trilogy, with Sivan keeping his role. Fans were also able to see Troye as the young version of Logan in *X-Men Origins: Wolverine* in 2009.

With the weight of his entertainment background hanging on his shoulders, Sivan took to YouTube to better introduce himself to the world. Week after week we saw videos ranging from song covers to quirky vlogs, and the YouTuber skyrocketed to become one of the most popular people on the internet.

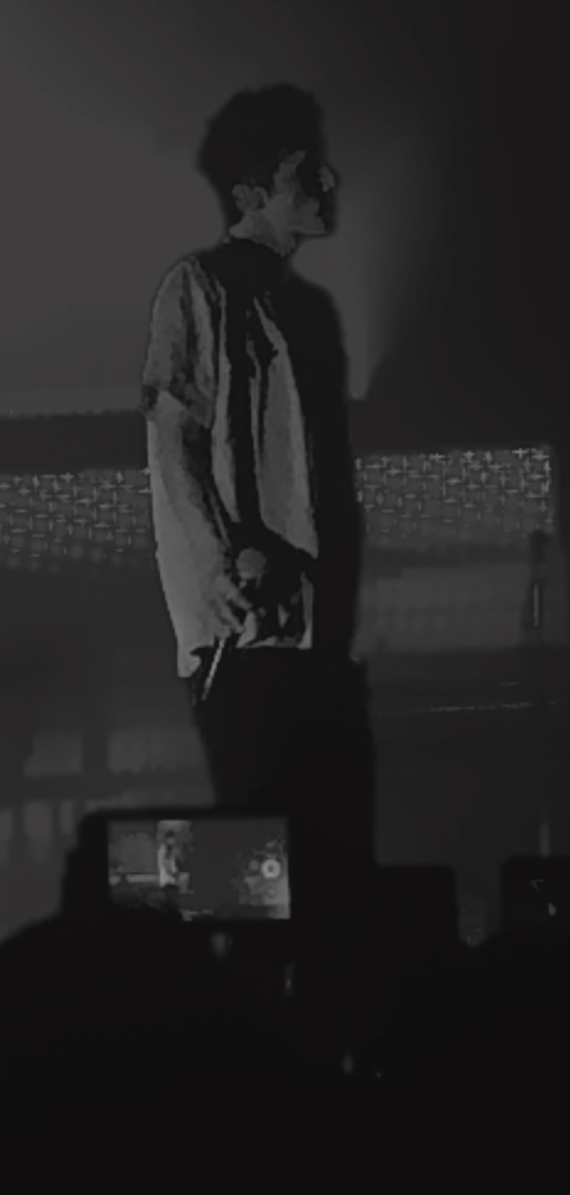
In December 2012, Troye sang a comical original song titled "We're my OTP", with OTP of course meaning "one true pair." Staying true to his YouTuber persona, this song delved into the themes of internet culture and made heads nod in agreement around the world.

In May 2013, Troye released a video of his original song "The Fault in our Stars" inspired by the heartbreaking novel by John Green. This is where I personally saw an edge of heaviness creeping onto Troye's channel. Something was changing.

In August 2013, Troye releases "Coming Out." The incredibly candid video fulfilled what its title suggested. Sivan, on a pedestal of internet fame, poured his heart out to his fans about his sexual orientation, and went on to release a second part to the video. Through his video he addressed everything from talking to parents, and finding support through the resources and community that exist out there. Hearts melted, and if anything his fan base grew.







In July 2014, Troye released *Happy Little Pill*. The dark record explored themes of addiction, emptiness, and escape, placing Sivan's music into the genre of "dream pop."

In August 2014, the EP *TRXYE* is released, which features three songs in addition to "The Fault in our Stars" and "Happy Little Pill."

When Troye released his EP, as someone who knew him for his comedic antics more than his musical inclination, I was critical. I found myself going back, and listening to his covers both from his very early YouTube uploads to around the time where I had started following his videos. He was good, no doubt, but I was hesitant in seeing where this was going.

In July 2015, Troye posts a video titled "Announcing My Album" and starts by thanking his fans for their incredible love for his EP, that eventually sent it to the top of 66 charts all around the world. He gushes about the work he's put into "doing it again, and doing it better," and announces that "this is happening."

