### **Scott Insitute prepares for** annual Energy Week · A7

SCITECH

### Tartan basketball loses to **Washington University** • A12

**SPORTS** 

### Concert Preview: MIX ft. The Originals · B8-B9

PILLBOX

# HETARIAN Carnegie Mellon's student newspaper since 1906

thetartan.org f @thetartan f The Tartan

January 30, 2017 Volume 111, Issue 14

# Robotics Institute receives \$250 million donation from DoD

Staffwriter

In keeping with Carnegie Mellon University's rich tradition of excellence in robotics, an independent institute founded by the university was awarded more than \$250 million in order to create a robotics manufacturing institute in Pittsburgh. This announcement was made by the Department of Defense (DoD) on Friday, Jan. 13.

The money is a mixture of public and private money, with \$80 million coming from the DoD and an additional \$173 million coming from partner organizations. The public-private Manufacturing USA institute was gifted to American Robotics, a Carnegie Mellon-led nonprofit venture with more than 220 partners in sectors all across the nation, including industry, academia, government, and nonprofit. The Richard King Mellon Foundation, a group dedicated to securing the future of South-western Pennsylvania, was instrumental in the process of creating the proposal.

This high-level award is a step that puts Carnegie Mellon and Pittsburgh on the path to becoming a central part of technological advancement in terms of manufacturing, artificial intelligence, autonomy, and 3D printing. In order to be at the forefront of this new wave of emerging donation will allow American Robots to make industrial robotics more affordable for both big and small businesses. Furthermore, they will be adaptable to many uses, allowing companies to achieve more in less time, and at increased efficiency.

Many government officials predict that manufacturing on this scale will introduce a new generation, one in which the nation potentially experiences an influx of new jobs and fueled economic growth, putting the U.S. squarely in the lead on advanced manufacturing.

"This new institute will provide significant benefits to the region and the nation, while creating enormous opportunities for [Carnegie Mellon] scholars and researchers, and new momentum for the university," President Subra Suresh said in a university press release. "The institute, in return, will benefit from [Carnegie Mellon]'s expertise in technology, as well as its strengths in policy, ethics, and human interfaces that will ensure that new technologies work to benefit humankind."

Among the several university faculty members who led the development and preparation of this institute was Gary Fedder, Carnegie Mellon's vice provost for research as well as the Howard M. Wilkoff Professor

"The Advanced Robotics Manufacturing Institute (ARM) seeks to help make their robots safer, more affordable, and more useful."

Engineering and a professor at Carnegie Mellon's Robotics Institute. He played a pivotal role in the establishment of the institute.

"When the DoD announced its intention to create a new of Electrical and Computer institute dedicated to robotics

manufacturing, we knew that [Carnegie Mellon]'s historic strength in the field, leading to cutting-edge research underway today, gave us a great opportunity," said Fedder in a press release. "We were fortunate to build a team

that brought complementary strengths from across the nation."

One of Fedder's partners on the project was Howie Choset, also a professor in the Robotics Institute. "This work has the power to benefit

society broadly, and to benefit many, many potential workers and their families," said Choset. He believes that their mission had four prongs: empower American workers to compete with low-wage workers abroad, create and sustain new jobs to secure U.S. national prosperity, lower the technical, operational, and economic barriers for smallmedium sized enterprises as well as large companies to adopt robotics technologies, and assert U.S. leadership in advanced manufacturing.

Robots come with many challenges; they are expensive, singularly purposed, challenging to reprogram, and require isolation from humans for our safety. However, the Advanced Robotics Manufacturing Institute (ARM) seeks to help make their robots safer, more affordable, and more useful.

"The institute will tap into Carnegie Mellon's research strengths in collaborative robotics, sensor technologies, materials science human-computer interaction, areas that are rapidly transforming many sectors of our economy," said Provost Farnam Jahanian. "With this unique partnership between academia, government, and industry, [Carnegie Mellon] is poised to bridge the gap between research, innovation, and practice in the emerging field of advanced

# Students share concerns on changing add/drop/withrawal course policies



Aisha Han/Visual Editor

Students gathered in Rangos 2 to express their concerns regarding the university's timeline for adding, dropping, and withrawing from courses.

