Carnegie Colloquium focuses on implications of Al · A6 SCITECH

CMU basketball wins home opener against Geneva · A10 SPORTS

Everyday Noodles provides respite for students · B8-B9 PILLBOX



thetartan.org 🥑 @thetartan f The Tartan

November 21, 2016 Volume 111, Issue 12

Proposed

changes

to Greek

housing

YIYUAN CHEN

Staffwriter

weeks, housing servic-

es has proposed several

changes for Greek Hous-

ing's 2017–2018 lease. Tom

Cooley, director of Housing

Services at Carnegie Mel-

lon presented these propos-

als at two forums to gauge

reactions from the Greek organizations to these new

changes. The Tartan inter-

viewed Cooley to get more

information on what led to

in this new lease deals with

the current financial sign

over form for Greek hous-

ing. The financial sign over

form is a document that

students who join Greek organizations must sign in or-

der for the organization to

charge them for fees. Under

the current system, Greek

organizations have the option to bill students for

any kind of Greek-related

fees through this sign over

form, which allows Greek

organizations to withdraw

money from individual stu-

dents' university accounts. All but one of the Greek

organizations on campus

currently use the sign over

form to charge students for

system

chapter dues. While this

many of these changes. One major change made

During the past two

Students discuss religion at CMU

LUCY CHEUNG Junior Staffwriter

In light of spirituality development month here at Carnegie Mellon University, the State of the University held a discussion on interfaith and reason in today's society. This event occurred Thursday, Nov, 17 at 4:30 p.m. in Doherty Hall A302. Five student speakers began the discussion, but audience members and a variety of other student speakers joined the conversation as the event progressed.

The event began with a discussion about the crucial question of how religion at college is different than back home. Many speakers claimed that college is about defining your own religion and deciding what you truly want to believe in without the guidance of your family. There are no longer strict parameters or regiments like those that surrounded you as you grew up, but rather an opportunity to define our own religious identity.

David White, sophomore statistics major and member of the Inter-Varsity Christian Fellowship, noted that college is a lonely place where we're among our own solitude. Back home, we're provided with support from our friends and family members who we have grown up with and who can provide us with emotional stability. He believes that at Carnegie Mellon, we're sometimes relieved to find comfort in our religion or faith, knowing that there is someone there, someone

Report reveals Carnegie Mellon and 18 other universities lost millions on deal

Expected Actual Outcome Outcome PNC interest rates fall dramatically PNC pays non-zero interest rate After the Great Recession of 2007 and 2008, Carnegie Mellon made an agreement with PNC Financial Services to pay a \$100 million fixed central banks like the Federal Reserve interest rate every month until 2028. lowered interest rates to zero and some to sub-zero. PNC, in turn, would pay Carnegie Mellon the This meant that the bank was paying an almost-zero variable interest rate based on the constantly rate to Carnegie Mellon fluctuating LIBOR rate. while Carnegie Mellon was still paying the fixed rate based on the market in 2006. \$44.75 million loss \$44 million further since 2004 expected loss

Yoonyoung Kim/Staff Designer

to lose \$44 million more on Since interest rates in the fluctuating LIBOR rate. "The university took this

guarantees that the Greek organizations will always receive the money they charge, it also puts extra responsibility on Housing Services to keep track of the money. "We are man aging being an accountant for their fees," Cooley remarked, "and there's a lot of risks from the university's standpoint." The new lease

See RELIGION, A3

The Roosevelt Institute released a report last year that revealed that Carnegie Mellon has lost \$44.75 million since 2004 on five variable-to-fixed rate swap agreements and is expected

SHLOK GOYAL

Junior Staffwriter

swap to hedge against variable interest rates. For example, Carnegie Mellon issued a bond in 2006 (essentially taking on a loan) in order to finance new construction and pay off existing debts.

Carnegie Mellon uses a

these deals.

egie Mellon made an agreement with PNC Financial Services to pay a \$100 million fixed interest rate every month until 2028. PNC, in turn, would pay Carnegie Mellon the variable interest rate based on the constantly

market often change, Carn-

action to reduce its exposure to rising interest rates on variable rate debt," Ken Walters, Executive Director of Media Relations said. "The agreements eliminated the

See REPORT, A3

See HOUSING. A3

Amnesty International draws attention to abused Qatari workers

EVANGELINE LIU Staffwriter

Three years ago, human rights monitors discovered that there were pervasive human rights abuses of laborers in Qatar working on construction projects related to the 2022 World Cup, which is to be hosted in the Middle Eastern country. Many of these laborers are migrants from other countries, many in South Asia.

The laborers are "treated like cattle" according to Amnesty International. The International Trade Union Confederation estimates that at least 4,000 migrant workers would die due to work-related incidents before the World Cup even starts. Amnesty International also found that workers may also not be getting paid on time, are forced to live in dirty and cramped conditions, have their passports confiscated by employers, are threatened for complaining about harsh working conditions, and have to pay high fees which reach into thousands of U.S. dollars to recruiters in exchange for a Qatari job.

Unfortunately, despite Qatar's announcements of labor reforms two years ago, the abuses have continued into this year at various World Cup sites in Doha.

Because of the severity

International at Cornell University, its sister organization at Carnegie Mellon University, and student groups from seven other universities in the U.S., Canada, and U.K., are delivering an open letter to each of their respective university presidents asking them to utilize the universities' existing connections to Qatar satellite campuses to put pressure on Qatari authorities to put a binding labor reform plan into place before construction peaks in 2017.

All of the universities involved have satellite campuses in the Education City district of Doha, which is physically very close to where many of the

of this problem, Amnesty labor abuses are taking place. In particular, the letter asks the university presidents to demand the labor reforms via the President's Council, a forum among international universities in Qatar that is convened by Her Highness Sheikha Moza bint Nasser, a Qatari royal and high-profile surrogate for the Qatari government. Because the presidents of the universities serve on the council, they can potentially have considerable access and influence over people at the highest levels of the Qatari government.

The efforts of this petition were led by the Cornell chapter of Amnesty International. Christopher Hanna of Cornell University, the facilitator of the campaign, said he was encouraged to pursue this since Cornell's former acting president had previously expressed a willingness to use the power of the President's Council to pressure the Qatari government to respect the rights of political prisoners.

Christopher Hanna (left) recruited other Amnesty International groups, such as Carnegie Mellon University's chapter (right) to help Qatari laborers who are facing poor working conditions.

"The values that our universities claim to uphold ... everything from human rights to [equal] opportunity...aren't being respected in Qatar," Hanna said in an interview with The Tartan. Our universities have partnered with Qatar to establish cutting-edge academic programs in Education City, but they haven't quite yet partnered up in promoting human rights and the rule of law.

He started this campaign over the summer and played a significant role in planning the cross-campus campaign and drafting the open letter. The letter contains a blueprint appended from Amnesty International's report of specific labor reforms and includes reparations for workers who were victims of labor violations at Khalifa International Stadium.

One of the groups that was contacted for support in this campaign is Amnesty International at Carnegie Mellon, led by co-presidents Sam Bolig, a sophomore statistics major, and Jack Verser, a junior social and decision science major. students of Carnegie "As

Mellon, we felt compelled to offer our support by presenting this open letter to our University President and the Dean of our campus in Qatar," Bolig and Verser said in an interview with The Tartan.

Their hope is that President Suresh and the Ilker Baybours, Dean of the Qatari campus, will help raise awareness of the issue and present a united front against these abuses before World Cup construction peaks next year. "Ideally, these actions would create a movement toward reforming these horrific labor practices at the World Cup construction sites that would reach the Qatari government," said the co-presidents.







FEATURE PHOTO

Students stage walk-out to resist Trump presidency





On Nov. 16, students took part in a walk-out to show unity for people who are vulnerable under Donald Trump's presidency including undocumented immigrants, Muslims, LGBTQ people, black people, and all people of color.

NEWS IN BRIEF

Carnegie Mellon University will host its fourth annual Giving Tuesday on Nov. 29

On Tuesday, Nov. 29, after students return from Thanksgiving break, Carnegie Mellon will be hosting its fourth annual Giving Tuesday, an event open to the entire Carnegie Mellon community in the U.S. or abroad. The 24-hour event is focused on both philanthropy and volunteering. This year, Carnegie Mellon hopes to raise \$1,600 in donations. This would be a 22 percent increase from last year's Giving Tuesday.

On Tuesday, all gifts that are made online, on the phone, or in person will count towards the event. Any direct mail gifts postmarked before 11:59 p.m. on Nov. 29 can also be counted based on the donor's intent.

in Wean Commons in the Cohon Center. There will be a midnight "Plaid-Palooza" until 1 a.m. that will provide students with food and entertainment as well as philanthropic education. Social media challenges will be released throughout the day. Winners of these challenges will be able to randomly select a fund which they would like to see receive a \$500 gift.

A group of students will also be selected to participate in unique opportunities such as having lunch with Carnegie Mellon President Subra Suresh or touring the steam tunnels with the Dean of Student Affairs.

The student organization that makes the most Each college will conduct donations over \$5 will receive a \$500 gift.

and a citation for underage

A Carnegie Mellon staff

member's laptop was report-

edly stolen from Warner

Hall. The investigation is still

A Carnegie Mellon staff

member filed a report with

University Police after he

noticed a suspicious letter

was placed on his car while it

was parked on campus. The

investigation is ongoing.

Suspicious Activity

drinking.

Burglary

ongoing.

CMU Professor Kanade receives 2016 Kyoto Prize for Advanced Technology

On Nov. 10, Takeo Kanade, the UA and Helen Whitaker University Professor of Robotics and Computer Science at Carnegie Mellon University, received the 2016 Kyoto Prize for Advanced Technology. The ceremony took place in Kyoto, Japan.

The Kyoto Prize for Advanced Technology is given to people who have who have made significant scientific, cultural and spiritual contributions to help humankind. Kanade received his prize for his contributions to computer visions and robotics. The prize comes with a gold medal and a cash award of 50 million yen (approximately \$450,000).

Kanade became part of Carnegie Mellon's Robotics Institute and the Computer

Nov. 15, 2016

Nov. 15, 2016

A person in a vehicle

yelled a racial slur towards a

female Carnegie Mellon stu-

dent while she was walking

along Forbes Avenue. The

investigation is still ongoing.

Vehicle Damage/Hit and

A hit and run incident oc-

curred in the East Campus

Garage. University Police in-

vestigated the situation and

were able to find the person

responsible. University Po-

lice assisted in the exchange

of information between each

Science Department in 1980. He was the director of the Robotics Institute from 1992 to 2001.

Kanade is responsible for fundamental discoveries in face detection technology, automated driving, three-dimensional image reconstruction, self-flying helicopters, and the use of video images to estimate the direction and speed of moving objects. In his early years at Carnegie Mellon, Kanade founded and led NavLab, which worked on a vision-based autonomous car. Kanade also co-developed the world's first direct-drive robot arm, which is now recognized as one of the most advanced robot arm technologies.

Compiled by

STUDENT GOVERNMENT COLUMN



DOMINIQUE ESCANDON Special to The Tartan

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

Something that's always been important to the Student Government President's Cabinet has been ensuring the comfort of every student on campus. In our meeting immediately following the election results, we reflected on this past year's tumultuous election. We felt it was necessary to help provide pecially with people I hadn't a nonpartisan space where students could find support in each other, faculty, or staff and have productive conversations about how the election affected them over a slice of pizza. We reserved a space in Danforth, created the Facebook page to advertise this "Pizza and Conversation" event, and waited for Nov. 14 to come.

parties to represent them better, or would we rather they stick to their personal values to show strength of character? What were "Not My President" protests hoping to accomplish? When are Facebook comments a good space for conversation, and what makes social media effective for creating discussion? By the time I had to leave to go back to my mousetrap car, I felt like I had a better understanding of how to have productive political conversations, esmet before, and I hope everyone else felt as satisfied with their experience as I did with mine. However, I recognize participation in this event alone doesn't constitute me as an "excellent citizen" whose civic duties of engagement, compassion, and inclusion are all fulfilled. There are so many intelligent and valued students on campus who didn't attend this event because they were still struggling with the emotions they might be feeling, or felt like their thoughts wouldn't be welcomed on such a liberal campus. We should all consider how we can offer support to everyone who has felt forgotten in this election, be it in its results or in its reactions. Regardless of your political leaning, you deserve respect and love. Choosing compassion can be hard but makes a better campus for us all. If you're feeling scared about your permanence in the United States or the health of the industry you're hoping to progress to after graduation, know that there are always faculty and staff members willing to listen and give advice. Don't know where to start? You can always reach out to any member of the President's Cabinet!

NEHA SRIVASTAVA

Nov. 16, 2016

Compiled by

ROSE PAGANO

Found Property/Carrying

A wallet which contained

cards was discovered in the

Gates/Hillman Center. The

wallet was returned to its

owner and the Carnegie

Mellon student received a

citation for carrying a false

identification card.

fake identification

a False Identification

Card

two

Campus Crime & Incident Reports

Intimidation

Run

driver.

received medical attention Harassment/Ethnic

Nov. 14, 2016

Nov. 14. 2016

Alcohol Amnesty

Nov. 12, 2016

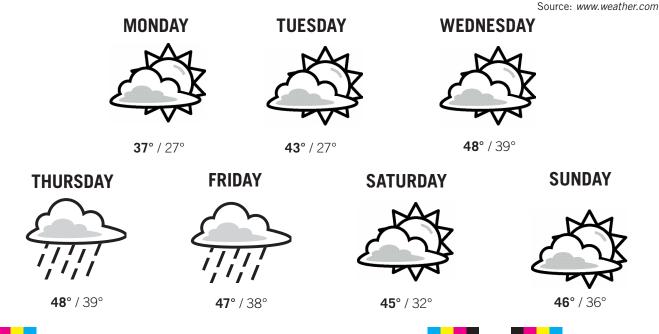
University Police responded to Delta Tau Delta after receiving a report of a male student who struck his head. Police also discovered an intoxicated Carnegie Mellon student on the premises. The second student was provided with medical attention. Amnesty was enacted and no citations were issued.

Underage Drinking

Nov. 13, 2016

А University Police Officer discovered an intoxicated Carnegie Mellon student by the dorms on the Hill. The male student

WEATHER



Immediately, I became nervous. How would the night go? The calls I received while the election results came pouring in were so emotional. Was I prepared to revisit that?

Of course, Carnegie Mellon's response amazed me. Beyond all else, it was incredibly comforting to hear from faculty members who had experienced similar elections and told us we would be able to live to tell the tale, and I'm so grateful that they were so willing to offer us their time to share this experience with us. And of course, the discussions I had throughout the night were rational, analytical, incredibly reflective, and always hopeful.

Misinformation had a major influence over this election. What news sources do people use to get unbiased reporting? Should politicians align their public views with that of their

Corrections & Clarifications

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

Housing Services clarifies new changes to Greek housing lease



Housing Services has recently proposed multiple changes to the lease for Carnegie Mellon University's Greek housing. Housing Services can now close Greek houses over the summer and has disallowed boarders from residing there.

HOUSING, from A1

specifies that only rent and rent-based parlor fees from non-residential members of the Greek organizations will be collected through Housing Services and billed from student account; it requires all Greek organizations to bill chapter fees independently, possibly through a third-party transaction.

In order to help the fraternities and sororities adapt to this change, Housing Services will "[have] more intentional conversations with these organizations about how to make this change, and work with organizations on making this shift," Cooley said.

The largest controversy among Greek communities has to do with the topic of receiving refunds when students change their residence. In situations where a member of a Greek organization decides to move out of their chapter housing, the current lease gives individual chapters the freedom to choose how much the individual will be charged throughout the rest of the leasing period when the student is no longer living in the house.