In December 2015, *Blue Neighbourhood*, Sivan's first studio album, was released, after *Wild*, *Talk Me Down*, and *Youth* had teased fans for the months building up to the release.

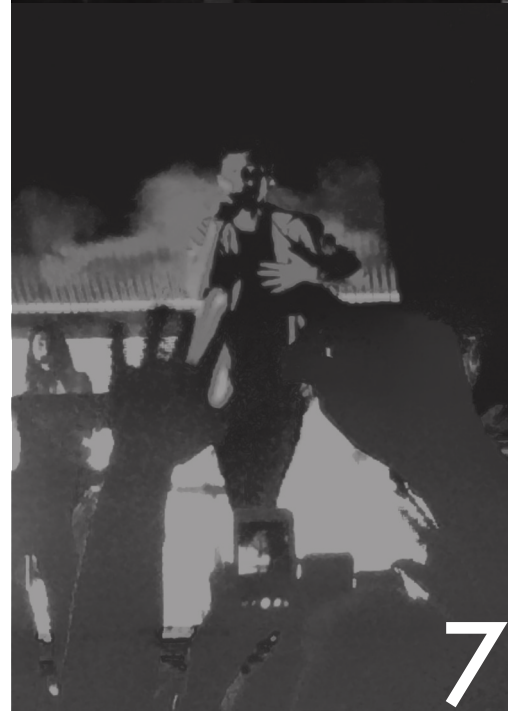
In May 2016, it was announced that on his world tour, Troye would be coming to Pittsburgh. I got up from my family gathering, ran to my room, grabbed my laptop, and frantically looked for presale tickets. And that was that. I was going to see him.

The scene was surreal. Rainbow flags, sparkles on cheeks and bodies swaying in unison. Troye's face went serious as he sang with heart, and softened to the goofy smile that I so clearly remember seeing for the first time all those years ago. He had everyone sing happy birthday to a fan, and brought a group of devout fans onstage to take a selfie with him.

As fans pelted gifts onstage he announced, "I usually don't like when people throw things on stage, but I also like free stuff, so thank you, you guys!" As everyone screamed in unison, he picked up a pair of broken sunglasses and put them on, and proceeded to inspect what he called a "nice t-shirt" that someone had thrown for him.

Concerts are always cathartic. Aside from seeing a being that you only know from behind a screen, in person, the sheer atmosphere of people singing together and base vibrating in your bones, it's enough to rock your emotional capacity. Friday night, however, I didn't feel like I was going to see a star. I felt I was seeing a friend after a long time. Someone who grew up with me, and found themselves in their own twisted way while I found mine. I found myself looking for his humanizing moments more than his larger-than-life presence, and was relieved and delighted to see it again and again throughout the night, from when he took off his platform sneakers because they hurt his feet, to when he called out to his fellow LGBTQ community members, with a lump in his throat.

Thank you Troye, I hope we get to see each other again soon.







# Diwali Garba

Photo Spread by Evangeline Liu | Staff Photographer



Diwali, the Hindu festival of lights, is celebrated every autumn. It symbolizes the victory of light over darkness, knowledge over ignorance, and hope over despair. Every year, people in South Asia and all over the world celebrate Diwali by lighting diyas, lanterns, and firecrackers, cleaning, and decorating their homes with colorful and elaborate powders and flower petals. They also share the most sumptuous and delicious Indian food, and dance the night away in traditional Indian Garba style.

At Carnegie Mellon, Diwali is celebrated every year during an event put together by OM, CMU’s student organization for Indian spirituality and culture. This year’s celebration, in Wiegand Gymnasium, featured a massive buffet of Indian food, Bollywood music, and Garba dancing aplenty, along with performances including CMU Sahara, CMU Raasta, and Deewane.



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# Ban All Blockbusters

explaining the 13th

Eric Wiegand | Junior Staffwriter

Watch *13th* tonight, get some sleep, and wake up tomorrow ready to act.

This is a new documentary from Ava DuVernay, the director of *Selma* (2014), currently available to stream on Netflix.