YIYUAN CHEN

Operations Manager

On Jan. 24, Carnegie Mellon Student Senate and the Graduate Student Assembly organized a student forum to discuss the university's current academic policies regarding overloading courses and its timeline for adding, dropping, and withdrawing from courses. Representatives from Academic Policies and Practices (APP) discussed students' main concerns regarding the current academic practices, their general sentiments based on past surveys, the stress culture within the university,

and changes proposed by the APP representatives of the Task Force, an organization launched last spring by Provost Farnam Jahanian, psychology professor Marlene Behrmann and Dean of Student Gina Casalegno to enhance the Carnegie Mellon experience.

Through the HealthU Survey conducted in 2013, APP representatives found that nearly half of the undergraduate students at Carnegie Mellon identified the quantity and difficulty of academic work to be the main causes of stress. The APP Work Group argued that the current overloading policy,

which automatically lifts the maximum credit limit for students with a QPA higher than 3.0, was shown to have fostered a toxic culture that pressures students to take on more courses than they can handle.

At the student forum, Jacobson, the Annette associate dean of the College of Engineering, proposed that Carnegie Mellon should remove this policy. "More stringent policies are needed to retain [the credit limit]," Jacobson said. Her proposal stated that students must first consult their academic advisors in order to overload and advisors should also present

students with comprehensive plans for future courses. Moreover, first-year undergraduate and graduate students would no longer be allowed to overload, with the exception of double-major students and students pursuing dual degree or 2-3 academic programs.

The overloading norm at Carnegie Mellon also leads to a higher course drop rate weeks into the semester. The current policy states that students have only two weeks to add courses, but ten weeks to drop a course and until the last day of classes

See POLICY, A3

# Remembering the life and legacy of Professor Fienberg

**ROSE PAGANO** 

Personnel Manager

Stephen E. Fienberg, Carnegie Mellon Professor of Statistics and Social Science, passed away on Dec. 14 at the age of 74.

Fienberg was world-renowned statistician famous for creating certain statistical applications as a way to impact public policy and science. Some of the areas his work targeted were elements of human rights, forensics, survey procedures, census polling, and privacy standards. Additionally, Fienberg was voted into the National Academy of Sciences (NAS) in 1999 and developed methodological and theoretical progressions in both multivariate and algebraic statistics. Fienberg also pursued his interests in other academic areas and spearheaded machine learning at

Carnegie Mellon. "It was an incredible fortune to know and work with Steve Fienberg. He was the consummate academic who did it all - from administrative work to teaching and advising all while working to solve many of society's grand challenges," Richard Scheines, Dean of the Dietrich College of Humanities and Social Sciences said in a university press release. "Steve had preternatural energy, and he made everything he took on better, including the Statistics Department, the National Academy of Sciences, the Machine Learning Department, you name it. He was rightfully regarded by his CMU colleagues and his collaborators around the world as a world-class talent. He will be sorely missed."

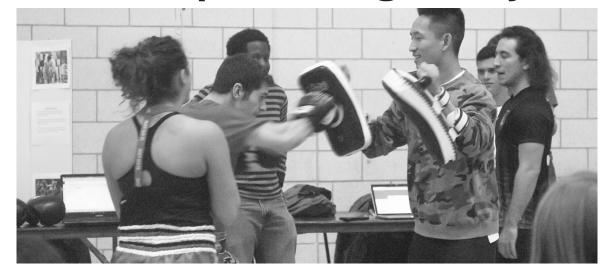
After coming to Carnegie Mellon in 1980 as a member of the Statistics Department, Fienberg was also appointed positions in Heinz College, CyLab, and the Machine Learning Department. Fienberg was appointed head of the Statistics Department from 1981 to 1984 and was a key player in incorporating the Statistics Department with the Dietrich College of Humanities and Social Sciences. He was known for enlisting worldclass professors and held the position of dean of the college from 1987 to 1991. During his time as the Dean of Dietrich College, Fienberg founded the Modern Languages Department, which resulted in improving