Initially, Housing Services proposed to change this policy because it is inconsistent with other on campus housing policies. Students who move out of other on-campus residences for approved reasons, unlike those in Greek housing, receive a refund from the university, while Greek residents are not guaranteed a refund when they withdraw. The current practice allows Greek organizations to manage and prevent extra financial burden due to losing residents. Requiring Greek organizations to refund individuals could lead to an increase in the amount

every individual has to pay.

After negotiating and communicating with representatives from Greek life organizations, Housing Services agreed not to change this current practice. "We decided to keep the status quo," said Cooley, "the house manager or the treasurer has the ability to decide whether they would refund or not refund the students."

Rules regarding boarders in Greek housing were restated and emphasized in the new contract. Boarders, the non-Greek members who reside in Greek houses, will no

longer be allowed due to laws regarding subletting and their lack of housing insurance. In the past, Greek organizations have allowed boarders to sublet at chapter houses during the summer to generate revenues for their chapters.

Housing Services now also has the right to close a Greek house over the summer for renovations or cleaning with prior notice, given that Greek houses generally do not reach the minimum standard of cleanliness.

The overall rate increase of all Greek Quad housings will be 5.5 percent, which is lower than this rate has been in the past three years. The rent at Margaret Morrison Greek houses will decrease by 15 percent to normalize the existing inequity in rent.

All changes for the new lease are final and complete with the exception of a few details regarding housing insurance, which the university legal team is still in the process of drafting. The new lease will be complete by next week, and will be presented to all Greek organizations on campus to sign. The new lease will become effective on July 1, 2017.

State of the University allows students to hold dialogue on faith

RELIGION, from A1

in the bigger picture, who is guiding us through times of adversity and frustration.

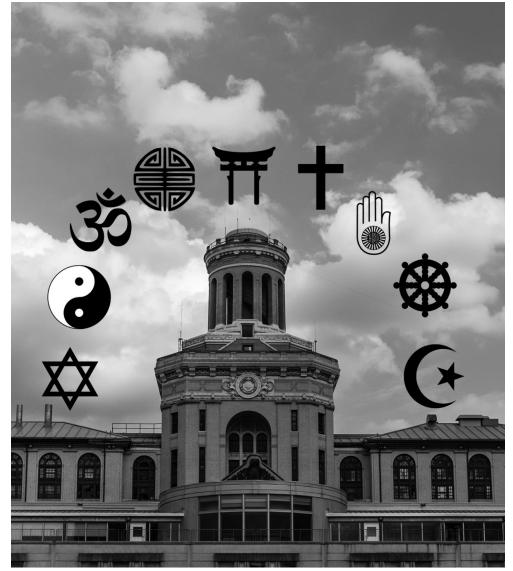
Many students mentioned that since Carnegie Mellon is an intensely academic school, we may tend to find ourselves at a crossroads between religion and education.

A physics major in the audience supported this view, noting that while he was studying Higgs Boson, a fundamental field to the first particle physics theory, he was forced to rethink the existence of God. If there are solidified facts that the existence of Earth was created through scientific realms, where does the idea that God molded earth and humans come into play?

Meanwhile, another audience member suggested that religion and science coexist. They claimed that without religion and ethics, biology itself is incomplete. As the world is changing and we seek to understand our lives and the past, religion serves as a supplement and anchor. Both science and religion are seeking to understand the universe and collaborate to explain what the other cannot. The open conversation touched upon what exactly religion is. In our lives, we seek to live by standards, to follow regiments, and make ourselves accountable. The panelists claim that religion is a system of accountability. No matter what it may be ----Christianity, Buddhism, Jainism, Hinduism, Islam, etc. - the ultimate purpose of religion is to better humanity. They also claimed that, as human beings, we are not objective, and that as humans attempt to create this baseline set of standards, we often feel in touch with religion, where our morals and senses align.

The discussion also focused on religion as it connects specifically to Carnegie Mellon. Many questions were raised, such as: How is Carnegie Mellon as a university in terms of religion? Is it secular? Is it welcoming to accepting a variety of faiths? What is faith itself? "At Carnegie Mellon, you don't just simply choose to believe" said Andy Norman, an adjunct faculty member in the Department of Philosophy and director of Carnegie Mellon's Humanism Initiative. He believes that there is a disconnect between skepticism, rationality, and faith. When is faith used to defend certain things? What is the distinct line between religion and faith? The conversation moved towards the suggestion that faith and religion are an application to self. Faith is not necessarily tied to a religion. As religion provides us with parameters and a way of life, faith is what we decide to believe in. While you may believe that Jesus died and rose, providing that it is written in our history, to believe that his death and resurrection was a payment for our sins, takes faith. According to Reverend Eric Andrae of the First Trinity Lutheran Church, our university is not secular in that God touches upon every aspect of life. While Carnegie Mellon is not bound by religious affiliation, he believes that we are still blessed by God.

To further the discussion on Interfaith, the Jewish Student Association, Muslim Student Association, and Inter-



Varsity Fellowship hosted the Carnegie Mellon Interfaith Thanksgiving Table on Sunday to bring together students of different spirituality backgrounds to connect through faith, values, and food. Also, in an attempt to promote a welcoming environment on the discussion of religion, Carnegie Mellon is hosting Ask Me Anything (AMA) Day, where individuals across campus will wear buttons to encourage others to ask them about spirituality, faith, and religion.

Theodore Teichman/Visual Editor

State of the University hosted a discussion where students speakers of different religions shared their perspectives on how they have connected with their faith at Carnegie Mellon and how the university has affected their beliefs.

Report reveals that swap agreements proved costly for colleges

REPORT, from A1

risk of the university being exposed to higher variable interest rates by changing the debt to a less risky, fixed rate."

After the Great Recession of 2007 and 2008, however, central banks like the Federal Reserve lowered interest rates to zero and some to sub-zero. This meant that the bank was paying an almost-zero rate to Carnegie Mellon while Carnegie Mellon was still paying the fixed rate based on the market in 2006. This created a discrepancy between what Carnegie Mellon was paying PNC and what it was receiving from the bank, leading the school to lose \$24 million in this particular agreement and \$44.75 million through the five total payments so far.

The university is expected to lose more money on these swaps since interest rates remain at levels far below those in 2006. While the Roosevelt Institute report says that Carnegie Mellon has paid \$39.15 million and is expected to pay \$34 million

the latest annual more, financial report released last week shows that Carnegie Mellon has so far paid \$44.75 million and its forecasted actual loss will be an additional \$44.175 million, for a total loss of \$88.925 million. Carnegie Mellon cannot terminate these contracts without paying the fair value, or expected value of the deal, which is effectively the loss the agreements will garner, nullifying any benefit of canceling the agreement.

Carnegie Mellon spent \$5.6 million on paying the swap interest this past year and since the highest-value swap agreement doesn't end until 2028, most of this payment is going to be consistently present until then.

Considering, however, that Carnegie Mellon's total operating and non-operating expenses were \$1.09 billion, this loss only accounts for 0.5 percent of the university's annual expenses, indicating that it hasn't created a substantial loss to the university. At the same time, the loss Carnegie Mellon has realized so far in swap agreements could pay the tuition and fees of 855 undergraduate students in 2016, or 13 percent of the undergraduate class. It must be noted, however, that this loss has occurred over 12 years rather than a single year.

For the future, Carnegie Mellon already agreed in 2007 to four swap agreements worth a total of \$80.425 million that will go into effect from 2028 to 2031. This offers the university stability for however the market looks like at the time, but locks it into a contract into the future.

One benefit to the swap agreement has been that Carnegie Mellon now knows the rate it must pay each year for the life of the agreements. While protecting against rising interest rates, though, this exposed to Carnegie Mellon to a loss in income induced by lower rates. Thus, the university is now paying more than it otherwise would be without a swap agreement.

In addition to Carnegie Mellon, the report also studied losses generated by 18 other universities on similar swap agreements. The phenomenon is not unique to Carnegie Mellon, as Harvard, for example, has lost \$1.25 billion and the University of Michigan has lost \$85.5 million. In total, the 19 institutions have paid \$2.7 billion on swap agreements they signed, some starting over a decade ago. According to the Roosevelt Institute, the money lost on these swaps could have paid the tuition and fees of 108,000 undergraduate students for one year at the 19 institutions.

In general, having low interest rates should help an university that issued bonds to finance construction or other investments since it could now refinance its debt and pay a lower interest rate in the future. However, the swap agreements' termination penalties often make it difficult for colleges to exit the agreement.

These penalties also rose

when the interest rates fell since they are based on the net expected value Carnegie Mellon will gain from these deals, which became further negative when the rates declined.

One action the report recommended schools with bad swap deals take is to ask the Securities and Exchange Commission to investigate whether banks did not properly explain the risks of the swap agreements. According to the report, they are legally required to do so, but banks often "downplay the risks and highlighted the savings that borrowers would enjoy if none of the risks associated with these highly risky deals materialized.'

Another action the report recommended to universities was to look into suing the bank based on whether it manipulated the LIBOR rate. The LIBOR rate is an interest rate set by the most prominent global banks in the world and is the one which financial institutions' payments to Carnegie Mellon are based on. Many of the banks, including JPMorgan Chase, illegally colluded to keep this rate low from 2007 to 2010, potentially increasing the losses Carnegie Mellon and other institutions generated from the swap agreements.

Raaga Kalva, co-president of the Roosevelt Institute's Carnegie Mellon Chapter, cited increases in tuition and the lack of adequate financial aid offered by Carnegie Mellon as being problematic for students. He believes the money that was lost could have been "used for the students and for the faculty and for our institution versus going to these banks."

The Roosevelt Institute cites the spread of swap agreements as a sign of the increasing influence of financial firms.

Kalva backs the sentiment, saying, "the lack of our financial expertise should not be something that becomes a factor in the way that students' lives are affected because that's not the goal of our institution."



Forum

FROM THE EDITORIAL BOARD

The Tartan stands committed to freedom of speech

It's been nearly two weeks since the election, and President-elect Donald Trump has taken to Twitter more than once to show his displeasure with criticism against him, denouncing The New York Times, protesters in New York that he called "very unfair," and the cast and crowd of Hamilton, from whom he demanded an apology. These actions continue the unsettling precedent set during Trump's campaign for what kind of relationship dissenters from the press and the population can expect with President Trump.

No matter who you voted for, we the people must now fight to uphold a fundamental American freedom — the freedom of speech. What makes America truly great is that our democracy promises us the right to stand up to our elected officials if we take issue with their actions, as well as the right to publicly proclaim these opinions in newspapers, on the radio, on television, in magazines, etc. - all without fear of persecution and censorship. Trump's actions suggest that he would prefer a silent, compliant public and press, and may be willing to infringe on our right to free speech to obtain it. This would erode the very foundations of our democracy.

The best way to protect our rights is to exercise them, but to do so ethically. The first tenet of the Society of Professional Journalists' Code of Ethics is to "seek truth and report it," which encompasses a journalist's duty to provide a complete story with all perspectives, to never purposefully distort information, to hold power structures accountable, and to "support the open and civil exchange of views, even views they find repugnant." Throughout this year's campaign, the media has not always upheld their end of this bargain, often spinning stories to create favorable angles and silencing viewpoints that do not align with their story. American media consumption habits, supported by the media being consumed, have created a climate that values audience satisfaction and catchy headlines over ethical, unbiased reporting that honors all perspectives.

In the wake of this election cycle

and in the face of Trump's presidency, The Tartan will continue to strive to uphold our duty, and we hope to see the same from other news sources.

At Carnegie Mellon, we want to be clear that The Tartan is more dedicated than ever to protecting the open exchange of information. We seek to accurately and completely cover campus and national news as it pertains to you, our readers. As Carnegie Mellon students ourselves, we promise to continue looking critically at everything around us, asking difficult questions, and endeavoring to find their answers. The Tartan is a resource for everyone at Carnegie Mellon to express their opinions or frustrations, generate important conversations, and demand action from your community. We stand behind the freedoms guaranteed to everyone by the First Amendment. As the Carnegie Mellon student newspaper, we're invested in your right to exercise those freedoms.

If you would like to have your voice heard by suggesting a story or submitting a letter to the editor please contact us at forum@thetartan.org.

LETTER TO THE EDITOR: THE POWER OF CMU STUDENT

Stereotyping other side damages, divides U.S.

Let's assume you respect women, believe in racial equality, value democracy, and care about honesty, decency, and basic human kindness. How can you fight for those beliefs and values? Since the election, I have talked with many students who are grappling with that most important of questions what can I do now to make things better?

Students have changed the world many times. On Feb. 1, 1960 four African American college freshmen sat down at a "whites only" lunch counter in Greensboro, North Carolina. They were refused service but they did not leave. The next day, there were 20 students "sitting-in" at that lunch counter. By the end of the month, thousands of students and supporters had launched sitins, swim-ins, and other protests throughout much of America.

It is happening again. Students are again rising to the challenge of building a more just world. You won't all agree on what that world should look like, but your disagreements can be a source of strength so long as you can respect your differences and learn from them. Over the last week, I have been profoundly inspired by my students, not just because so many are fighting for their beliefs, but because they are doing so while listening to those who see things differently.

So what should you do now? There are many ways to create positive social change, and I do not believe Carnegie Mellon students need a professor to tell them what to do. Just don't stop believing in your power.

Nico Slate is an Associate Professor of history at Carnegie Mellon

Allegheny detention center violates basic human rights

In early November, The Pittsburgh Post-Gazette reported that the Pennsylvania Department of Human Services (DHS) was investigating Shuman Juvenile Detention Center after a possible suicide attempt at the detention center. On Sept. 30, the Department issued Shuman a second provisional license (reduced from full license), meaning it has not been in compliance with government standards for the second time and must create a plan to return to compliance. Only after a facility's fourth consecutive provisional license can it be forced to shut down. However, the staggering degree of the actions that Shuman employees have committed against the facility's juvenile residents bring into question whether this provisional license is an effective consequence.

There have been a variety of incidents over the past several years that illustrate the situation at Shuman. In April 2013, a worker slammed a 16-year-old into a door frame. This March, an employee grabbed and threw a resident to the floor by his neck, then proceeded to drag him intervention could help to crealong the floor by the neck. In April, a worker head-butted a resident against a wall and left him alone in his cell, unconscious, for eight minutes until a nurse arrived. And in May, two workers escalated a dispute over a bin into an attack that culminated in the near-severing of a resident's ear. The injury needed 30 stitches, according to the DHS report, and was a "significant" factor in the second provisional license.

Even worse, is that, according to the Post-Gazette's coverage, the average stay for residents at Shuman is 10 to 12 days. And in that short period, minors are brutalized.

Even after all of this, the DHS still allows Shuman two more attempts to solve the issues before they can be shut down. This is problematic for two reasons.

First, the DHS is placing too much responsibility on a facility that has already proven unsuccessful. The provisional license places the onus on the center to formulate a plan to right the wrong, when government ate effective plans, and then provide the accountability to successfully implement them.

But even worse is the precedent that the system sets for the rights of prisoners as humans and citizens of this nation and commonwealth. These aren't hard criminals being attacked and mistreated by employees - they're minors. If these actions occurred anywhere other than a juvenile detention center, there would be public outcry. The adults responsible would be criminally charged. Even though prisoners are not afforded every constitutional freedom, they are still protected by the cruel and unusual punishment clause. Their safety, health, and decency ought to be a legal paramount for any facility with human lives in their care.

Shuman's director Earl Hill attributed the mistreatments to problems with training employees, but more important than training alone is the act of cultivating a culture and mindset that prioritizes residents' humanity over their criminality.

Jarah Ezebet Game **SARAH BENDER**

With Donald Trump's election to the office of President of the United States, the divide among the American people has widened: there are the bleeding-heart liberals who champion the fundamental rights of all humans and think every small slight is a cause for immediate outrage and offense, and the selfish conservatives who are either too concerned with their own interests to worry about the people suddenly vulnerable in Trump's America, or who are secretly racist, sexist, xenophobic and homophobic themselves, and therefore vindicated in their prejudices by the outcome. At least these are the reductive and harmful generalizations we've been left with in the midst of the current political turmoil.