*13th* examines racial inequality in the United States by focusing on the issue of mass incarceration stemming from the Thirteenth Amendment to the Constitution. The film aims to put on stark display the patterns of oppression which black Americans have experienced, from disproportionate imprisonment, to Jim Crow, to broad racial profiling. Rest assured that DuVernay knows exactly what she is doing, combining the incredible heart seen in *Selma* with the prowess of a director having several documentaries under her belt already. She executes her purpose with laser precision.

I watched *13th* with my roommate Christian Strange, a fellow third year School of Drama student. He is a black man from South Carolina.

Strange is a clear-eyed, intelligent man, with a keen desire to improve the world around him and share his story. I was excited to experience this documentary with him and to explore how our feelings related afterward.

Here is a selection of our thoughts:

Christian Strange: This being my second time watching ... I started to think about how many people have sacrificed their lives and laid their lives down so I could live in a sort of privileged lifestyle. Because, when I watched this, you know, I examined my own life and I kind of said to myself, "I would never get arrested, I would never get patted down for something, because of the way that I was brought up, because of the way I carry myself," and that hurts because I feel like I am privileged in a sense. Whereas there are some guys who get looked at all the time.

Eric Wiegand: At the beginning of the documentary, they focus a lot on D.W. Griffith's *Birth of a Nation*, and I thought that was really illuminating, how much of an impact it had on the country. It began the second arrival of the Ku Klux Klan in America, and

it's a film. The documentary kept going with that as far as talking about black representation in the media, and I thought that was signifying of Ava's mission as a filmmaker herself. It hits at the heart of her work and her mission.

CS: As an artist myself, it's my mission to create pieces of work that showcase who I am as an African-American male and the experiences I've gone through. And watching this movie ...like Fred

the savior of the white population. I think that's a huge issue. There's a feeling in a large part of the population that "us" does not mean everyone in the United States.

CS: I feel like my grandfather and my father can speak firsthand on how these white politicians try to implement new ideas to help the general population, but it's only helping their people. My grandfather works with low-income housing, he helps to get these Black and Hispanic families into decent housing, and he is the only person who will constantly be on their side. I know that I would love to have children one day, but I get scared of the fact that I will have to tell my children how to present themselves in a manner that doesn't make them seem threatening, because I know my father did it with me. I never want to have that talk with my son, but I know that it will happen.

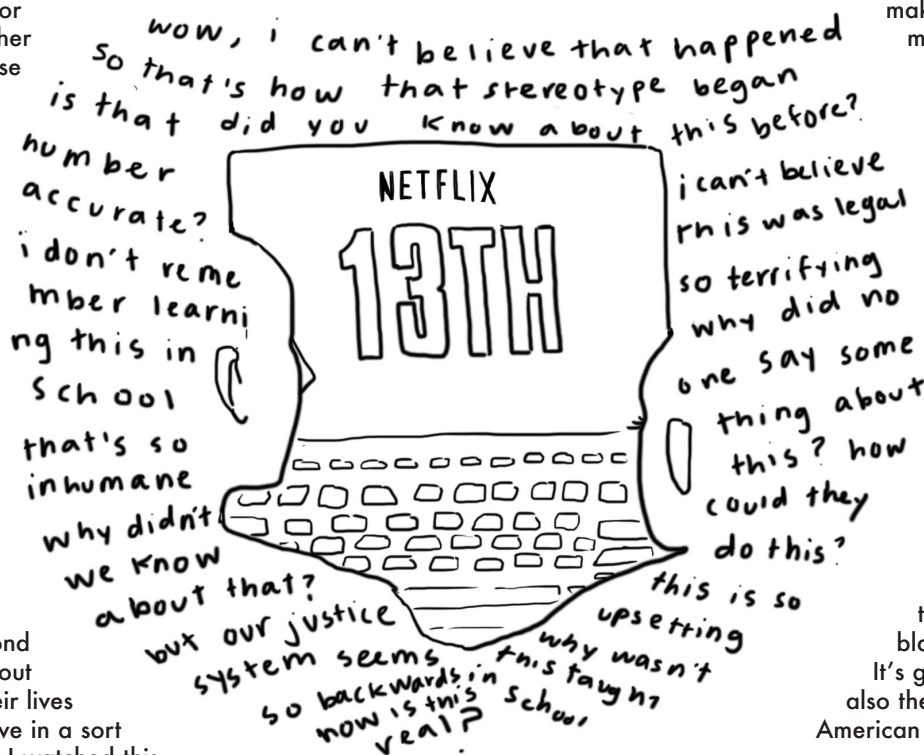
EW: Just watching a documentary that punches me in the gut is a reminder of the impact that this sort of thing can have, that art can have, and it really is an enormous inspiration to go forward and create content that is addressing these issues, forcing people's eyes upon them like this film is.