the college's standing. "For 36 years, Steve was one of Carnegie Mellon's most valued citizens," Provost Farnam Jahanian said. "A brilliant, nationally renowned statistician and a thought leader on datasharing, he made a transformative impact on the fields of social and behavioral science and machine learning. As a teacher and leader, he was collaborative, thoughtful and remarkably generous — a truly rare find. Steve has left an indelible mark on the institution and on the countless students, faculty and staff who were fortunate to work alongside him."

For the National Academy of Sciences, over a course of more than 40 years, Fienberg was on 35 committees and panels that tackled subjects ranging from bilingual education to census data. He also took part in the Standing Committee of

See FIENBERG, A3

# Students pack Wiegand Gym for winter Activities Fair









Hundreds of students flooded Wiegand Gymnasium on Wednesday, Jan. 25 to learn more about the various clubs and organizations at Carnegie Mellon. Organizations represented different sports, activities, and cultures.

**NEWS IN BRIEF** 

### CMU flu forecasting systems predict that flu symptoms will peak in upcoming weeks

A group of computer scientists and statisticians at Carnegie Mellon University have predicted that flu activity may be reaching its peak for the 2016-2017 season. This was deduced from models created by the Stat and Delphi flu forecasting systems developed by the Delphi research group at Carnegie Mellon.

The Stat system creates its predictions by analyzing past flu patterns and current input from the CDC and Prevention's domestic influenza surveillance system.

It predicts that flu activity for Pennsylvania, West Virginia, Delaware, Maryland, and Virginia will peak the week of Feb. 12, and flu activity nationwide

The Delphi system uses best guesses which are made weekly by a group of people who receive input from the CDC's surveillance network.

It predicts that flu activity for Pennsylvania will peak the week of Jan. 29 and will peak nationally the week of Feb. 5.

Compared competing flu forecasting systems, both the Stat and Delphi flu forecasting systems proved to predict the most accurate forecasts for the 2015-2016 flu season.

According to a Carnegie Mellon press release, members of the Delphi research group expressed the hope that they will eventually be able to forecast flu activity the same way weather forecasts.

### Meditation could be the key to dealing with stress during the 2017 Superbowl

Those looking forward to next week's Superbowl are probably all too familiar with the stress that comes along with the event, especially if your favorite team is competing. Carnegie Mellon University scientists may have found the solution. They predict that if utilized during the games, mindfulness meditation can help improve stress management.

"If you get stressed out watching football or think that you might, set aside a little time before the game or during halftime doing brief mindfulness practices," David Creswell, associate professor of psychology in the Dietrich College of Humanities and Social Sciences, said in a university press release.

Scientists believe that mindfulness meditation can also help relieve stress in our everyday lives. Creswell found that mindfulness intervention programs are able to reduce loneliness in older adults, slow HIV progression, and even improve healthy aging. This is because mindfulness meditation training enhances brain stress resilience circuits and improves inflammatory health outcomes in

high-stress adults. "These brain changes provide a neurobiological marker for improved executive control and stress resilience, such that mindfulness meditation training improves your brain's ability to help you manage stress,' Creswell said.

> Compiled by **VALENE MEZMIN**

### STUDENT GOVERNMENT COLUMN



**DOMINIQUE ESCANDON** Special to The Tartan

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

Long breaks from school have always been marked by weeks of reflection that turn, at least for me, into a need for action. I found myself thinking about Carnegie Mellon (maybe way too much considering that this was supposed to be a time for relaxation) and what changes I would see within the next two and a half years. Having already spent three semesters getting to know some of the most unique and driven people I've ever met, I grew anxious to see what this next semester would bring.