Things really aren't looking great for anybody at the moment. Those who had ample reason to vote against Trump - those who aren't straight, white, male, or Christian, for example — could be in imminent danger of losing rights that they've fought so hard to gain, in a country where equality is unfortunately far more selective than we tend to feel comfortable admitting. At the same time, the white working class and others who supported Trump have been crying out about failing economic systems and an unsustainable way of life for many elections now, only to be repeatedly ignored by career politicians who couldn't care less about their situation and Trump's campaign promises about the economy just don't add up. But while both sides have very legitimate concerns, they have also become increasingly hostile due to a cycle of vicious insults supplemented with little actual dialogue. The fact that we remain unwilling to listen to others means that our country may be harder to heal than anyone wants to imagine, both conservatives and liberals alike will have to become more open minded in order to bridge the gap between their vastly different viewpoints.

Trump — or even those who didn't, but don't see his looming presidency as any particular cause for alarm to stop looking down on those who are protesting and petitioning to protect their rights from an almost inevitable attack. This isn't liberals being sore losers and harboring resentment. This is people standing up for their fellow human beings, making sure the incoming administration knows that their well-documented hatred will not be accepted willingly by the people.

Sure, maybe Trump's position on the LGBTQ community has fluctuated even in the short time since the election, and he might not seek to reverse marriage equality. Maybe Trump didn't actually want the endorsement of the KKK — in fact, his campaign did denounce the group's support just days before the election. But that doesn't change the fact that hateful, intolerant people evidently feel that their vision for our country will be easier to attain in Trump's America, and this is both a serious problem for our society and a very real reason for people to feel afraid.

The truth is, if we don't see some



A good first step in trying to change this ideological stalemate would be for those who supported one's fears as valid during this time, it probably reflects more on us and our privilege than on their tendency to overreact.

The next time you feel the urge to convince someone our country has survived bad presidents before, take a moment to consider the 4,000 Cherokee people who died during Andrew Jackson's presidency, or the thousands of Americans who succumbed to AIDS before Ronald Reagan ever addressed the disease as a concern. Think about the Japanese internment camps that held approximately 120,000 people many of whom were American citizens - prisoner during World War II. Sure, this nation has weathered bad presidential decisions before, but certain individual groups have not been so lucky.

We can't even honestly claim that American society today is drastically different and therefore undeniably safer than it was in the past. Just last year, Vice President-elect Mike Pence ignored an HIV epidemic in Indiana for more than two months, even as people were infected at a rate of more than 20 per day. Trump's

See DIVISION, A5

Editorial Board

SARAH GUTEKUNST* Publisher **CLAIRE GIANAKAS***

Editor-in-Chief SINEAD FOLEY

Forum Editor

Editorial Staff

VALENE MEZMIN News Editor

JULIA EVE NAPOLITANO SciTech Edito JULIE SANSCARTIER

Pillbox Editor THEODORE TEICHMAN

Visual Editor ALEX WOOD

Sports Editor

ZOE MCCANDLER Advertising Manager

JADE CROCKEM* Operations Manager **ZEKE ROSENBERG*** Layout Manager

SOPHIA CHENG

Copy Manager

Systems Manage

ARIEL HOFFMAIER^{*}

Training Manager

Assistant Forum Editor

Assistant Pillbox Editor

SARAH BENDER

APEKASHA ATAL

RENA MIU

DEBORAH CHU Assistant News Editor Business Manage NAVIYA SINGLA

Assistant SciTech Editor GEAR JIANTHANAKANON IAN TANAYA

Assistant Sports Editor PAULINE TING

Assistant Online Editor AISHA HAN

Assistant Visual Editor member

Pillbox Editor **INDIA PRICE** Online Editor

ABHISHEK TAYAL

SIMIN LI

Assistant Visual Editor ZICHEN LIU Assistant Visual Editor

RUTH SCHERR Assistant Copy Manager

AMELIA BRITTON Assistant Copy Manager

* Denotes executive committee

Staff COPY

> Charles Li, Corey Emery, Christine Kim, Stephanie Kuang, Pauline Ting, Jade Crockem, India Price, Naviya Singla

ADVERTISING Zoe McCandler, Corey Emery

BUSINESS Sophia Cheng, Lindsey Shi



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

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

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

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

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

Library of Congress ISSN: 0890-3107

© 2015 The Tartan, all rights reserved

Web: www.thetartan.org



Cabinet is already set to contain an anti-semitic white supremacist, and Trump has pledged to sign the First Amendment Defense Act, a bill that would forbid the government from "discriminating" against any person who denies a service or product --even hospital visitation rights, contraception, or treatment for STDs to gay couples, unmarried couples, or women on the basis of their religious beliefs.

Instead, rather than dismissing people's overwhelming lists of concerns immediately, our efforts may be better served by trying to address the many problems that gave them cause for concern in the first place. Everyone needs to come together to ensure that vulnerable groups aren't abandoned to a history that repeats itself in devastating ways.

At the same time, the rhetoric dismissing all Trump supporters - and Republicans in general — as nothing more than racist, uneducated people incapable of voting in even their own best interest is equally unhelpful, and also needs to change in order to improve the country for everyone.

First of all, these assessments are reductive and, in many instances, simply not true. Nate Cohn, who covers elections, polling, and demographics for The New York Times, observed that "Clinton suffered her

biggest losses in the places where Obama was strongest among white voters." Obviously some hateful racists and bigots were able to celebrate their own terrible views by becoming avid Trump supporters, but a lot of people who ended up voting Republican were swayed by a variety of other factors. It's heartbreaking that people decided to compromise on treating minorities as equals, but that's not the way everyone was able to rationalize the choice.

Furthermore, there are actually a number of studies that suggest that, as a whole, Republicans are both more open-minded and knowledgeable than Democrats are today. Liberals are also more likely to block someone with differing opinions on social media sites, rather than entering a conversation and trying to educate them about their views.

But secondly, refusing to acknowledge the concerns of a huge portion of our country on the grounds that they just aren't decent enough to deserve it is dangerous, and might be a large contributing factor to Trump's victory in the first place. "No party these past decades has effectively represented the interests of these dispossessed," Emmett Rensin stated in a Vox article titled The Smug Style in American Liberalism. "Only one has made a point of openly disdaining them too."

disenchanted voters, with self es-

teem that repeatedly suffers hits from an unsympathetic public and who are faced with increasingly bleak prospects, turned away from the candidate who called them "deplorables" and has long been seen as a Wall Street insider? Are college-educated liberals with a good chance of landing a successful career and being able to support their families in a position to judge them for that choice?

Ultimately, there is no excuse for any of the bigoted opinions that have gained both spotlight and legitimacy now that the man preaching them has been not punished, but elected our leader. At the same time, there is also no excuse for writing off a huge percentage of the population as uneducated, uninformed, and morally inferior, simultaneously shutting down any chance for them to bring their own struggles to light. In an election with candidates as flawed and contested as this one has been, both sides had to set aside some of their misgivings and do what they felt best ensured their success and happiness.

If we want to stop this from happening ever again, all of these misgivings — from both sides — need to be addressed with empathy and respect in the future.

Sarah Bender (@sbender) is Assis-Is it really a surprise that these tant Forum Editor for The Tartan.

Gwen Ifill remembered as influential journalist

NOMEN

SYDNEY ROSLIN

Editor's note: This weekly series

For every gender barrier that has

been broken down, there have been

brave women to strike the first blow.

The world of journalism is no ex-

ception. This week, journalists and

broadcasters are mourning the loss

highlights stories of women featured

in the media. Find previous install-

ments @ thetartan.org.

"When I was a little girl watching programs like this — because that's I would look up and not see anyone who looked like me in any way. No women. No people of color. I'm very keen about the fact that a little girl now, watching the news, when they see me and Judy [Woodruff] sitting side by side, it will occur to them that that's perfectly normal — that it won't seem like any big breakthrough at all."

And that is exactly what she did. Ifill made herself visible, she did not back down as a reporter, and she embraced the fact that it's very hard to be a trailblazer.

Especially on a platform like broadcast media, there are many stereotypes for women to break down. Too often, women on television are objectified, made to be like props rather than people with opinions, or overshadowed in debates and nightly broadcasts.

Ifill, however, made her voice heard loud and clear. She asked tough questions and expected the most out of her coworkers and guests. She did not let the gender bias in her industry speak for her,

Ifill ... carved a path as a black woman in a field dominated by white men.

of Gwen Ifill, who, as a journalist, carved a path as a black woman in a field dominated by white men.

Ifill, who had been battling with cancer, died on Monday at a hospice in Washington, D.C. She was 61 years old at the time of her death.

Ifill is best known for her work covering the White House, Congress, and national campaigns over the past three decades as a journalist and broadcaster for The Washington Post, The New York Times, NBC, and PBS. She moderated the vice presidential debates during the 2004 and 2008 elections, was the moderator and managing editor for "Washington Week" on PBS, and, with colleague and fellow trailblazer Judy Woodruff, hosted PBS' nightly news program, "NewsHour." Together, she and Woodruff made up the first all-female news anchor team on network nightly news.

As media goes, broadcast journalism has presented largely white, male anchors. In an interview with The New York Times, Ifill stated,

and she was much more than a pretty face on TV. When Ifill delivered the news, she didn't deliver the news as a female newscaster, she de-her gender didn't matter.

Of course trailblazers have their speed bumps, and Ifill had to deal with her fair share. Hate mail from racist viewers, or sexist viewers, would fill her inbox, but she didn't let that stop her from continuing to deliver only the highest quality of journalism. She took everything with a grain of salt and moved forward.

It can be difficult being a trailblazer, being a pioneer. It can be difficult when the rest of the world does not believe that you can do it, not because you have proven yourself unqualified but because of your race and gender. But Gwen Ifill handled the burden with grace and power, and will be greatly missed.

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

Politicians must accept climate change or suffer consequences



NINA NELLY KOWALEWSKI

Junior Staffwriter

I would love to visit the beautiful glacial figures nestled in the mountains of Montana's Glacier National Park someday — that is, someday very soon. I crossed one of the glaciers before I was born, when my adventurous mother went on a hiking expedition to Montana when she was pregnant with me. The picture of my mother crossing a long lick of ice may be "my" only picture in the vicinity of these wonders of nature if I do not get a chance to see them for myself within the next decade. By 2030, these once grand, magnificent sculptures could become virtually obsolete as a result of global warming causing our climate to change.

This phenomenon of long term climate change has been acknowledged by every single major scientific agency in the United States, who cite the primary culprit for its acceleration as none other than humankind itself, a claim that is documented by hundreds of studies. Yet an unambiguous consensus that the higher average global temperatures have been increasing - with 15 of the 16 warmest years on record having been recorded since the beginning of the 21st century — is not enough to convince our President-elect Donald Trump that climate change is NOT a hoax.

The last time I checked (and I do my share of extensive fact-checking), I could not find any credentials that cited Donald Trump as a scientist. Reality star? Check. Business leader? Check. Qualified to make an educated assessment of scientific data and scientific opinions? Not even close.

Donald Trump has an extensive history of calling climate change a

'hoax'. Somehow I cannot find conceivable evidence to support his touted claim. I can, however, confidently tell you that if we continue to choose to ignore climate change, its effects pose a great threat to our planet's diverse life and ecosystems.

In the last century, average global temperatures driven by human activities, have increased by 1.5 degrees Fahrenheit. Naturally, the planet has periods of cooling and warming, but as our civilization has rapidly advanced in the past 200 years, it has not done so without leaving a footprint on the environment. Our industrial impact is largely responsible for the rising levels of greenhouse gases, including carbon dioxide and methane, that are released through the combustion of fossil fuels for electricity, transportation, and heat.

Typically when we a picture a gas, we think of it as disappearing and dissipating away because we cannot see it anymore. However, as is the case with a ma-

jority of greenhouse gases, some may

actually persist in the atmosphere in a layer around our earth for anywhere between 10 to 100 years. As greenhouse gases build up in the atmosphere, they exhibit a warming effect on the earth by trapping the heat, resulting in the greenhouse effect. During the day, sunlight warms the earth. Heat collected by the earth during the day escapes in the form of infrared radiation. Normally, it would continue to escape directly into space. Instead, it is stopped by greenhouse gases. Instead of permitting infrared radiation to pass through them, these gases absorb it and spread it back to the land and the ocean. Greenhouse gases are necessary components of our atmosphere, shielding us from incoming infrared radiation from sunlight that has damaging properties for us and our skin, but as emissions from human activities increase and more greenhouse gases build up in the atmosphere, they exhibit a gradual detrimental effect that is caused by this unnatural,

human-accelerated global warming over time.

Rising global temperature is only one of many indicators of climate change. Total snowfall has exhibited a decrease over the past decades with 80 percent of the locations studied experiencing more winter precipitation in the form of rain instead of snow. With human-induced climate change, extreme weather events are likely to become more frequent and intense. This past decade has seen twice as many record high temperatures as record lows. In addition, despite natural variability, there is a clear substantial overall increase in sea surface temperature since the 1950s.

The rate of increase in sea level has recently surpassed that of an inch per decade. The ocean water itself has become more acidic — this is due to the increased carbon dioxide levels in the atmosphere that dissolve in the water, where they create an imbalance in the nutrients in the water and can disrupt

N

the life and growth of marine animals. The ice in the Arctic and Antarctic ice caps has exhibited a decrease. and the rate of melting of glaciers has accelerated over the past decade, contributing to the rise in sea level. The oceanic process of storing heat and responding to increased levels of greenhouse gases is not immediate, and can often take years for the full effect to be reached, which makes it all the more crucial that we begin to take initiative and claim responsibility for the problem NOW.

Despite the overwhelming scientific data, President-elect Trump fails to accept that climate change is REAL and MATTERS. To put it in Trump's terms, equating the earth to a business deal, then passing it back and forth between politicians and neglecting it, is a dangerous move. And let's face it — Donald Trump has bankrupted his companies at least six times. Not a stellar track record when handling a deal as 'huge' as the earth.

When has a matter of biased opinion ever been more correct than scientific evidence except in the political scene? The fact remains — you can't change the truth, no matter how much you dismiss it.

Our choices right now will dictate the narrative we will set for life on this earth. We have the potential to shape the future. A denial of science is a step in the wrong direction for us. And, moreover, time and global warming won't wait for us to catch back up before it's too late and irreversible damage has been done. It is high time that we stopped turning our backs and making excuses, and do the right thing for our home. This is a global problem, and it is time to come together and work as one rather than push each other apart. The earth is crying out, but we can't hear it over the sound of our squabbling nations.

Science & Technology

Carnegie Mellon colloquium explores artificial intelligence

NAVIYA SINGLA Assistant SciTech Editor

The Carnegie Endowment for International Peace (CEIP) and Carnegie Mellon University held the first part of the two-part joint Carnegie Colloquium on Digital Governance and Security in Washington D.C. on Oct. 31.

The first part of the colloquium was titled "The Rise of Artificial Intelligence: Implications for Military Operations and Privacy," and the second part, titled "The Future of the Internet: Governance and Conflict," will be held this year in Pittsburgh on Dec. 2.

CEIP is a series of foreign policy-based research centers located in Russia, China, Europe, the Middle East, India, and the United States, with headquarters in Washington

the phrase, "The Global Think Tank." It was established in 1960 by Andrew Carnegie and, according to a report by the University of Pennsylvania, is the third most influential think tank in the world.

The colloquium, held for the benefit of both Carnegie Mellon and the CEIP, aimed to allow for communication between the academics at Carnegie Mellon and the foreign policy and ethics experts from all the CEIP stations across the world to discuss the implication of artificial intelligence on foreign policy and the challenges posed by it. The second part of the colloquium will focus on cybersecurity norms and internet governance.