CS: I also want to speak on the images in the credits, because it gets me every time, seeing these young faces, these young Black faces, and seeing the joy that they have. But I can also see them not realizing the struggles they have ahead of them. Seeing these black families, in good times, you know. It's good to show not only the bad sides, but also the good sides, the happy sides of African-American life.

Ava DuVernay's documentary urges us to listen. It insists that we not turn our gaze away, as is so easy for some of us to do. It was a galvanizing experience, sharing the film with Christian. I urge you to watch *13th*, share it, discuss it. Our only course toward a better future is through dialogue, the sharing of experience. This film is one step.

Hampton, the young guy, twenty-one years old, our age, who got killed, because he was trying to unite people together, by the police. I look at his story and all the stories they talk about and I say, "I'm going to use this in my own life, and pick up from where they left off."

EW: Something that is extremely prevalent in the documentary is the question of how we define "us." They were talking about politicians fighting to be



Art by Paola Mathus | Staff Artist

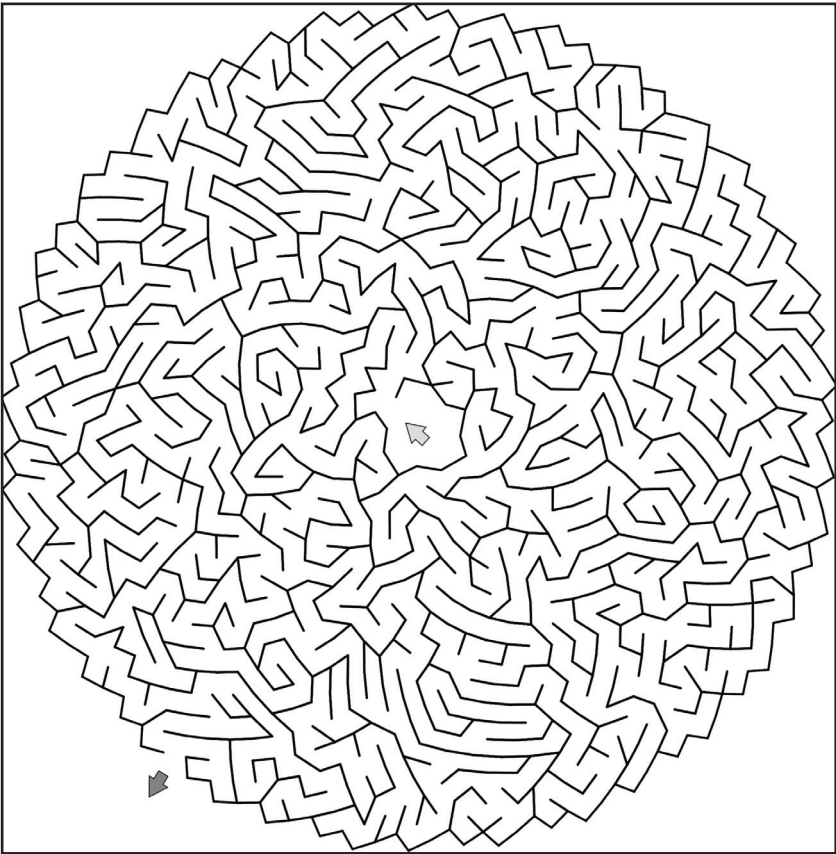


sudoku

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

sudoku courtesy of [www.krazydad.com](http://www.krazydad.com)

maze



maze courtesy of [www.krazydad.com](http://www.krazydad.com)