For this reason, it was incredible to return to our weekly Wednesday Cabinet meetings to hear about the Mental Health Advocacy Open House that Eric Zhu, Student Government's mental health representative, is organizing with the Provost's Task Force. The Open House will take place on Monday, Feb. 20 from 6 to 8 p.m. in Peter/Wright/ McKenna. The event is an opportunity for mental health advocacy organizations, such as Active Minds, Emerging Leaders, Counseling and Psychological Services, and University Healthy Services, to present their past work as well as their goals for the upcoming two semesters. This is presented with a poster session and roundtable ideation discussions on provided topics.

The goal of this event is to improve communication and coordinate efforts among those on campus who work within mental health advocacy through information and conversation. Again and again mental health has been pinpointed as one of the most pressing concerns at Carnegie Mellon, one that we can always be working harder on.

In establishing a poster template for all interested organizations, the information exchange will be streamlined to benefit both student leaders in mental health as well as general community members. By learning more about what events have already been done, or are being planned on campus, student leaders can ensure that their efforts in student wellness are maximized. For community members, this is an opportunity to find out what aspects of Carnegie Mellon's mental health action groups interest them the most.

My favorite part of this event is the conversation component. Incredibly impactful actions on campus have all sprung from the right people having the right conversations. With such a diverse, independent, and busy campus, it can be difficult to coordinate connections - by providing a central location for the cross-pollination of ideas, we can ensure that the vision of the Carnegie Mellon of tomorrow is always innovative and empathetic.

I'm incredibly excited for everything that's in store for this semester, and I believe that this Open House will set an important tradition that will catalyze action beyond what any of us might see during our time here. If you feel there's something Carnegie Mellon is missing in its mental health discussions, want to join the action, or are even just interested in learning about what the Provost's Task Force and other related organizations have accomplished to date, make sure to come by! And of course, for any other concerns or ideas you might have, you can always reach out to any member of Cabinet!

# Campus Crime & Incident Reports

### Harassment

Jan. 19, 2017

Carnegie Mellon student reported that an individual driving a vehicle shouted an inappropriate comment towards her while she was walking off campus. An investigation is on-

### **Alcohol Amnesty**

Jan. 20, 2017

University Police responded to Mudge House after receiving a report of an intoxicated female. The Carnegie Mellon student was provided with medical attention. Amnesty was applied and no citations were issued.

### Hit and Run

Jan. 20, 2017

University Police responded to Margaret Morrison Street after receiving a report of a hit and run. An investigation is ongoing.

### **Suspicious Person**

Jan. 20, 2017

A suspicious male was spotted at Shady Oak Apartments. The male left the building before University Police arrived. An investigation is ongoing.

### Burglary

Jan. 20, 2017

Mellon Carnegie student's jacket, headphones,

and money were unlawfully removed from their apartment in Fairfax Apartments. An investigation is ongoing.

### **Theft of Wallets**

Jan. 21, 2017

Three Carnegie Mellon students reported that their wallets were unlawfully removed from Wiegand Gymnasium while they were playing basketball. An investigation is ongoing.

### **Burglary**

Jan. 23, 2017

A Carnegie Mellon staff member reported that money was unlawfully removed from an office in Cyert Hall. An investigation is ongoing.

### Theft by Deception

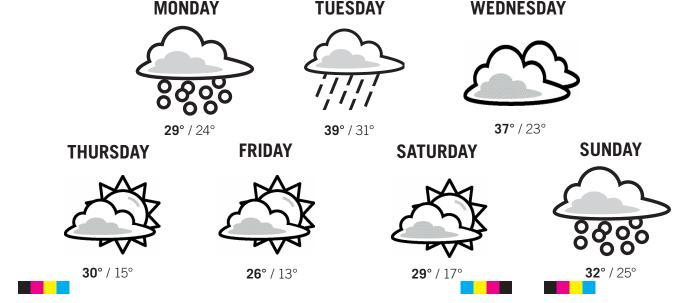
Jan. 24, 2017

A Carnegie Mellon student was contacted by individuals stating they were from the Internal Revenue Service (IRS). The individuals claimed that the student owed taxes to the IRS and requested that he purchase a large amount of gift cards to pay the debt. An investigation is ongoing.