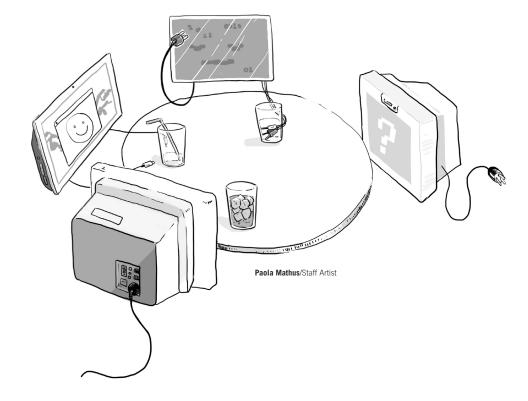
"Designing safe software systems and attempting to create the learning abilities of

D.C., that collects itself under the human brain are natural progressions towards the two of the modern world's most pressing concerns - cyber security and privacy," said President Subra Suresh, in the welcome address. He explained that discussion, such as the one facilitated by the colloquium, would help shape thought about the effects of technology on global society and diplomacy.

> The colloquium consisted of three panel discussions with experts from both sides. The first panel was "The Future of Consumer Privacy: Machine Learning and New International Data Protection," and was introduced by Andrew Moore, Dean of the School of Computer Science at Carnegie Mellon.

In his speech, Moore

See COLLOQUIUM, A7



HOW THINGS WORK

Hyperloop:

breakthrough the Hyperloop.

The Hyperloop is a system that would allow people to travel from Los Angeles to San Francisco, which would take five and a half hours by car, in a mere 35 minutes. It sounds amazing, and also like something out of science fiction.

But Elon Musk, most known for SpaceX and Tesla Motors, has been trying to make science fiction into science fact for the past few years, hosting an open Spacex Hyperloop Pod Competition to see who can design and build the best Hyperloop pod. Here at Carnegie Mellon, we have our own Hyperloop design team, which placed in the top 30 out of over 1,300 teams in January 2016 and is looking to take home the title in the competition's final on-track

competition in January 2017. In a 57-page paper entitled "Hyperloop Alpha" that Musk posted on the SpaceX website, he wrote, "The Hyperloop (or something similar) is, in my opinion, the right solution for the specific case of high traffic city pairs that are less than about 1500 km or 900 miles apart. Around that inflection point, I suspect that supersonic air travel ends up being faster and cheaper."

The technology to make a Hyperloop seems far out, and as one HowStuffWorks article describes it, "It's sort of like traveling in a bullet through a shotgun barrel partly using technology from an air hockey game."

The Hyperloop appears to be a cross between a train and a plane, with pods traveling through steel tubes mounted on reinforced concrete pylons spaced out 100 feet apart that can withstand Californian

suspension would require a perfect vacuum within the tubes, which is near impossible with the amount of traffic that would occur in and out of the tubes each day and would be ruined with even the slightest crack in the tube. Instead, Musk is proposing

using two elevated tubes, one North and one South, which would travel parallel to Interstate 5.

The tubes would have reduced air pressure inside, estimated to be one-sixth of the air pressure on Mars, to reduce drag within the tube from the pods.

The goal is to keep the tube tracks as low-tech as possible, instead focusing on the design of the pods to acquire most of the speed. A key feature of the pod designs is to have them with metal skis with magnets on the bottom that ride on a cushion of air pumped through the skis. The initial takeoff of the pods would be due to an electromagnetic pulse to the bottom of the skis.

transportation vehicle, passenger comfort and safety are the top priority. There will be emergency exits placed all along the tube, and pods would be timed so that they leave one at a time.

Some of the downsides so far are that the pods will be very cozy and may induce claustrophobia, and there has been no mention of a bathroom so far. Although, standing up in a vehicle going that fast may not be the best idea anyway. With some of the brightest young minds working on this problem, the Hyperloop may very well be a reality in our lifetime.

Regardless, this concept is revolutionizing the way people view travel and transportation, and may open the vein for other possibilities. Transporta-

tion plays such a large role from scales of local comerce to international trade. Having safe and fast transportation can drastically change the world.

Vehicle concept revolutionizes transportation speed

and fluidity. From boats, to cars, to planes, to space travel, there have been major breakthroughs in terms of fuel and engine efficiency, design, and speed of travel from one location to another, and there's about to be another

JULIA EVE NAPOLITANO

SciTech Editor

Within the past

100 years, trans-

portation methods

have exponentially

increased in speed

earthquakes. In Musk's own words, "This

is where things get tricky."

Musk has gone through a number of potential solutions for this feat of physics, only to rule most out. Using powerful fans to push the pods would create too much unwanted friction within the tubes. slowing the pods down.

Using electromagnetic

Along the track, linear induction motors will keep the pods at a constant speed, getting their power from a combination of batteries and solar panels placed on top of the tubes. As with any

Isabelle Vincent/Staff Artist

SCITECH BRIEFS

Stephen Hawking gives humanity 1000 years to find planet

Speaking at the Oxford University Union, Stephen Hawking admitted that humanity's survival is dismal in the distant future, noting that "although the chance of a disaster to planet Earth in a given year may be quite low, it adds up over time, and becomes a near certainty in the next 1,000 or 10,000 years."

Many factors can render the planet uninhabitable if given 1,000 years. Global warming does not seem to be slowing, but increasing exponentially. Frequent epidemics, such as the Ebola and Zika viruses, are also on the rise. "By that time we should have spread out into space, and to other stars," Hawking remarked. "So a disaster on Earth would not mean the end of the human race." Premonitions similar to Hawking's are partially what drive today's rush for the colonization of Mars.

Dinosaurs mav have existed 20 million years earlier

Paleontologists at Macquarie University employed a novel dating method involving probability to increase the accuracy of the fossil record. A new family tree of over 1,000 species, the largest ever, was assembled to aid in the design of a probabilistic framework of first occurrences of specific species.

Paleontologists found that the likelihood of discovering the very first fossils is very minute, and so introduced probabilistic methods to increase accuracy of their estimates.

They found that the very first dinosaurs were present at the end of the Permian-Triassic period, 250 million years ago, meaning early dinosaurs somehow survived the largest mass extinction event in Earth's history.

The entire study was published in *Biology Letters*.

China uses CRISPR, gene-editing to fight cancer cells

Scientists at Sichuan University injected a patient suffering from metazoic lung cancer with white blood cells that were edited using Clustered Regularly Interspaced Short Palindromic Repeats (CRIS-PR). This is the first known instance of the application of the CRISPR technology on human beings.

CRISPR are segments of prokaryotic DNA that enable faster, cheaper, and more accurate gene editing. The new white blood cells, T-Lymhotcytes, targeted and attacked rogue cancer cells.

Sichuan University received ethical clearance for its trial within six months. Seeking the same approval would have taken much longer here in the United States. Scientists are hopeful that competition between China, and the U.S. will drive the latter to accelerate gene-editing research.

Pluto may have oceans underneath its icy surface

Scientists have newfound evidence of a sub-surface ocean on the icy dwarf-planet Pluto. Analysis of data sent back by NASA's New Horizon space probe, which made the closest flyby of Pluto last vear, shows compelling signs of water bodies below the ice surface. This adds Pluto to the list of worlds in the solar system believed to harbor hidden water oceans, which are highly probable incubators of extra-terrestrial life. Pluto's oceans are not the most likely candidates for alien sightings, however, due to their harsh, cold conditions.

Pluto's supposed ocean is estimated to be 150 to 200 kilometers below the surface and 62 kilometers deep. Internal exothermic processes in Pluto's core are what could keep water liquid despite the planet's great distance from the sun.

Zika virus no longer an international health emergency

The Zika virus, the disease that ravaged Brazil and Florida, is no longer an international emergency according to the World Health Organization (WHO). This does not mean the virus is eradicated or ceased to be a threat, however. "We are not downgrading the importance of Zika," said Pete Salama, executive director of WHO. "By placing it as a longer-term program of work, we are saying Zika is here to stay and WHO's response is here to stay."

The Zika virus was declared a Public Health Emergency in February 2016, after it was linked to birth defects such as microcephaly and neurological complications. The disease will likely continue to spread in areas with the mosquito vector since its spread depends on the Aedes aegypti mosquitoes that act as carriers to that virus.

Alaska Airlines flies first biofuelpowered engine

Commercial airline Alaska Airlines flew its first flight with 20 percent biofuel. The fuel was made from forest tree limbs and branches, developed at Washington State University with aid from Northwest Advanced Renewables Alliance. Moreover, it is chemically indistinguishable from usual kerosene-based jet fuel.

Joe Sprague of Alaska Airlines commented, "This latest milestone in Alaska's efforts to promote sustainable biofuels is especially exciting since it is uniquely sourced from the forest residuals in the Pacific Northwest."

This feat comes at a time when contrails and jet engine emissions are under scrutiny from the environmental community.

Source: Forbes Science



Source: CNN

Source: Forbes Science

Source: WIRED

Source: The Huffington Post

Source: Science

PUGWASH

Trump presidency leads to uncertainty for future of science



ROB MACEDO Special to The Tartan

Recent events have led to many questions about the future of our country, one major question being: What exactly does the Donald Trump presidency mean for the future of science and technology in the United States? Trump's personal quips on the subject seem at best immature, simple, and uninformed, and at worst anti-fact. Yet, the forces and motives that have led to his unprecedented presidency are complex and nuanced, and paint an uncertain picture of the future for science in the United States.

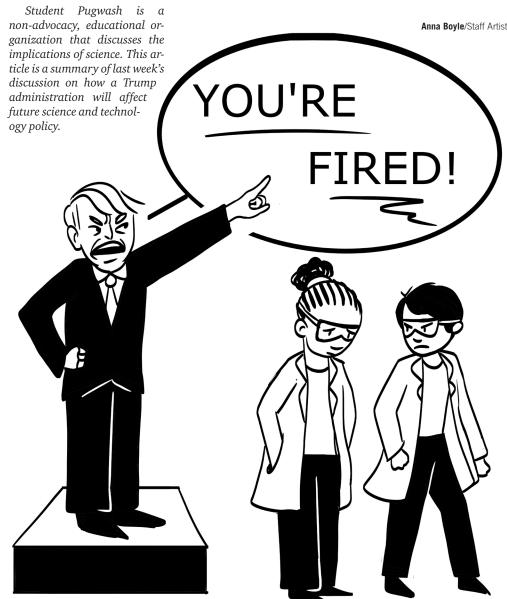
On one hand, there are many signs that we are entering a dark age of scientific Armageddon. Trump has put a prominent climate change skeptic in charge of his Environmental Protection Agency (EPA) transition team, and has publicly questioned climate change himself. He has supported claims that vaccines cause autism, and in general has expressed contempt for the scientific community. There is ample evidence that a Trump presidency could lead

to a decrease in both funding and respect for science in America, and possibly in the world. This may be the tipping point for global catastrophes such as climate change, and this election will forever be remembered as the beginning of the end.

On the other hand, such fears may be somewhat alarmist. In fact, in many ways Trump could act as a catalyst to a certain type of scientific and technological progress in the United States. Trump rose to power because of a nationalism that — while in many ways is fearfully similar to the jingoism that beget Nazi Germany — is also not unlike the American fervor that propelled the United States scientifically and technologically after the second world war. For example, the 1960s space race that led to an acceleration of technological innovation was very much fueled by a nationalist and globally competitive atmosphere. This type of research — large, flashy, and militaristic — may be perfectly in-sync with Trump's (and more importantly, Trump's supporters') agenda. If marketed correctly, in-

vestment into clean energy could capture America's imagination the way the space race so classically did. Currently, China is leading the world in clean energy research by a significant margin. If Trump and his supporters do truly wish to dominate China in all manners, we must increase expenditure in clean energy technologies. If the motive is spun not as an attack on fossil fuel industries, but rather a rejuvenation of American might, clean energy research could potentially receive a boost.

Yet, this could all be overly optimistic thinking about an administration that has great disdain for scientific inquiry, particularly climate change. While we may see growth in showy and defense-focused research, funding for fundamental climate research could wane, not unlikely funding cuts for stem cell research in the George W. Bush era. In fact, countries such as France have threatened to place tariffs on U.S. goods if the U.S. refuses to address climate change. This, coupled with Trump's predilection for isolationism, could destroy the global competitiveness of American products (not to the mention the environment as well). As many articles on the subject have espoused, we honestly do not know exactly what Trump means for the future of science and technology. In this scenario, the only thing that is truly certain is uncertainty



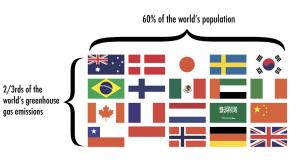
CFO of DOE talks finance

JADON GROVE

Junior Staffwriter

The Chief Financial Officer (CFO) of the U.S. Department of Energy (DOE) Joseph Hezir spoke at Carnegie Mellon on Nov. 11 as part of the Scott Institute for Energy Innovation's Distinguished Lecture Series. As the president-appointed head of the Office of the Chief Financial Officer, Hezir is responsible for the management and financial integrity of all of the DOE programs, resources, and activities. This includes determining how to distribute the yearly budget that is tentatively proposed to be \$32.5 billion for the 2017 fiscal year. His presentation last week aimed to describe the need for innovation in the energy field, to define the Mission Innovation program, and to show the tentative process for the appropriation of the upcoming DOE budget. Ed Rubin, Alumni Chair Professor in the environmental engineering department and professor in the engineering and public policy department at Carnegie Mellon, introduced Hezir, explaining their close connection as former professor and student, and mentioning Hezir's many achievements since attending Carnegie Mellon. Hezir received his undergraduate degree in chemical engineering (CIT '72) and a master's degree in public policy from the Heinz College (HNZ '74) and then transitioned into a career focused on policy. Hezir spoke first about the value of innovation and the benefit of government-funded research. His case-study for this point was the adoption of clean energy technologies such as solar power and LED lights. The issue is not that the technologies aren't beneficial or that they aren't being adopted; the issue is that the adoption of current technologies alone will not shift the country to what he labeled "deep decarbonization." Hezir called for an aggressive technology innovation program as the solution to move the country closer to that clean energy goal. He then moved on to a discussion about what he hopes the policy approach for this task will be: Mission Innovation. This global initiative, signed in 2015 at the United Nations Climate Change Conference (COP21) in Paris, France, is an

 United Nations Climate Change Conference Plan:



Funding 2X by 2021

\$35 billion of clean energy R&D in the next 5 years



Al Colloquium hosted in D.C.

COLLOQUIUM, from A6

elaborated on the difficulty of the conflicts between privacy and personalization, especially when using machine learning, saying, "privacy and personalization, which seem like clear goods, lead us to very difficult societal and technical challenges." He then explained four fictional, but relatable scenarios that shed better light on the dilemma posed by this intersection of technology and policy including law-enforcement and medical use of data.

He referred to the data of Matt Fredrikson - an Associate Professor in the School of Computer Science that reveals the trade-off be-

deputy U.S. chief technology officer at the White House Office of Science and Technology Policy; Yuet Ming Tham, a partner at Sidley Austin's Hong Kong office who focuses on privacy, cross-border compliance, and investigations; and Paul Timmers, director of the Sustainable & Secure Society Directorate in the European Commission Communications Networks, Content and Technologies Directorate General (DG CONNECT).

Following the panel were robot presentations by Carnegie Mellon Robotics Institute professors. These included the snakebots by Howie Choset, a professor of robotics; tional discussions, ... These the ballbot by Ralph Hollis, a professor of robotics; and the Robotanist by George Kantor, a senior systems scientist. Finally, the last panel, titled "International Perspectives: Autonomy and Counter-autonomy in Military Operations," was introduced by David Brumley, director of CyLab Security and Privacy

Institute at Carnegie Mellon University. The speakers included Lt. Gen. Dr. R.S. Panwar, the former colonel commandant of the Indian Army Corps of Signals; Daniel Reisner, a partner at Herzog, Fox & Neeman; and Mary Wareham, advocacy director of the Arms Division at Human Rights Watch and global coordinator of the Campaign to Stop Killer Robots.