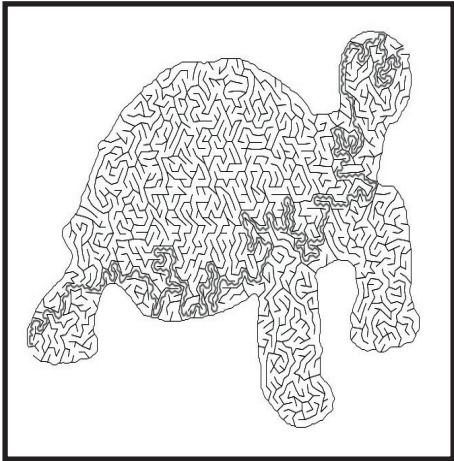
Solutions from Oct. 31

S	L	A	P	S		E	C	H	O		S	K	Y	S
L	I	L	L	E		E	L	E	V		C	R	O	C
I	N	T	E	R		R	A	R	E		A	I	D	A
M	A	I	N	T	A	I	N		R	O	L	L	E	R
S	A	N	E	S	T		E	T	E	S				
E	L	L	O		O	B	S	T	E	T	R	I	C	S
T	O	R	U	S		E	S	E			S	E	R	A
S	U	B	S	I	D	I	A	R	Y		S	A	R	A
M	E	T	H	A	N	E			A	N	T	A		
A	T	R	I	S	K		A	B	S	O	R	B	E	D
S	H	E	D			E	S	S	O		O	T	E	R
S	E	V	E			Y	E	A	R		G	E	N	I
E	R	I	S			S	E	N	T		E	D	E	N