> Compiled by **VALENE MEZMIN**

**WEATHER** 

Source: www.weather.com



### **Corrections & Clarifications**

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

# Trump administration seeks to repeal Deferred Action for Childhood Arrivals

**EVANGELINE LIU** Staffwriter

In June 2012, on the 30 year anniversary of a Supreme Court case that banned states from charging undocumented children tuition at public schools, then-President Obama announced his signature immigration program known as the Deferred Action for Childhood Arrivals

program, or DACA.

DACA allows eligible undocumented immigrants who arrived in the United States as minors — often because they were brought here by their parents — to apply for a renewable two-year deferral of deportation proceedings, to apply for a work permit, and in some states, to receive certain government benefits such as in-state tuition at public colleges or the ability to apply for a driver's license. However, it does not provide legal status or a path to citizenship — it only allows some undocumented people to come out of the shadows and temporarily live without fear of deportation.

To be eligible for the DACA program, an immigrant must have arrived before the age of 16 and before June 2007, be enrolled in school, have a high school diploma, or be honorably discharged from the military, be younger than 31, and not pose a threat to national security (i.e., no felony or significant misdemeanor convictions and fewer than three misdemeanor convictions).

Republicans during the Obama presidency have tried to defund DACA because they believe it is executive

this is difficult to do since the application fees form the bulk of DACA funds. Now, with President Trump's inauguration and Republicans controlling both branches of Congress, the DACA program faces a significant risk of being repealed. Many on the program, known as DREAMers, named after a different immigration program that grants conditional and permanent residency to undocumented immigrants on certain conditions, are worried that under President Trump, they will be deported from the only home many of them

In the months since the election, the presidents of over 550 colleges and universities across the U.S. have collectively signed an open

have ever known.

including Carnegie Mellon President Subra Suresh.

"Since the advent of the Deferred Action for Childhood Arrivals (DACA) program in 2012, we have seen the critical benefits of this program for our students, and the highly positive impacts on our institutions and communities", the letter declares. It further argues that many DREAMers have actively and positively contributed to both campus communities and wider society, and that they are the "best of America." "This is both a moral imperative and a national necessity," the letter states.

While we do not yet know how President Trump and the Republican-controlled Congress will change DACA or whether the program would

overreach, but in practice letter in support of DACA, be ended, or what will happen to the DREAMers if the program ends, Carnegie Mellon's press release states that "[as] an international community of scholars, [Carnegie Mellon] will continue to do all it can to support students, faculty, and staff, including those who are most vulnerable, consistent with local and federal laws." Meanwhile, Carnegie Mellon's Division of Student Affairs and Office of General Counsel have conducted meetings with various student groups to hear their questions and concerns about this issue and to take these voices into account while creating university policy.

More details will be published as the current administration unfolds and related university policy is developed.

# APP officials propose alternative add/drop academic policies



Representatives from APP discussed newly proposed dates for students to add/drop courses which could help deal with stress.

POLICY, from A1

to withdraw. This policy not only creates vacancies in the classroom, but also prevents interested students from taking certain courses. Moreover, the late drop and withdraw deadlines perpetuate students' suffering in these courses, creating more stress and negatively influencing their performance in other courses.

In order to reduce stress and ensure an even distribution of opportunities, the APP Work Group proposed two new plans based on studying peer institutions such as Cornell University and University of Pennsylvania. Both plans involve moving the withdraw deadline from the end of the semester to 10 to 11 weeks into the semester which will allow students to concentrate on improving on other courses.

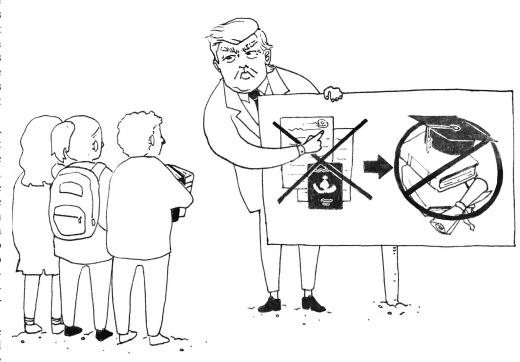
The Concurrent Model allows students up to two weeks to add or drop a course. By expediting the process of dropping courses, more opportunities can be made available to wait-listed students. However, some students argued that two weeks of time is not sufficient for students to make an informed decision about a course. This will result in more students resorting to withdrawing which will negatively impact their transcripts. The Separate Model moves the drop deadline to the fifth week. It allows more time for students to consider dropping a course, but still creates vacancy in the classrooms.