Jim Garrett, the Dean of CMU's College of Engineering explains in the university press release about the colloquium, "The wide span of impact from artificial intelligence and cybersecurity demands these kinds of internaforums provide an exchange of ideas, an appreciation for a wide variety of views and a debate on tough topics." Thus, the Colloquium is a great way to open discussions about artificial intelligence and its implications, and the second part is sure to bring more interesting and valuable discussion as well.

Teichman/Visual Editor

agreement between twenty countries to increase funding in clean energy research twofold by the year 2021. This group of countries comprises 60 percent of the world's population and two-thirds of the world's greenhouse gas emissions. The doubling, he explained, would add roughly \$35 billion to the development of newer and more efficient energy techniques in the United States over the next five years.

One of the points Hezir focused on here was the faith that the administration would be placing in the financial investments. He acknowledged that many clean energy technologies will take more than a typical shortterm horizon on the investment. They will often require many years to materialize and then be applicable.

Hezir then transitioned to the topic of categories within the DOE, attempting to answer the question: how do we appropriate a doubling in funding? He explained that the increases wouldn't be consistent across the department. For example, on one hand, the Energy Efficiency & Renewable Energy office will receive a significant amount of new money, while on the other, the Fossil Energy office will receive less.

He explained that some of the current categories are unnecessarily difficult to work with. There is a current push within the DOE for a rearrangement of departments from categorizing based on energy source to a system with offices organized around applications.

Hezir also touched on the format of funding, discussing some of the more novel ideas for funding techniques. An example he described was an innovation ecosystem in which multiple facets such as a university, a national lab, and energy companies are all close together. The regional focus would provide increased funding in the block format for areas that have such development in an effort to improve growth more naturally. Throughout Hezir's presentation, a single question permeated: "How can the DOE most effectively spend a dollar of investment?" It is Hezir's hope that aggressive investment in more precise fields is a broad idea that will improve clean energy within the United States.

Hezir closed by taking some questions. In response to an audience member who asked the obvious question about the role of the DOE in a Trump administration, Hezir acknowledged the clear issues that may arise, but also provided some optimism. The CFO position, along with many other leadership positions within the DOE, is an appointed position, but he ended with the hope that the future leaders of the department, as well as Presidentelect Trump, will recognize the importance of government investment in energy research and continue with the proposed improvements.

Additional information was provided by Amanda King, the media coordinator for the Scott Institute for Energy Innovation.

tween privacy levels and lives saved or years of lives saved, to caution against "being on either extreme end of that trade-off" and say that "we should find our place in the middle of that trade-off."

This panel's speakers included Edward Felten, a computer scientist and



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-govschools.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

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



The Tartan fantasy football league takes a creative turn

Layout Manager Zeke

Rosenberg took home the vic-

tory over former personnel

manager Lula Beresford. De-

spite not even having DeMarco

Murray in his lineup this week,

he still ranked up quite a few

points from players like Jordy

Nelson who scored 30 points

after completing 12 catches

for 126 yards and scoring a

touchdown. Antonio Brown

also brought in 35 point. Beresford still put up a good

fight with wide receiver Allen

Robinson after gaining 107

yards and a touchdown pass for a total of 27 points. How-

ever, the Cowboys defense

scoring her -3 points did not

help. As the resident Cowboys

fan of The Tartan, I would like

to apologize on their behalf.

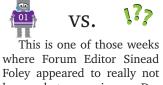
At least we beat the Steelers

VS.

though! #WeDemBoyz

JADE CROCKEM Operations Manager

Fantasy football has been quite the source of excitement in the Tartan office. Although some of us are still a little confused about what's actually going on, some of us (mainly me) have truly begun to shine. Everyone has gotten pretty invested in their team, doing everything from trash talking to intense planning. We are finally in week 10 of our Tartan fantasy league, and it was quite a shake-up. I was not the overall loser, but opted to write the article because I live for any chance I get to roast people. I've been killing the fantasy game lately and with four wins in a row under my belt, I'm excited to head into the next week and make it five. However, I can't jump to week 11 without first talking about my amazing week 10.



Foley appeared to really not know what was going on. Despite not setting her line up and leaving Marvin Jones, who was on bye week, in her lineup, she still had some luck on her side and was able to rack up a respectable number of points. Running back Ryan Matthews brought her in 29 points after he rushed a total of 109 yards and caught two passes for an additional 30 yards. Quarterback Blake Bortles also racked up a decent number of points after completing 32 of 49 passes. However, this wasn't enough to stop Le'Veon Bell who brought Pillbox Editor Abhishek Tayal 33 points after catching nine of ten targets and a touchdown pass.

vs. ???

Foley didn't seem to be any

more aware of her second team

as she left Golden Tate — who

was also on bye week — in her

lineup. Stefon Diggs still man-

aged to score her 29 points

after catching for 164 yards.

Her quarterback Marcus Mari-

ota also managed to rack up

27 points after completing 19

passes for 295 yards. It wasn't

enough to stop Online Editor

India Price though. LeGarrette

Blount scored her 24 points

after carrying for 69 yards and

scoring three touchdowns.

Her quarterback Eli Manning

also brought in a decent 17

points in the Giants win over

the Bengals. A.J. Green also

brought in a solid 19 points after catching seven passes

for a total of 68 yards. Price

brought her A game this week,

but will she be able to pull off

this kind of win next week

when she's a playing a team

that will probably remember

to set their lineup?



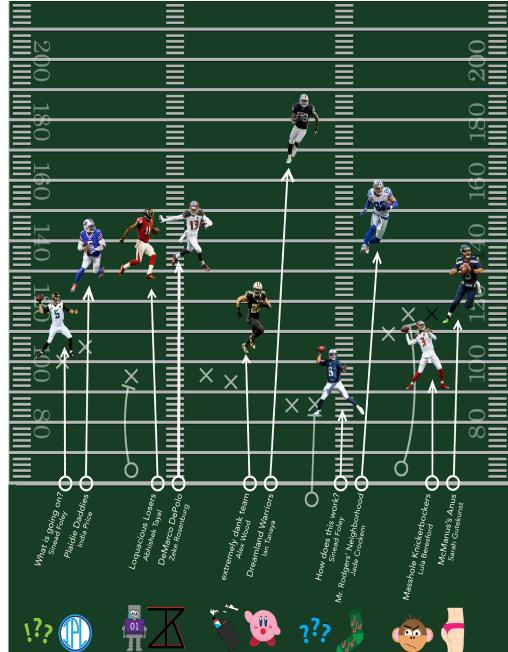
This week I went up against Sports Editor Alex Wood, and I'd like to say that I completely destroyed him. Wood had a pretty good week with quarterback Cam Newton completing 23 of 38 passes for 261 yards for a total of 23 points. Dez Bryant also brought him a decent number of points catching six of nine targets for a total of 116 yards and a touchdown pass for a total of 23 points. None of this was enough however to win after the Cowboys' Ezekiel Elliott brought me in a whopping 40 points by rushing 21 times for 114 yards and scoring three touchdowns. Despite the fact that I had a few single scoring players and left 22 points on my bench with Demaryius Thomas and 21 points with Davante Adams, I was still able to take home the victory thanks to Elliot's outstanding performance and continue my four game winning streak.

Assistant Sports Editor Ian Tanaya had a pretty good week with almost all of his players scoring in the double digits. Odell Beckham Jr.

digits. Odell Beckham Jr. brought him in 25 points after catching 10 of 11 targets and scoring a touchdown. Larry Fitzgerald also scored 25 points after completing 12 receptions. The Ravens defense also brought him in a whopping 16 points after catching two interceptions against Cleveland Browns. Publisher Sarah Gutekunst did not fare as well this week with almost half of her team scoring in the single digits. Quarterback Russell Wilson brought her in a respectable 25 points by completing 25 of 37 passes for 348 yards, three touchdowns, and no interceptions. Running back C.J. Prosise also scored her 21 points after rushing for 66 yards in his first career start. However, it wasn't enough to beat Tanaya.



Top 5 Teams This week	
Dreamland Warrior	165
Mr Rodger's Neighborhood	138
DeMArco DePolo	133
Pladdie Daddies	125
Loquacious Losers	123



Icons - India Price/Online Edito

Infographic - Aisha Han/Assistant Visual Editor & Matt Mcgehee/Staff Designer



Show tomorrow who's boss. Learn SAS® Analytics - MONEY's No. 1 job skill - for free.

Did you know that analytics skills are in high demand? That's 1.5 million data science jobs available by 2018. So why not learn SAS Analytics - the No. 1 job skill for kicking off your career with a higher starting salary - for free?

- 1. Download SAS[®] University Edition for free.
- 3. Land the job of your dreams.
- 2. Access free resources and an online community of experts. 4. G
- 4. Go from your parents' basement to a sweet place of your own.

sas.com/freeanalytics





SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. * indicates USA registration. Other brand and product names are trademarks of their respective companies. © 2016 SAS Institute Inc. All rights reserved. G32771US.0816





<u>SPORTS BRIEFS</u>

Men's Basketball The Carnegie Mellon men's basketball team defended their home court on Thursday, Nov. 17 against the La Roche College Redhawks. The Tartans played a hard fought match but ended up falling to the Redhawks, 66– 61. The loss puts the Tartans at an even 1–1 record for the season.

The Tartans jumped out to an early lead, but couldn't hold on to it as the Redhawks went on a 12–2 run that lasted most of the first quarter. La Roche carried their early momentum all the way into halftime, and Carnegie Mellon was looking out of sorts. The game went to intermission with the Redhawks leading 33–25 and hungry for more.

The Tartans started to see some real offensive production in the second half, but they couldn't match the attack of the visiting team. The Tartans were down six points with 12 minutes left to play when they finally found a glimpse of hope with seven unanswered points.

That hope quickly faded as the Redhawks repeated their 12–2 run from earlier in the game and put the Tartans out for good.

Senior center Chris Shkil led the Tartans with 16 points, eight rebounds, and four blocks while his senior forward Jack Serbin, hauled in nine rebounds and recorded six points. The Tartans will look to avenge their loss on Tuesday, Nov. 22 when they go on the road to take on the Allegheny College Gators. The game is scheduled for 8 p.m.

Women's Basketball

The Carnegie Mellon women's basketball team kicked off their season on Tuesday, Nov. 15 at La Roche College. The Tartans set the tone for their season with a dominating 74–45 victory, led by senior guard Jackie Hudepohl and senior center and forward Lisa Murphy who each had a double-double.

The Tartans established presence early in the game with a 10-point lead in the first quarter, but the Redhawks managed to cut the lead to four as the game headed into the second quarter. Murphy then took over the game and scored the next six points for the Tartans to put the lead back at ten. As the teams went into the locker room, Murphy scored another point along with four points from Hudepohl and two free throws from first-year guard Makayla Filiere. Carnegie Mellon led by 30 at halftime.

The Tartans took over every aspect of the game in the second half, and the Redhawks couldn't do anything about it. Carnegie Mellon shot 51.5 percent from the field while La Roche was held to only 34.5 percent. The Redhawks also committed 16 turnovers in the second half which made

it nearly impossible for them to come from behind and win. Murphy led the scoring with 24 points, but Hudepohl was right behind her with 22. Murphy also hauled in a whopping 22 rebounds, and Hudepohl earned 10 of her own.

The Tartans went into the second game of their earlyseason road trip on Friday, Nov. 18 in Wilmington, Ohio. The Tartans took on Transylvania University and defeated the Pioneers handily by a score of 80–60.

Murphy was the star of this game, and finished with 31 points, nine rebounds, and five blocks. Not only did she have a massive scoring night, but she didn't miss a single shot. All 12 attempts from the field connected along with each of her seven free throws. Hudepohl also contributed her fair share with 14 rebounds.

Murphy started a 17–6 run for The Tartans early in the game that set them on the path to victory, and they would end up leading 49–35 at the half. The Pioneers tried to climb their way back into the game, but could only decrease the Tartans' lead to 10 points. The Tartans decisively closed out the game with a 19–9 run to end the game with a 20-point lead. They moved on to play Wilmington College the following day.

> Compiled By ALEX WOOD

Upcoming Events

Men's Basketball vs. Bethany at Bethany Nov. 22, 7 p.m.

Men's Swim & Dive Total Performance Inv. at Kenyon College Dec. 1- 3, All Day

Women's Basketball vs. Waynesburg at Waynesburg Nov. 22, 6 p.m.

Women's Swim & Dive Total Performance Inv.

at Kenyon College

Dec. 1-3, All Day

Men's Basketball vs. Mt. Aloysius at Carnegie Mellon Nov. 26, 3 p.m.

Women's Basketball vs. St. Vincent at St. Vincent Nov. 26, 2 p.m.

UAA Soccer Standings

Men's			Women's	5	
Univ.	W	L	Univ.	W	L
Rochester	3	0	CMU	3	0
NYU	2	0	Wash. U.	3	0
Wash. U.	2	0	Chicago	2	0
Brandeis	1	0	Emory	2	0
Emory	2	1	NYU	2	0
СМИ	1	1	Brandeis	2	1
Chicago	1	1	CWRU	2	1
CWRU	1	2	Rochester	2	1

C3 IoT is Hiring the Brightest Minds in DATA SCIENCE

Are you ready to:

- Discover, develop, and implement the next generation of big data analytics
- ✓ Tackle huge data sets employing the latest technologies for industrial-scale projects and global customers
- Enable enterprise customers to embrace data-driven predictions and decision making
- ✓ Work with an internationally-recognized team of IT, software, and data science experts
- ✓ Join a high-growth enterprise software company in the heart of Silicon Valley
- Make an impact and have fun doing what you love, while building your ideal career





C3 IoT has developed some of the most sophisticated applications of machine learning and forecasting techniques for today's modern enterprise systems.

- S. Shankar Sastry, Dean, College of Engineering, University of California, Berkeley

"



C3 IoT is meeting a fast-growing demand for machine-learning IoT applications that enable organizations in data-intensive industries to use real-time performance monitoring and predictive analytics to optimize business processes, differentiate products and services, and create new revenue streams. C3 IoT is a comprehensive Platform as a Service (PaaS) for the rapid design, development, deployment, and operation of next-generation IoT applications. www.c3iot.com

APPLY TODAY:

View position details and submit resume:

c3iot.com/careers

Sports

Men's basketball wins one point thriller in home opener

MARIKA YANG Junior Staffwriter

On Tuesday, the Carnegie Mellon University men's basketball team began the 2016–2017 season on the right foot with a thrilling victory at home against the Geneva Golden Tornadoes.

The Tartans took to the court and got to a fast start, quickly scoring two layups. They swiftly gained a 12-3 lead on the Golden Tornadoes, taking advantage of four Geneva fouls within the first six minutes of the game. The Tartans defense forced Geneva to 1-of-10 shots made, taking command of the flow of the game. The Golden Tornadoes, however, fought back and drained six consecutive buckets to eventually take the lead at 20–18 halfway through the first half. The Tartans offense missed several shots. and were unable to get back into the groove they had at the beginning of the game. Both teams traded shots, but neither squad established a lasting lead.

As the half winded down into its final minutes, the Tartans offense began to find its momentum again, recovering

several offensive rebounds and scoring on second chance shots. They also scored a perfect 6-for-6 from the free throw line and recorded five steals in the half. Carnegie Mellon ended the half on a 10–4 run and headed into the locker room with a 34-28 lead.

The Tartans came out of the halftime break with an aggressive offensive attack and soon amassed an 11-point lead over Geneva. The Golden Tornadoes refused to allow the Tartans to run away with the game, slowly coming back and cutting the lead in half. Strong defense from Carnegie Mellon stalled the comeback, but Geneva eventually took the lead with five minutes left to play. The two teams traded shots, and the lead shuffled back and forth, but The Tartans went on to score three consecutive baskets to widen the lead. The final moments included two clutch free throws with 8.9 seconds left to overtake Geneva, 67–66. The Tartans held onto the lead and escaped with the win.