crossword

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

sudoku

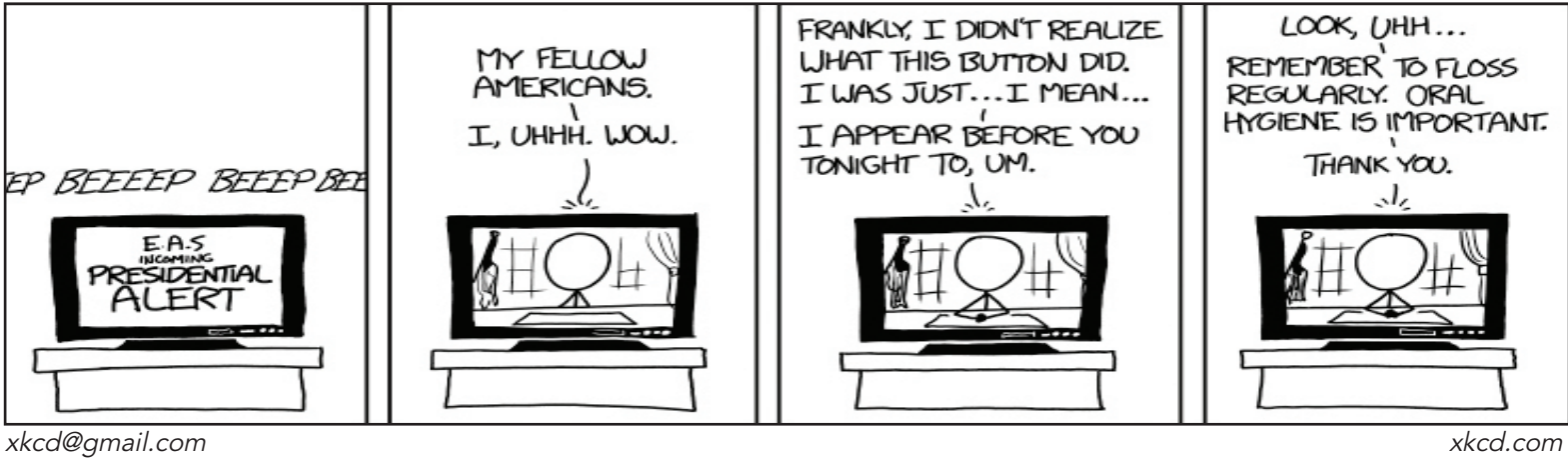


maze



# Very Presidential

by xkcd



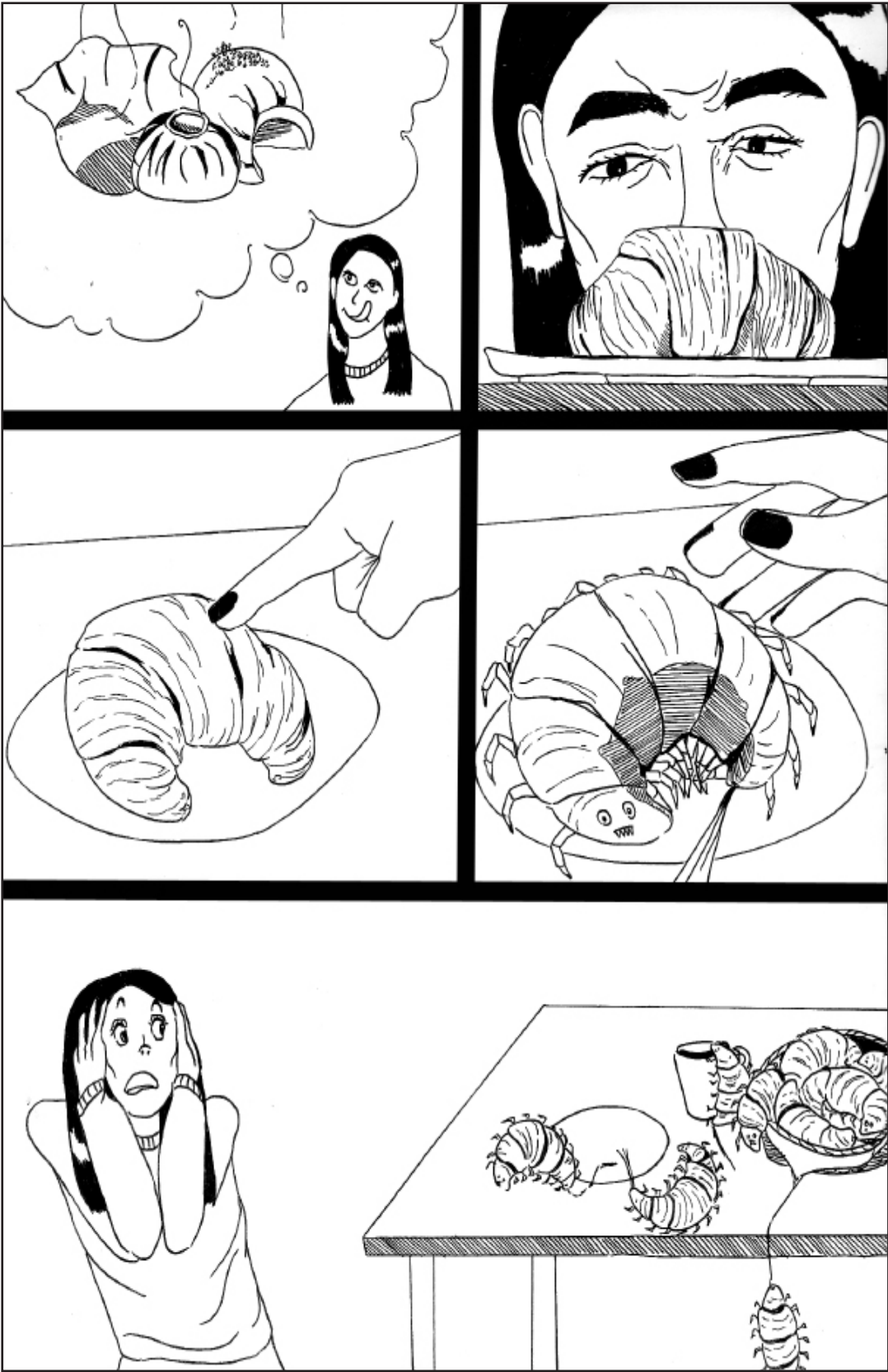
# Mushrooms

by xkcd





Croissant Bugs  
by Simin Li | Assistant Visual Editor





horoscopes: cute aspects of the signs

Aries

march 21–apr. 19

You're impatient. Is it because of the slow wifi? YES.

Taurus

apr. 20–may 20

The internet is awesome. Outside? What's outside?

Gemini

may 21–june 20

You can get distracted and end up scrolling through your Twitter feed for hours.