Both models benefit students in courses that require more teamwork. This is because many projects suffer from the loss of group members towards the end of the semesters, and the remaining members become more stressed due to the leftover work of the missing members. Carnegie Mellon will work on changing the stigma of receiving a "W" on the transcript communicating with employers.

However, many students

argue that the current policy is the least stressful. Since students often don't receive indicative feedback on their grades in the first few weeks, having a drop deadline earlier than mid semester would only conduct more stress later on when they could no longer drop the course without facing consequences. Some argued that if professors are not limited by policies and have the freedom to add enthusiastic students to their courses, opportunities can be evenly distributed. During the feedback section of the forum, some students suggested that Carnegie Mellon should apply its conversion to pass/fail model at a larger scale which passed the course to satisfy the requirement but receive no credit.

Another forum dealing with the same issue was held for faculty members on Jan. 25. The policies in the proposal are not final, and APP will continue to debate between these options.



Paola Mathus/Staff Artist

# **Reviewing Professor Fienberg's legacy**

FIENBERG, from A1

the American Opportunity Study, whose goal is to examine data from the U.S. census to investigate individuals' and families' trends. Additionally, Fienberg, being an expert in forensics, served on the National Commission of Forensic Science as the only statistician.

had many Fienberg accomplishments and was recognized many times throughout his career. He oversaw 43 Ph.D. students and held numerous honors: the 1982 Committee of Presidents of Statistical Society President's Award for Outstanding Statistician

Under the Age of 40, the 2002 ASA Samuel S. Wilks Award for his distinguished career in statistics, the first Statistical Society of Canada's Lise Manchester Award in 2008 to recognize excellence in stateof-the-art statistical work on problems of public interest, the 2015 National Institute of Statistical Sciences Jerome Sacks Award for Cross-Disciplinary Research, the 2015 R.A. Fisher Lecture Award from the Committee of Presidents of Statistical Societies, and the ISBA 2016 Zellner Medal.

Fienberg also held many fellowships, including fellow positions at the American Academy of Arts and Sciences, the American Academy of Political and Social Science, Royal Society of Canada, American Statistical Association (ASA), Institute of Mathematical Statistics and the International Society for Bayesian Analysis (ISBA).

Throughout his Fienberg extremely prolific, publishing over 500 technical papers, editorials, brief papers, and discussions. He also co-authored seven books including 1999's Who Counts? The Politics of Census-Taking in Contemporary America, which he referred to as "one of his proudest achievements."

"Steve was a clear role model for how statisticians can make a difference," Christopher R. Genovese, Head of the Statistics Department said in a university press release. "He had an abiding passion for statistics and its role as a force for good in the world. He was intensely dedicated to his work and focused on doing things the right way. Steve was also incredibly invested in guiding and supporting students, from those in his freshman seminars to the doctoral students he advised. [Carnegie Mellon] Statistics would not be what it is today without him."

This year's recipient of the Dickson Prize in Science is Chad A. Mirkin, director of the International Institute for Nanotechnology and the George B. Rathmann Prof. of Chemistry at Northwestern University.

The prize, which is awarded annually to individuals in the U.S. who make outstanding contributions in the

scientific and medical fields, was founded through a trust fund created by Dr. Joseph Z. Dickson, a Pittsburgh physician, and his wife, Agnes Fisher Dickson.

Mirkin has been a faculty member at Northwestern since 1991. A chemist and world-renowned nanoscience expert, he is known for the discovery and development of spherical nucleic acids (SNAs), the invention of Dip-Pen Nanolithography (DPN), and contributions to supramolecular chemistry and nanoparticle synthesis.