Senior forward Jack Serbin lead the Carnegie Mellon team with eighteen points and twelve rebounds, the 32nd double-double of his



Senior center Chris Shkil snags a rebound from a missed shot by the Geneva offense on Tuesday when the Tartans won their opening home contest.

career. Senior center Chris Shkil notched a team-leading five blocks, while also recording his fourth double-double of the season with thirteen points and fourteen rebounds. The two teams played with different styles; Geneva took nearly twice as many threepoint shots as Carnegie Mellon, while the Tartans scored 42 points in the paint to Geneva's 26. Another difference in the game was second chance points. The Tartans scored 16 points off of offensive rebounds, while Geneva scored 7 points.

Carnegie Mellon won the turnover battle, with 11 turnovers to Geneva's 14. They also scored more points off of

turnovers than Geneva did.

In order to continue improving as the basketball season gets into full swing, the Tartans need to be more aggressive on defense to prevent opponents' shooting and speed from overpowering them. The Carnegie Mellon squad began their season with a win, starting off with a 1–0

record. They moved on to play La Roche College two days later, but fell to the Redhawks 61-66, putting them at a 1-1record for the season.

Mark Egge/Staff Pho

The Tartans go on the road on Tuesday, Nov. 22 to take on the Allegheny College Gators. The game is scheduled for 8 p.m., and the road to the playoffs starts now for this team.

Tartan cross country ends season at NCAA championship

ALEX WOOD Sports Editor

The Carnegie Mellon men's cross country team finished off an impressive season on Saturday, Nov. 19 at the NCAA Division III Men's Country Champion-Cross ships. The Tartan runners went on the road to Louisville, Kentucky, where they traversed E.P. "Tom" Sawyer Park. Even though the Tartans had strong finishes in everv regular season event, they weren't able to pull it together for the final competition. That said, the Tartan runners were up against the best competition in the nation, and they put up a good fight. A total of 278 runners competed in the meet, all together representing 32 schools. The Tartans earned 480 points as a team, which was enough to earn them the 20th spot in the final standings. North Central Uni-

versity took the team championship with 60 points.

The shining beacon of light for the Tartans in an otherwise disappointing result was sophomore William Mitchell, who had the best individual performance of the team. He completed the grueling 8k course with a time of 25:15.1 and finished in 72nd place overall. This was a significant improvement over last year's national championships where he placed 135th. Mitchell has had a breakout season, with nine top ten finishes, never ending a race lower than 26th place until this final competition.

the finish line was junior

his own this season, finding two first place finishes early in the season, while finding himself higher than 20th place only four times over the course of the entire season. Expectations were high for Auld coming into the competition as they were for everyone on the Tartan squad, but the stiff competition proved to be too much to handle. The cross-country season spans a large portion of the year and fatigue is one of the most important factors in determining who comes out on top at these large meets.

The third Tartan to cross the finish line at the nation The second runner to cross championships was senior Curtis Watro with a time of 25:43.7. Watro earned 153rd place with that time, which was a result that did not live up to expectations based on his performance earlier in the season. The spring saw Watro earn six first place finishes,

top runners on the team and in the region. As the regular season came to a close, Watro's finishes started to slip as he began to earn placements in the high teens and 20s, which was uncharacteristic of him.

The rest of the Tartan team crossed the finish line soon after, but it was evident that the Tartans had not performed as well as they hoped. Junior Paul Fleming coasted through the end of the race only five seconds after Watro, and took 164th place. The number of runners at this meet made the competition fierce, and even the smallest measurements of time could have been the difference between first place and tenth place. Rounding out the Tartan runners was sophomores Jared Moore and Aadi Mhatre. Moore recorded a time of 25:50.4 to take 169th place, and Mhatre

proving himself as one of the earned 174th place by crossing the line in 25:51.4.

> Senior Ryan Archer unfortunately injured himself during the race, but he managed to find the strength to push through his pain and make his way across the finish line to complete what is likely his final race as a collegiate athlete. First-year Edward Goebel was also slated to attend but could not due to an injury late in the season. Goebel won the University Athletic Association (UAA) Rookie Of The Year award, so it would have been a great opportunity for him to showcase his talents. He'll have to heal up and hope that he can be just as mobile as he was before his

the meet as the third individual in four years to compete on a national level for Carnegie Mellon. This year was Alavilli's first time racing on the national stage, and she had a strong showing with a time of 22:01.1 to take 108th place out of 280 total runners. She also ran the same course earlier in the year, and improved her personal time on the track by 30 seconds.

cross-country Tartan had a season to be proud of. They may not have achieved the results they wanted on a national level, but they definitely showed their competitors how strong they can be. They'll need to come back next season with a vengeance if they want to compete on the national stage and succeed like the winners of the championship. But this iteration of the team has what it takes to win if they choose to work for their rewards.

Ryan Auld, a veteran of the team. Auld finished the race in 25:33.3, and even though he was only 20 seconds behind his teammate Mitchell, he had to settle for 126th place. Auld really came into

injury.

The Carnegie Mellon women's cross country team also sent one representative to the NCAA championships on Saturday. Junior Aparna Alavilli was selected to attend



Aisha Han/Assistant Visual Editor & Theodore Teichman/Visual Edi

Women's basketball begins the new season undefeated

ALEX WOOD Sports Editor

The Carnegie Mellon women's basketball team traveled to Wilmington, Ohio on Saturday to face off against the Wilmington College Fightin' Quakers in the championship game of the Wilmington Tip-Off Tournament. The Tartans earned the victory with a thrilling fourth quarter performance, and improved to 3-0 on the season while retaining their No. 18 national ranking.

The Tartans opened the contest on the offensive, scoring the first points of the game on a long three-point shot from junior guard Anna Novak. A Wilmington player scored a quick layup in transition before the Tartans came right back as senior guard Jackie Hudepohl hit a clean jump shot to keep her team in the lead. The Fightin' Quakers answered with another layup before Novak scored her second goal of the quarter to put the Tartans up 7–4. First-year guard Makayla Filiere drained a three-pointer of her own to further increase the lead, but the Tartans just couldn't keep the opposing offense down. The Tartans only allowed two more goals in the quarter, and even earned another threepointer from first-year guard Megan Jaeb. The first period ended with the Tartans with slight lead at 18-13.

The Tartans opened the second period with the same vigor as they did in the first, and sophomore guard Jenn Mayberger nailed a threepoint shot to give her team a comfortable lead. The teams traded layups throughout the rest of the half, and Wilmington College began to gain momentum with successive shots while the Tartans failed to convert their possessions into points. Senior center Lisa Murphy pulled it together for the Tartans though, and tied the game at 29 with a threepoint shot. It wasn't enough, however, and Wilmington ended up outscoring Carnegie Mellon and headed into the half ahead of the Tartans by two points at 37-35.

The third quarter began with another three-pointer from the rookie Mayberger, and eventually the Tartans would earn another eight points in the quarter. Murphy scored four of those points and first-year Katharine Higgins contributed the other half with a free throw and a threepoint shot. The Tartans then made crucial mistakes at the end of the quarter and allowed the Fightin' Quakers to take the lead at 46-49 with only 10 minutes left in the game.

The first play of the final quarter looked grim for the Tartans because it saw Wilmington earn another point on a free throw, increasing the lead to four points. The Carnegie Mellon squad must have eaten a large can of spinach after that free throw, because they came roaring back with a

quick jumper from Hudepohl followed by Mayberger's third three-pointer of the game to give the Tartans a 1 point lead at 51–50. Novak then hauled in a clutch rebound from a failed Wilmington layup, and Hudepohl turned it into a short shot to increase the lead. Wilmington came right back with their own jump shot to put themselves within one point, but then the game stalled out and no team could score for just over four minutes. Filiere would be the one to break the drought with 3:33 to play by making an incredible steal and finishing the layup on the fast break in true playmaker fashion. After her shot, there was no doubt that the Tartans would win the game.

Oddly enough, the rest of the Tartans' points would come from free throws. Murphy made two with just under three minutes left to play to put the Tartans up by 5 points, but Wilmington was still fighting and managed a



Junior guard Anna Novak sends the ball to the net with a smooth jumper.

three-pointer to try and close the gap. With less than one minute left to play, Murphy drained another free throw. Wilmington answered with another three pointer, but it was in vain. The final 30 seconds saw the Fightin' Quakers foul the Tartans in desperation, resulting in five

successful free throws on the part of the Tartans. Carnegie Mellon would close out the game with a seven-point lead at 63–56 to maintain a perfect record. The team must travel once again for their next contest at Waynesburg University on Tuesday, Nov. 22. The game is scheduled for 6 p.m.







11.21.16 • B4 Jazz Orchestra • B8 Everyday Noodles • B10 Monster

18 A. 18

table of contents

Jazz Orchestra

International Film Festival

Everyday Noodles

3	Advice for Awkward People: Extended Thanksgiving Break
6	Ban All Blockbusters: Gimme Danger
7	An Open Letter to Marvel: Doctor Strange
11	Comics: Gunshots, Chemists, and Party Time
13	Puzzles: Your Weekly Mental Warmup
14	Horoscopes: The Signs As Winter Things

5

Publisher Sarah Gutekunst Editor-In-Chief Claire Gianakas Pillbox Editors Abhishek Tayal and Julie Sanscartier Assistant Pillbox Editor Apeksha Atal Comics Editor Julie Sanscartier Visual Editor Theodore Teichman Copy Manager Rena Miu Cover Rosemary Haynes The Tartan. Box 119. UC Suite 103. Carnegie Mellon University. 5000 Forbes Ave. Pittsburgh, PA 15213. www.thetartan.org. © 2012 The Tartan

advice for awkward people

about extended Thanksgiving break

Dear Sarah,

This week will be the first time I've gone home all semester. I've been looking forward to this break for literally months. I absolutely crave the comfort of a homemade meal with my family, the convenience of free laundry that my mom will fold for me, and the respite of three measly days where I don't have anything due. Also worth mentioning, I get to see my dog for the first time since before the semester! I can't tell you how much I've missed all of these small treats that I took for granted over the summer.

Being without them for so long, I will not let myself forget to cherish all the best people and things in my life.

It's kind of undeniable that home is better than school, where I'm often hungry, tired, alone, and too busy to make the time for pesky housekeeping like dishes and laundry. I'm excited for Thanksgiving break, but I think what I really, deeply, *spiritually* desire is winter break.

Three days isn't enough. Plus I still have homework due next Monday, so even though I'm on break, I have to actually be productive. I really need time to unplug and stop thinking for a few days, but Thanksgiving break just isn't long enough. The very thought of climbing on that Pittsburghbound Megabus on Sunday makes me want to cry prematurely. What if I just get a head start on winter break and refuse to get on that bus, first day of kindergarten style?

What real harm could it bring? Thanksgiving Broken

Dear Thanksgiving Broken

Well, it could bring some harm, but it really depends on your priorities. If you want to get a good semester QPA, then missing the last two weeks and all of your finals might not be very effective. But it sounds to me like what you're really after is some good old R&R. A semester at Carnegie Mellon can be extremely stressful, damaging to your self-confidence, and downright physically exhausting.

I'm lucky enough to have a car on campus and live within a reasonable driving distance, so I've gone home for more weekends than I would honestly recommend. Now that I'm a senior, it's not as difficult for me get in the car and come back to Carnegie Melloncholy. But back in freshman year, I kicked and screamed and cried with the best of the kindergarteners. Why would I want to go back when I was perfectly happy on the couch with my dog Twinkle and all the potato chips I could eat? (Thanks, Mommy.)

I could list of tens of reasons not to come back, but the reasons we all have to be here are pretty compelling. First, your parents (or you, or the government, or whoever) are paying for you to be here. They would probably be pretty upset if all of that money they're investing in your future went down the can.

And second, the world is beyond crap, and if you even hope to have a prayer of finding a job in the crap, you better have at least a Bachelor's degree. Make good on your parents' investment so you can pay for their nursing home in 30 years.

Right now the two weeks after Thanksgiving may seem unsurvivable. But survival is making it one day at a time. Sleep as many hours as you can and eat all the food you can fit in your stomach while you're home for break, but when you get back (which you will), take the rest of the semester step by step. There's a very bright month-long light at the end of the tunnel.

Take care of yourself, and keep your head up! Sarah

The Rover

production brings a new twist to an established classic

Last Friday night, I had the pleasure of watching the School of Drama's latest production, The Rover, in the Philip Chosky Theater. The show worked beautifully as an interesting contrast of experimental interactive cinema with decidedly classical 17th century Italian themes.

The Rover depicts the struggles of young people finding true love in the 17th century. The plot is filled with drama and complicated relationships, and the cast of Carnegie Mellon drama students did a brilliant job portraying the rivalries of love, the sisterhood, the friendships, and the social relationships of this time period in Naples. Every character was well cast and the acting was without a doubt absolutely spectacular. Most interestingly, even the historic Italian accents were perfect.

The set looked like it was straight out of a dream. The boards and tinsels added a playful touch to the entire carnival theme. A production hand on *The Rover* admitted to working days and nights for the show, and sometimes having only 10 minutes breaks in between four hour long production sessions. He said that the pride he felt on seeing the finished product made all the work and exhaustion completely worthwhile.

Interactivity was an essential component of the performance. Instead of staying on the stage for the entire play, the actors actively tried to talk to the audience. From trying to praise a beautiful lady, to calling out a man and pretending he's part of the play, the actors made the play more interesting to watch. In addition, the actors made full use of the space and environment of the theatre, frequently moving off of the stage and walking around, encouraging the audience members to turn their heads. This built interest and

If you haven't watched *The Rover* yet, and if you happen to be interested in 17th century Europe and romantic dramas, or intrigued by the idea of interactive theatre portraying classical themes, this fantastic show is definitely recommended. The show runs through Saturday, Dec. 3 and tickets can be purchased at the Purnell box office or on the School of Drama's website.

made for an altogether more exciting experience.

Jiayi Zhao | Staffwriter

CMU Jazz Orchestra enthralls

Julia Eve Napolitano | SciTech Editor

This past Thursday, Nov. 17, the Carnegie Mellon University Jazz Ensembles hosted their fall concert in Kresge Theatre. The concert was packed, with audience members still spilling into the theater during the first few pieces. Even arriving 15 minutes early, I was unable to obtain a program.

The Carnegie Mellon University Jazz Orchestra started promptly at 7:59 p.m. with Oliver Nelson's 1962 "Miss Fine," a smooth, chill swing song. "Miss Fine" was one of Nelson's first big band songs, with big band referring to a large music ensemble with saxophones, trumpets, trombones, and a rhythm section derived from the Swing era in the 1920s. In contrast to smaller jazz ensembles, where improvisation is featured, big band is often more about intricacy and organization.

Eric DeFade, a jazz saxophonist who is a twotime Grammy-award winner for performances on Nancy Wilson's jazz albums, is the current director of the Jazz Orchestra. In the true jazz concert fashion, DeFade only occasionally conducted the ensemble, instead clapping in time to get them on the same tempo and carrying conversations with ensemble members during pieces.

Next up was John Coltrane's 1959 "Naima." This slower ballad, featuring a sax solo and piano solo, had many rich chords underlying the melody.

Switching it up a bit, DeFade invited Carnegie Mellon alumnus Natasha Patamapongs to the stage to sing Clifford Brown's "Joy Spring."

Patamapongs earned her BHA at Carnegie Mellon with a dual-major in international relations and music technology and is currently a master's student in entertainment industry management at Carnegie Mellon's Heinz College. As a professional jazz singer, she brought cool dynamics and runs to the piece, utilizing the microphone to effectively throw her voice to the audience.