Cancer

june 21–july 19

You still make friendship bracelets. And probably will still make them when you're 80.

Leo

jul. 20–aug. 22

You like old coffee shops and dancing when no one is watching.

Virgo

aug. 23–sept. 20

Did you send that text to the wrong person?! SHOOT.

Libra

sept. 21–oct. 19

Shadow puppets will never not be a thing.

Scorpio

oct. 20–nov. 20

You've got screenshots that could ruin lives.

Sagittarius

nov. 21–dec. 20

Food five second rule, am I right?

Capricorn

dec. 21–jan. 19

If pillow fights were a sport, you'd be varsity.

Aquarius

jan. 20–feb. 20

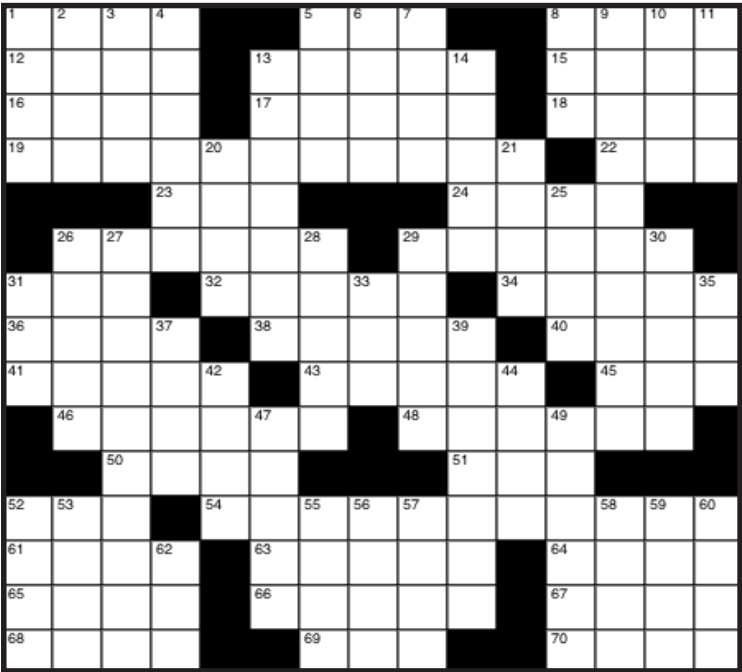
Sometimes you laugh so hard your sides hurt and you never really mastered handstands.

Pisces

feb. 21–march 20

You can draw amazingly well (as long as it's stick figures)!

crossword



Crossword courtesy of *FreeDailyCrosswords.com*

across

- 1. Culture medium
- 5. Bar order
- 8. Writer Grey
- 12. Author \_\_\_\_ Stanley Gardner
- 13. Wild rose
- 15. Earth Day subj.
- 16. Nothing, in Nice
- 17. Mr. Moto portrayal
- 18. Prefix with distant
- 19. Generation of tumors
- 22. Take advantage of
- 23. Apr. addressee
- 24. American space agency
- 26. Quagmire
- 29. Characteristically French
- 31. Energy
- 32. \_\_\_\_ evil...
- 34. Skater Harding
- 36. Corrida cries
- 38. Fantasize
- 40. \_\_\_\_ -a-sketch
- 41. Razor sharpener
- 43. Collection of maps
- 45. Overhead trains
- 46. Adventurous expedition
- 48. Walk with long steps
- 50. Light ring
- 51. Nasser's org.
- 52. Figure skater Midori
- 54. Capable of being submersed
- 61. Lopsided victory
- 63. Flip out
- 64. Fortuneteller
- 65. Estimator's phrase
- 66. St. \_\_\_\_ fire
- 67. Steven Chu's cabinet dept.
- 68. Exigency
- 69. \_\_\_\_ Kapital
- 70. Complete collections