Mirkin earned a bachelor of science degree at Dickinson College and a Ph.D. in chemistry at Pennsylvania State University. He was an NSF Postdoctoral Fellow at MIT prior to becoming a professor at Northwestern University.

He has received more than 100 national and international awards, including the 2016 Dan David Prize and the inaugural Sackler Prize in Convergence Research. He served as a member of the President's Council of Advisors on Science & Technology during the Obama administration, and he is one of very few scientists to be elected to all three U.S. National Academies. He is also a fellow of the American Academy of Arts and Sciences and the National Academy of Inventors, among others.

Mirkin has authored more than 670 manuscripts and more than 1,000 patent applications worldwide, and he has founded multiple companies, including Nanosphere, AuraSense and Exicure, which are commercializing nanotechnology applications in the life sciences and biomedicine.

# The Dickson Prize in Science

## **Professor Chad A. Mirkin**

George B. Rathmann Professor of Chemistry and Director of the International Institute for Nanotechnology, Northwestern University

# Award Ceremony and Lecture

# **Nanotechnology: Small Things Matter**

**Thursday, February 2** 4:30 p.m.

Rangos 1 and 2, second floor, Cohon University Center

A reception will immediately follow the lecture in Rangos 3.

These events are free and open to the public.

Carnegie Mellon University cmu.edu/dickson-prize

# **Forum**

FROM THE EDITORIAL BOARD

### Betsy DeVos' lack of experience puts schools at risk

Of all of Donald Trump's controversial Cabinet picks, Betsy DeVos, his choice for Secretary of Education, has received a considerable and much warranted — amount of criticism. DeVos is not an educator, nor does she have experience managing money or even applying for student loans — what she has done is substantial lobbying, mostly on behalf of charter schools. Apart from that targeted interaction with education, she has virtually no qualifications and gives us no reason to expect she will be able to manage the position competently.

Among the few who have reacted positively to DeVos are pro-school-choice groups, simply because of her stance on charter schools — they look forward to having plenty of options when the time comes to choose a school for their children. If her efforts anywhere near resemble what she has already done in Michigan, however, they will sacrifice quality in exchange.

Thanks to DeVos' efforts, charter schools abound in Detroit — but their test scores continue to rank among the lowest in the state even as their superintendents make as much as \$130,000 a year and operators are allowed to expand overseas. According to The New York Times, it is not unheard of for only 10 percent of high school seniors from these schools to score "college ready" on reading tests.

Another downside to DeVos' championed system is the fact that, when less-than-satisfactory charter schools increase in number and students enrolled, public schools get less funding by the very nature of the relationship between the two. Public schools pay to send children in their districts to charter schools, while still providing transportation themselves. Some charter schools don't provide free or reduced lunches to children in need. And charter schools, unlike public schools, can refuse students they don't feel should be a part of their student body.

"The president's decision to ask Betsy DeVos to run the Department of Education should offend every single American man, woman, and child who has benefitted from the public education system in this country," Senate Minority Leader Chuck Schumer (D-NY) said in a statement. "Public education has lifted millions out of poverty, has put millions in good paying jobs, and has been the launching pad for people who went on to cure disease and to create inventions that have changed our society for the better."

Schumer plans to vote against De-Vos at the confirmation hearing.

Another glimpse of DeVos' inexperience came during her Senate hearing, when she was unable to distinguish between "proficiency" and "growth." While some schools, which measure proficiency, evaluate their students based on a single benchmark that everyone is expected to reach, others measure growth, or how much children improve their own individual performance. This is an important distinction for the Secretary of Education to understand and develop a position on, as the debate determines which schools could be closed for poor performance.

Of course, DeVos also suggested that guns might be needed in schools to fend off grizzly bears, so perhaps this lack of understanding is simply the tip of the iceberg.