After her performance, DeFade commented, "It's always nice when someone sings of spring this time of year." The last song of the Jazz Orchestra's first

set was Maynard Ferguson's "Superbone meets that bad man," featuring the entire trombone section. A superbone itself is a hybrid trombone.

Next, the CMU Jazz Improvisation Vocal Ensemble (J.I.V.E.), directed by Betsy Lawrence, came on stage in their black and red colorcoordinated dress to perform. The instrumentalists accompanied the singers from behind, with DeFade directing the Orchestra as Lawrence directed the singers.

Their set included James Van Heusen's "Ain't it a kick in the head," which had really cool dissonant harmonies; Luis Demetrio and Pablo Beltrán Ruiz's "¿Quién será?," a classic Cumbia song with a popular English translation by Norman Gimbel; Josef Zawinul's "Birdland," another classic jazz fusion piece featuring a number of soloists from J.I.V.E.; and Earth, Wind & Fire's "Boogie Wonderland," a famous disco song.

This eclectic set was designed to expose the performers, both the singers and the instrumentalists, to as many styles of jazz as possible before going into the industry. To transition from J.I.V.E. back to the Jazz Orchestra's second set, they performed Irving Berlin's "Blue Skies," featuring Marina Byrne, a sophomore vocal major, who brought a rich tone to the song.

The Jazz Orchestra started their second set with Thad Jones' "To You," continuing the style of big band, with slow, warm, cluster chords. Next up was Joey Calderazzo's "Midnight Voyage," featuring the saxophone section. This piece was my personal favorite of the night because of an amazing saxophone solo performed by music master's student Joseph Scheller.

They wrapped up the concert with Dizzy Gillespie's "Manteca," which had a nice Latin vibe, featuring solos from every section.

Overall, the concert was very diverse in terms of the jazz genres that were explored. You should definitely go to their concerts next semester!





Vetrimaaran's masterpiece sparks intrigue at IFF

Vetrimaaran leaned on the wall of the corridor leading into McConomy in a plain gray sweater over a powder-blue, button up oxford. He checked his phone, and smiled warmly as his Tamil-speaking fans asked for photos, while soon-to-be fans poured in to fill the auditorium. Outside, gobi manchurian (spiced cauliflower) and pakodas (fritters) were being served with chutney and water.

The chattering of the audience induced an atmosphere of intrigue, as the kind-faced man who had greeted everyone stepped down to the front of the auditorium.

"This film is brutal," he said, "I just want you all to keep that in mind while you're watching."

The Interrogation or Visaranai, directed by Vetrimaaran, premiered at the 72nd Venice

being the official Indian submission for the Best Foreign Language Film for the upcoming 89th Academy Awards. Vetrimaaran is now touring the nation, promoting the film and speaking to its brilliance.

What makes this film particularly unique is the way it was filmed. "We didn't really have a script prepared," Vetrimaaran chuckled. Before each shot, the director had a synopsis and general outline of the scene on hand and nothing more. "Filming this movie was an organic process," he explained.

To further add to the atmosphere of the film, none of the actors knew their characters' fate until the end of the film. "I wanted to film chronologically, and so the lead actor, Dinesh, said he wanted to learn the plot chronologically." As a result, when the felt privileged to be able to step away from the violence, while others couldn't.

What makes the film particularly impactful is the purity of the main characters, and the contrasting ruthlessness of the policemen. There were a few redeeming characters who sought to aid the four men, but more often than not we saw betrayal and deceit reigning over mercy and compassion.

Vetrimaaran even removed a tentative dream sequence where the boys were to kill the policemen, to further their image of purity. Pandi, holding a gun to an officer at the end of the film, even says when prompted to shoot, "But to kill to live, sir?"

Since its release, the film has sparked conversations around India, about "the system," and about the effect it has on minority groups around the nation. The Chief Justice of Tamil Nadu has screened the film for magistrates to demonstrate issues with law enforcement,

> and the National Police Academy has invited Vetrimaaran to screen the film for its trainees.

The moderator for the Q&A session that was held after the movie emphasized that through the conflicted policemen and women in the film, the audience is encouraged to "cling to their own humanity," and recall that we know such incidences happen every day, and that it is our duty to bring about social change.

"I wish to have a better place for a common man to live in, that's what makes this all worth it, Vetrimaaran sighed, "but, I don't think that day will ever come. If it does, I'll be a happy man. Change is inevitable, but all films can really do is push people to want that change."

> **Apeksha Atal** Assistant Pillbox Editor

CARNEGIE MELLON* INTERNATIONAL Film Festival in September 2015, and

took home the Amnesty International Italia Award. In February 2016, it premiered in India, and proved to be both a commercial and political success.

On Nov. 18, the film was shown at Carnegie Mellon University's International Film Festival, sponsored by the Asian Studies Center, The Tamil Nadu Foundation, and Pittsburgh Humanities Festival, and promoted by Amnesty International and the Indian Graduate Students Association.

The film is based off of a book titled *Lock Up*, written by M. Chandrakumar. The true story follows four young men who travel from Tamil Nadu to Andhra Pradesh in search of work, and find themselves becoming victims of what Vetrimaaran calls "the system." The film explores themes of oppression, corruption, and injustice through the lens of police brutality and wrongful arrest in India.

Stunning visuals and an incredibly unique creative process earned the film the honor of

actors entered a courtroom, or prison scene, they never knew if they were going to make it out or survive.

In terms of the story and content, the film is difficult to stomach. Many scenes are packed with beating and screaming, and the film doesn't hold back in terms of jarring visuals. "I made it a point to keep all of the deaths offscreen," Vetrimaaran said, "and I also do my best not to glorify the violence. I'm trying to send a message, not encourage indulgence."

As would be expected, filming such scenes took their toll on the actors and film crew. Vetrimaaran spoke of actors embracing each other in tears after filming certain sequences, and reflecting on the hardships of the real victims of police brutality in between shots. Dinesh, the lead actor who played the character Pandi, was particularly shaken, and

Ban All Blockbusters

Authenticity and the new documentary Gimme Danger

Gimme Danger is a new documentary from Jim Jarmusch, director of *Only Lovers Left Alive (2013)* and *Coffee and Cigarettes (2003)*, currently in limited release across the country, being shown in Pittsburgh by Pittsburgh Filmmakers. The film is a retrospective on the band The Stooges.

Let's talk.

I felt pretty bleak before going to see *Gimme Danger*. To be honest with you, I'm still floating in a surreal headspace. Two weeks ago, I was a news junkie, but now I'm having a pretty difficult time engaging with reality. On top of that, the evening I saw this film, the sky was grey, the thanks-to-daylight-savings darkness was already taking over, and the cold was making itself known.

Gimme Danger didn't make me feel better. But it made me feel different, in a meaningful way. Jim Jarmusch's film is a stage dive into the truest realms of creativity, authenticity, and insanity. I'm more than willing to go there for a while. In the film, Jarmusch describes the Stooges as the greatest rock 'n' roll band ever, though their lead singer Iggy Pop denies genre on principle, preferring to "just be." In the course of five or six minutes, *Gimme Danger* describes a band who, in the course of a few years, released

a few albums, performed loudly and sporadically, and imploded shortly after in a notably messy fashion. And then the opening titles appear.

art by **Paola Mathus** Staff Artist It quickly becomes evident why Jarmusch is taken enough with Iggy and The Stooges that he felt compelled to make this film. They share the same sense of oddball humor, barely acknowledging that their work is so glaringly unconventional, driven purely and religiously to create art that is exciting and righteous to them. *Gimme Danger* is composed in such a way that you are often shaken by the images in front of you (hazes of intoxication, crowd surfing, peanut butter), overlaid two or three times, flashing in breakneck montages to the cacophony of live recordings. There is hilarity, obnoxiousness, and reckless energy. It may be the filmic equivalent of a Stooges concert.

Early in the film, Iggy Pop describes his basic songwriting skills with candor, contrasting his twentyfive-different-words-or-less approach with the lyrical prowess of Bob Dylan ("blah, blah, blah," says Iggy). And it seems to me that Jarmusch aims for the same target with *Gimme Danger*, preferring to convey the ecstasy of artistic conception rather than communicate truth in a manner more complicated or overthought. The film observes the young band exploring and experimenting with all forms of noise, challenging ideas about where music can originate as well as what is acceptable in performance.

I'm struck in a large way by the zen of The Stooges. Granted, they were nuts, addled by drugs in starts and stops, faced off with violent exchanges mid-performance. But that's all part of it. Creatively, they persevered when confronted with both indifference and outright hatred; and the way they persevered, with simple self-affirmation and sheer independence, is what is most inspiring. There's almost a nonchalance in Iggy Pop, a confidence that they would not have existed any other way.

A memorable moment in the film comes when Iggy describes the appropriation of rock by corporate America — men in suits solving equations, birthing inauthentic white bread groups to create harmless sound that placated the masses and sold records. These numbers — men cobbled together bland halfideas and pretended that's what the people wanted. This is the moment in the film that nailed down The Stooges' importance for me.

Gimme Danger is a caffeinated, joyous middle finger to people in power demanding that you sit down and buy what they're selling. It celebrates a group of midwestern kids who, through acts of simple, undaunted, artistic bravery, decided for themselves and generations to come that "cool" is what you want it to be. And, in a strange way, that's downright life affirming.

I'm sad and angry today, and I will continue to be for awhile. But, let me tell you, when I was in the basement theater bathroom after the film, listening to two old

LOVE

guys ranting and criticizing our next president, I smiled. It felt pretty punk rock.



An Open Letter to Marvel

Dear Marvel,

Congrats. Unsurprisingly, your new film, *Doctor Strange*, is great. I *love* this movie. I love its trippy art style, its classic Marvel humor, and its heart. You also somehow managed not to create a terribly-written villain (as you usually do), and your movie has already made over \$500 *million*. Obviously, that's a lot of money.

Oh, and I loved your actors, too. Well, most of them.

I thought your choice last year to cast Tilda Swinton as The Ancient One, a character known in the respected Marvel Comics to be an old male Tibetan monk, was interesting at first, and it's no surprise that Mrs. Swinton is a phenomenal actress. In fact, she was phenomenal in this very movie. But many people were angry, confused, and shocked. Tilda Swinton is as far from an old male Tibetan monk as you are from DC Comics.

Seven months ago you released a statement trying to defend yourself.

Here's how I break it down to my friends: one, you threw money at yourselves. No surprise. Every business does that. Tilda Swinton scared me to death as the White Witch in The Chronicles of Narnia and is enormously talented.

Second, by essentially sweeping your problem of accidentally creating a racist stereotypical Ancient One and offending China under the rug, you've created a larger problem by playing into Hollywood whitewashing and making her Celtic rather than Tibetan. You have denied another role, another job opportunity, to Asian actors. This is not the first time this has happened, and I am tired of feeling pushed to the side to seemingly appease your audience.

Third, and most importantly, you lied to me.

I see no "strong record of diversity" and "regular departure from stereotypes" when I see your ratio of three white Chris's for every one black Nick Fury. For every female superhero there are two genius playboy billionaire philanthropists. When I look at cast photos from your previous movies, I often see two colors. I, an Asian-American teenage woman, can't see myself, and I am part of one of your key demographics.

This was where my anger, confusion, and shock stemmed from, but I also felt hurt. Disappointed. Excluded. Grant Gustin, who plays the Flash on CW, said recently, "storytelling in general will remain an escape from every day life," and I did not expect you, my lifeboat, to cast me off, especially now. I expected more and better, and now after watching the movie I feel stuck between a rock and a hard place. Doctor Strange had quickly become one of my favorite Marvel movies, but I could not ignore the struggles, problems, and lies involved within its production. Additionally, all my fellow Marvel-loving friends have written this off, but myself and my Asian-American friends are still torn up about this. And this divide that's been caused probably hurts me more.

Earlier this month, I felt torn, too. I felt hurt about America as a nation, and how we are devolving

Izzy Sio | Staffwriter

into a cycle of violence and hate with a completely new, stronger, and rawer sense of viciousness with a seemingly bleak view on how we can find a solution. Right now, I'm ashamed of our country, and I feel that way towards you, too.

And right now, all I can think of is to ask, what happens now? What does this movie mean for our representation? How will representation form under Donald Trump's presidency? Moreover, how does this presidency reflect us as a nation? Your whitewashing has already dealt a major blow to diversity and visibility, according to Variety Magazine, because of its inevitable success. And with Trump, that blow might be a lot larger. But I refuse to be intimidated by our circumstances. If anything, these situations have motivated me to make a change.

I've already told people to go see this movie. In fact, I've already seen it twice. And I might watch it a third time as well. But when I tell people to watch this movie, I'm going to tell them about what has happened behind the scenes. I want people to watch this movie with a greater knowledge of Asian issues, and create a chain reaction of awareness.

I will acknowledge it: you possibly couldn't have won anyone over with this character. If you created a racist Asian stereotype, that might have offended people even more. But instead you created a complex, substantive character that an Asian woman could have desperately benefited from. I just don't want you to lie to me, or your millions of fans, again. I hope what has happened can help foster a discussion not just on your end, but everywhere else too.









EVERYDAY NOODLES

Marika Yang | Junior Staffwriter

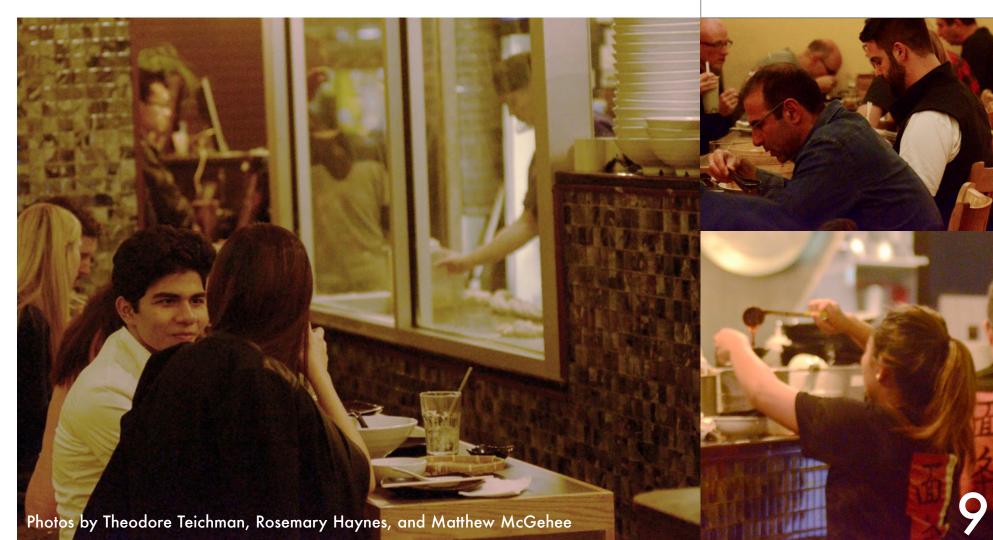
As the semester reaches its final lap, with all the exams and essays piling on top of each other up to our eyeballs, it seems impossible to even think about taking time to relax, chat with friends, and enjoy a good meal. But sometimes, taking time for ourselves, away from campus, tests, and deadlines, is the best way to relieve all the stress that has been building up on us since the start of the semester. For me, great food with great friends is the perfect remedy.

This is my first semester at Carnegie Mellon, and I've tried to explore Pittsburgh as much as I can. After visiting Oakland and Shadyside, Squirrel Hill was next on my list. This week I decided to go to Everyday Noodles in Squirrel Hill with a friend. As soon as we entered the restaurant I instantly knew I would have a good experience there. We were seated immediately, since we arrived early in the evening, before 6 p.m., but the place was already bustling with people relaxing after a long week. The interior of the restaurant is nice and laid back, the ideal spot for college students and families. Customers can watch the chefs make the noodles from scratch through a glass screen looking into the kitchen at the front of the restaurant. I was surprised to see the chefs making the noodles by hand in the Chinese style because it's something I haven't seen in many Chinese restaurants outside of China or a Chinatown.