down

- 1. Aviation prefix
- 2. Broad smile
- 3. Actor Baldwin
- 4. Impressionist Pierre
- 5. Elvis \_\_\_\_ Presley
- 6. Italian bread?
- 7. Piercing places
- 8. Mark of Zorro
- 9. Familiar
- 10. Entre \_\_\_\_
- 11. Writer Wiesel
- 13. Sanctified
- 14. Queen of Spain
- 20. Mardi \_\_\_\_
- 21. Preservative
- 25. Gin flavorer
- 26. Thaws
- 27. Sydney has a famous one
- 28. Caravansary
- 29. Scores
- 30. Recurring series
- 31. Not neg.
- 33. Safety device
- 35. Sighs of relief
- 37. Couch
- 39. Ripens
- 42. Friends
- 44. Ladies of Sp.
- 47. Red cosmetic
- 49. Van Gogh masterpiece
- 52. Pressing need
- 53. Shredded
- 55. Not fearful
- 56. Baby's cry
- 57. Narrative poetry
- 58. Nota \_\_\_\_
- 59. Internet writing system that popularized "pwn3d" and "n00b"
- 60. Goes wrong
- 62. Director Brownin



# calendar

## tuesday

11.08.16

### Election Watch Party

7 p.m. – 10 p.m.

McConomy Auditorium, Cohon Center

After the votes have been cast for one of the most controversial elections in American history, join SLICE, AB Films, SDC, Student Government, and Student Senate for some popcorn and great company as the fate of the nation is decided. If you are registered to vote on campus, be sure to stop by Wiegand Gymnasium at the Cohon Center during voting hours.

## friday

11.11.16

### Phipps in Photos

2 p.m. – 8 p.m.

Phipps Conservatory and Botanical Gardens

Admission: Free with price of Conservatory admission, free for students

Ring in Pittsburgh's bicentennial with a beautiful exhibit at Phipps. The Conservatory will be displaying historical photographs dating back to the opening of the gardens. Organizers are asking visitors to bring in any of their own photographs to share. Complementing this exhibit is Garden Railroad, an interactive exhibit with beautiful displays including miniature plants.

### Vertigo

8 p.m. – 10 p.m.

Rangos Ballroom, Cohon Center

Come on out Friday night to see The Originals, along with The Nor'easters, Voices in Your Head, Lark, and Faux Paz, for an evening of a cappella. The line up promises some electrifying performances and state-of-the-art lighting, sound, and staging. Tickets are still available, with VIP tickets granting audience members access to a mixer and an after party at Dave and Buster's.

## saturday

11.12.16

### 3rd Annual Food Truck Block Party

12 p.m. – 4 p.m.

CFA Parking Lot

Pittsburgh's food truck scene is coming to campus and bringing a diverse set of cuisines, cultures, and music with it. Trucks coming include BRGR, Berlin Street Food, Wok of Life, and Egdar Tacos Stand. A portion of most proceeds will go to local charities such as Rainbow Kitchen and Operation Better Block that are providing Thanksgiving meals to families in need, and participating trucks will have signs posted. Bring cash, and come out for a great time with SDC, the Intersection, and the Undergraduate Student Senate!

### ILoveMakonnen with K.Flay

7 p.m. – 10 p.m.

Wiegand Gym, Cohon Center

Tickets: Free for students at [carnegiemellontickets.com](http://carnegiemellontickets.com)

With 16 mixtapes and two albums to his name, Makonnen Sheran, better known as ILoveMakonnen, is coming to campus this Saturday. The singer and rapper is best known for his remix of Drake's "Tuesday", and has since co-signed with Miley Cyrus. His music is known for reflecting his Atlanta roots and his performances known for captivating and engaging his audience. Get your tickets now for what will surely be a night to remember.

## classified

Warehouse Data Entry Clerk employees needed for a warehouse. The successful candidates will have excellent warehouse and computer experience. Our client is looking for people who have computer experience. Specific experience with receiving, picking, and maintaining inventory and strong data entry skills.

You can contact me here  
[jason.wright59@aol.com](mailto:jason.wright59@aol.com)





# The Steaks Have Never Been Greater

This installation by Hannah “Voter Reform” Epstein and Maddy “Ohioan” Varner, opened in the Frame Gallery at 6 p.m. on Friday, Nov. 4. The exhibit explores the blend of politics and meme culture and includes an election viewing party at 6 p.m. on Nov. 8, also at the Frame Gallery.



A photograph of a white paper cutout of a hand, with the text "This pussy is a 5" written on it in black marker. The cutout is placed on a wooden surface, next to an orange pen and a ruler.