The menu itself is extensive, ranging from a variety of noodle choices, to dim sum, to several rice dishes. It took me a while to choose what I wanted, but I finally settled on a classic Chinese dish – braised beef and tendon noodle soup - while my friend selected the hot spicy wonton noodles and an order of pork soup dumplings for us to split. Instead of a waiter asking for our order, the restaurant provides paper menus and pencils at the tables so customers can check off everything they'd like to order. When the waiter came to pick up our menus, he simply asked which type of noodles we preferred (thin or wide). This was a new style of ordering that I hadn't experienced before, but it felt right with the casual but chic style of the restaurant.

The food came very quickly, with barely a wait at all. The moment the beef noodle soup was placed in front of me, I could smell the familiar aromas of beef and spices. It was phenomenal, with exquisitely tender beef and tendon, steamed broccoli, and handmade noodles. The dish immediately took me back to Shanghai, where I ate my first authentic Chinese beef noodle soup. It was quite spicy, just the way I like it. If you aren't partial to spicy food, be sure to ask your waiter for a mildly spiced dish. My friend and I shared dishes, and her wonton noodles were just as delicious, with the hot chili oil flavoring the noodles in the best way. The pork soup dumplings were also a great addition to the meal, with soy sauce and thinly sliced ginger complementing the dish. This was my first time eating soup dumplings, and they left a great impression. The pork was mildly seasoned, allowing for the soy sauce and ginger to enhance the dumplings. By the end of the meal, I was completely stuffed and satisfied.

Of all the places I've visited in Pittsburgh so far, Everyday Noodles is definitely at the top. The service was efficient, but not overbearing, the restaurant atmosphere very welcoming, and the food itself spectacular. It had some of the most authentic Chinese dishes I've had in a restaurant in America. This was the perfect way for me to relax after a week of endless assignments and to catch up with my friend. The place was busy, but not overcrowded, which allowed us to feel comfortable. I'm excited to go back with more friends and try different dishes. I would highly recommend Everyday Noodles to anyone – the menu has something for everyone, including vegetarian choices, desserts, and bubble tea. Plus, it's very close to campus – just a short ten-minute bus ride away. I will definitely bring my family to eat there the next time they are in Pittsburgh.





Stack'd Shadyside

728 Copeland Avenue (*next to Starbucks*) **stackdpgh.com** | facebook.com/stackdpgh

Monster



Put me in a box Wrapped with a pretty little bow Tell me who I am Because I sure as hell don't know,

Tell me why I should stay Live on this melancholy Earth Tell me why I should listen And what your words are worth.

So put me in a box, Make it pretty, wrap it tight. Tell me that I'm normal That I should be quite alright. Put a ribbon on me Let the sunlight catch my skin Tell me I'm a child of God And cover up my sin.

Try to make me normal Try to hide my darkened soul Make me a perfect image Say my heart is made of gold.

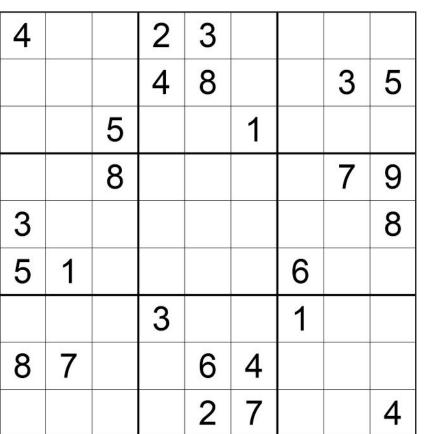
We both know what you're trying to do We know you won't succeed Because under all of your trying Is a monster you need to feed.

You want to explain yourself Try to talk to me Say you're sorry You're not sorry

Say your empty words I'll listen, don't worry Only because I'll think it's funny And I need a laugh, these days.

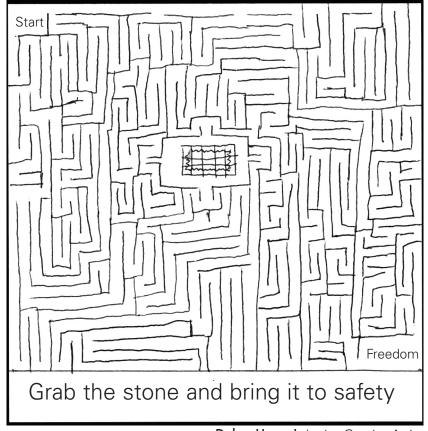


sudoku



sudoku courtesy of www.krazydad.com

maze



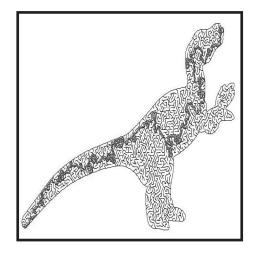
Dylan Hyun | Junior Comics Artist

Solutions from Nov. 7

S	Â	Ň	D		°A	Ů	s		Å	Ř	C	A	D	E
14 O	М	0	0		15 T	R	Е		R	Е	Е	L	1	Ν
17 N	0	0	Ν	18 T	1	D	Е		19 A	Ρ	Р	Т	А	Ν
20 J	U	S	Ν	А	Т	U	R	A	L	Е		22 C	L	T
23 A	R	Е	А	S				24 S	1	Ν	25 L	Е	S	S
					28 G	27 U	28 T	Т	Α	Т	E			
29	30 D	31 		32 H	0	S	Е	А		33 A	Ν	³⁴	35 M	В
87 N	0	т	38 W	1	т	н	S	Т	39 A	Ν	D	1	Ν	G
ŝ	н	0	А	L		⁴¹ E	L	Ι	0	Т		42 L	0	0
			43 C	A	₽₽ R	R	A	С	к					
⁴⁵ C	A	47 L	0	R	1	Е				48	49 S	50 T	51 L	52 E
53 A	Т	Е		54	Ν	D	55	R	67 E	С	Т		0	Ν
A S S	Т	А	59 M	0	S		R	Е	V	Е	R	Е	Ν	D
³¹	1	S	S	U	Е		⁶²	Ν	Е		⁶³	Т	Е	Е
84 S	С	Н	U	S	S		⁶⁵ S	0	Ν		W	0	R	D

crossword

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

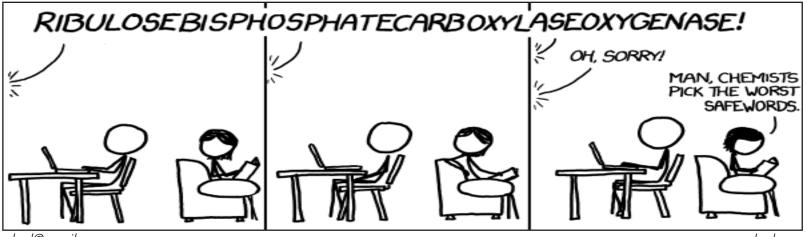


sudoku

maze

comics

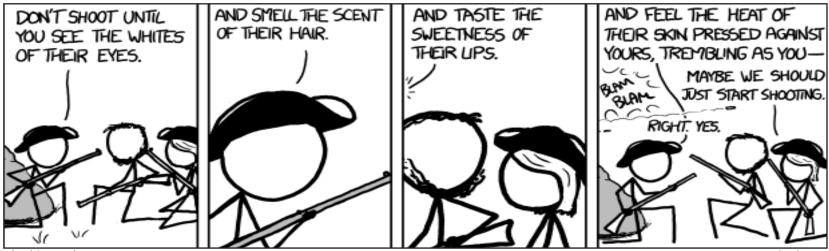
Safe Words by xkcd



xkcd@gmail.com

xkcd.com

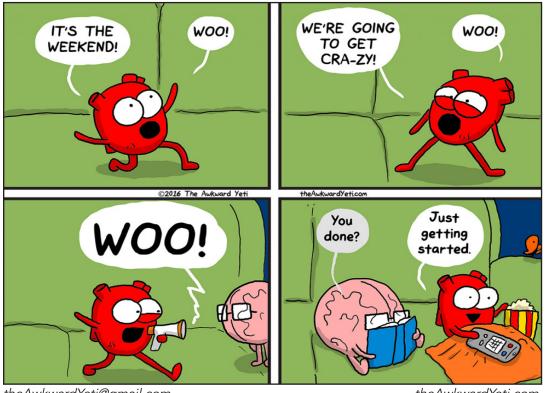
Whites of Their Eyes



xkcd@gmail.com

xkcd.com

comics



Party Time by Nick Seluk

theAwkwardYeti@gmail.com

theAwkwardYeti.com

Five Minutes by Brian Gordon



FowlLanguageComics.com

horoscopes

horoscopes: the signs as winter things



You are warm like half-melted marshmallows and hot cocoa.

Taurus april 20-may 20 You wear a Santa hat even though it's still November.



You put up Christmas lights in your dorm room on Nov. 1

Cancer

june 21-july 19

You buy limited edition Christmas things because CHRISTMAS!

Leo july 20-aug. 22 You tend to wear every item of warm clothing you own at once.

Virgo aug. 23-sept. 20

Watching The Nightmare Before Christmas is your favorite pasttime.

Libra

YOU LOVE ICE SKATING!

sept. 21-oct.19

Scorpio oct. 20-nov. 20

You love layering on warm blankets and binging Netflix shows. So many shows.

Sagittarius nov. 21-dec. 20

You're still thinking about Halloween for some reason?

Capricorn dec. 21-ian. 19 Building snowmen is more important to you than anything else.

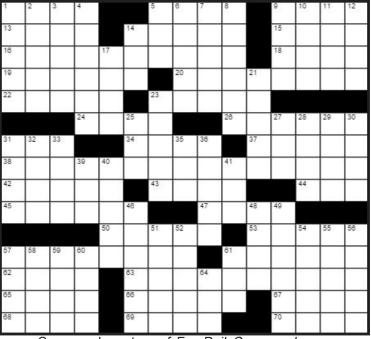


Skiing and snowboarding are the only activities you care about.

Pisces feb. 21-march 20

Flannels and indoor fires make your soul happy.





Crossword courtesy of FreeDailyCrosswords.com

across

- 1. Trim 5. Panama and bowler
- 9. Turkish titles
- 13. Medical suffix
- 14. Actress Shire
- 15. Waste allowance
- 16. Pertaining to the gullet
- 18. Few and far between
- 19. Highway divider
- 20. Forbid
- 22. Guide
- 23. SeaWorld attraction
- 24. Structure for storing grain
- 26. TV chef Lagasse
- 31. Draft org.
- 34. Chooses
- 37. Stop on
- 38. In spite of
- 42. Light
- 43. Junk e-mail
- 44. Great Lakes canals
- 45. Heathen
- 47. Untruths, tells falsehoods
- 50. Bristles
- 53. Boatswain
- 57. Desert region in SW Africa
- Greenish yellow finch
 Grinoco Flow" singer
 Lasting for half a year
 Steven Chu's cabinet dept.

- 66. Skeptical
- 67. Prefix with plasm
- 68. Prepare to be shot
- 69. River of Flanders 70. New driver, often

1. They're metered

down

- 2. Item having exchange value
- 3. Janeiro
- 4. Catches sight of
- 5. Witch
- 6. First letter of the Hebrew alphabet
- Jewelled crown worn by women 7
- 8. Biblical dancing girl
- 9. Longfellow's bell town
- 10. Snatch
- 11. Ethereal: Prefix
- 12. Keep it, to an editor
- 14. Convert into leather
- 17. Mata
- 21. Pertaining to people
- 23. Second-year students, for short
- 25. Destiny
- 27. Actor Byrnes 28. Reformer Jacob
- 29
- expert, but... 30. Building block brand
- 31. Ginger cookie
- 32. Slammin' Sammy
- 33. Stick around
- 35. Recipe abbr.
- 36. Stagnant
- 39. Finish first
- 40. Whiskey type
- 41. Where
- 46. Contemptibly small
- 48. Israeli statesman Abba
- 49. Poem of 14 lines 51. Woody inhabitants of forests!
- 52. Actress Anouk
- 54. Gravy, for one

57. Retain 58. Part of A.D 59. Caustic solutions 60. Bern's river 61 I ow island 64 Discount rack abbr

- 55. Liquid waste component
- 56. Thermoplastic yarn

calendar

monday

11.21.16

Stand-Up Comedy & Improvisation Five and Dime

8:30 p.m.–11:30 p.m. Hambone's 4207 Butler St, Pittsburgh, PA 15201 Tickets and Sign Up at: *http:// hambonespgh.com/*

Woody Drennan will be hosting this incredible stand-up comedy and improvisation night featuring comedians and improvisation troops galore. The improv troops will be working off of the comedians' sets to create 10-minute scenes on site, giving this performance a unique edge that will leave audiences delighted. Wings will also be available for purchase until 10 p.m., and the event is open to all who wish to participate.



Beginner's Fire Eating Workshop

6:30 p.m.–9:30 p.m. 110 Cutler St, McKees Rocks, PA 15136 Tickets: *https://flamewatercircus.com*

Eating Fire. It's that unattainable feat that you've seen in carnivals throughout your life and secretly wanted to try but have always been too terrified to pursue. Billy Tempest and Shade Flamewater are coming to change that for all aspiring fire eaters in Pittsburgh. Beginners will learn basic fire eating and tricks such as the 'Jellyfish Extinguisher.' **friday**

Winter Flower Show and Light Garden Opening

Phipps Conservatory and Botanical Gardens 1 Schenley Park, Pittsburgh, PA 15213 Official Website: phipps.conservatory.org/ winter

Phipps famous Winter Flower Show will be opening this Friday with the theme "Snow Day at Phipps" and will include adorable animals, vibrant lights, breath-taking flower displays, and much more. The Conservatory is hoping to recreate the "wonder of a winter's day" for guests old and young. Outside, the Winter Light Garden will be bright and decorated for guests to see as well, along with the Garden Railroad. The exhibit will be on display until Jan. 8, 2017.

I Made It! For the Holidays 2016

11 a.m.–6 p.m. Heinz 57 Center 623 Smithfield St, Pittsburgh, PA 15222

Spend Black Friday and Small Business Saturday with I Made It! For the Holidays, for the 10th year since its conception. The event will include plenty of handmade items, food trucks, and performing artists to warm up your evening. There are raffles to be entered, prizes to be won, and gifts for loved ones to be purchased, so head on down to the Heinz 57 Center for a great time. For more information, check out: *http://imadeitmarket.com*

saturday

A Very Electric Christmas

4 p.m. Byham Theater 101 6th St, Pittsburgh, PA 15222 Tickets: *https://trustarts.org*

What would the holidays be without the Christmas classics from Mariah Carey, Nat King Cole, and the soothing spirited compositions of Tchaikovsky? Not the same, and with A Very Electric Christmas, you can embrace the holiday season with Max, a bird who finds himself at the North Pole due to a mishap while en route to fly south for the winter. The heartwarming tale is perfect for spectators of all ages, and music lovers who can't get enough of that holiday cheer.

Christmas on the Farm

9:30 a.m.–5 p.m. Molnar Farms 3115 E Western Reserve Rd, Poland, Ohio 44514

Molnar Farms is hosting their third annual Christmas on the Farm craft and gift market, with tons of handmade crafts and alpaca accessories to take home for the holiday season. Vendors will include Orchard Creek Soaps, Junk Refunked, and many more. The event promises potential gifts for everyone on your list, and a great flea market-style shopping experience. Who can't get enough of that holiday cheer?





Bhangra in the Burgh

Bhangra teams from across the country came to compete in the tenth annual Bhangra in the Burgh. The event was a celebration of the traditional dance style from the Punjab region of India. All event proceeds were donated to Pittsburgh Promise, a nonprofit aimed at providing higher education to Pittsburgh youth.