Especially concerning for us at Carnegie Mellon is the fact that, if confirmed, DeVos would be in charge of running a \$1 trillion student loan bank, despite having no experience managing anywhere near that amount of money. She has no concrete plans to ensure tax money does not contribute to fraud and abuse, beyond delegating it to others in her department. She further refused to commit to enforcing the rules already in place to oversee colleges receiving federal funds without further review.

In addition, she's never even had to apply for financial aid for herself or her children, so we can't expect her to have any understanding of or empathy for the process.

DeVos has also said some worrying statements regarding sexual assault on campus. She refused to commit to upholding the 2011 Title IX. an anti-discrimination law which prohibits sexual assault as a form of sexual harassment on campus. This has left many concerned over the attitude the Department of Education would take regarding sexual assault under DeVos.

Furthermore, though DeVos has since attempted to change her stance, she did waver on whether she would enforce the Individuals with Disabilities Act during the hearing. At one point, she said she felt it should be up to the states

to decide — despite being a federal law to ensure that all students' rights are protected, and that parents have a say in their disabled children's edu-

DeVos was also questioned over donations her family has made to the Republican Party amounting to around \$200 million, and Senator Bernie Sanders (I-VT) asked her if she was chosen purely for this reason. And though she has resigned from a dozen foundations, including All Children Matter and Great Lakes Education Foundation, and plans to divest from 102 companies within 90 days of being confirmed, she would remain a co-trustee of three family trusts that could keep her tied to educational organizations like forprofit colleges.

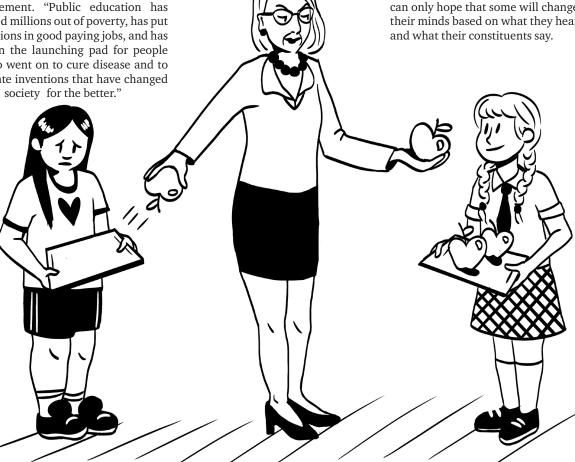
The way DeVos' hearing was run was equally as concerning as her conception of the realities of schooling in America. During the hearing, each senator had only five minutes to question DeVos, and they were not permitted a second round of questioning, despite precedents in which they had been granted more time.

Senator Lemar Alexander (R-TN) did say that Senators could question DeVos in their offices at another time, but the public could not watch these meetings the way they were able to see the hearing.

Furthermore, DeVos' completed ethics review was not made available until after the hearing, making it impossible for senators to address content they found within the document publicly.

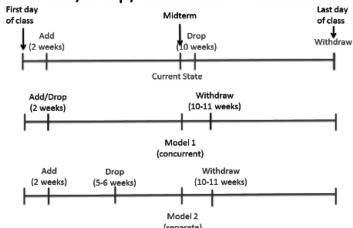
In an even more worrying move, the White House has yet to reconnect the phone lines following Trump's inauguration, so callers concerned about DeVos are not being heard. A voice mail recommends that callers instead turn to Facebook or email to voice their opinion, but studies have shown that calling is far more effective. While people can still call senators' and representatives' offices directly, there's something about being cut off from the White House itself that somehow suggests a lack of a voice in the matter.

In the end, though a second hearing has not been granted, the vote on DeVos' hearing was postponed until Jan. 31 to give lawmakers time to question her financial disclosures and positions individually. For the sake of students everywhere, we can only hope that some will change their minds based on what they hear



# New add/drop policy limits student choice

### Add/Drop/Withdraw Deadlines



Courtesy of CMU Student Experiences Task Force

### **ZACHARY GOLDSTEIN** Staffwriter

The Academic Policies and Practices (APP) Working Group of the Task Force on the CMU Experience recently proposed new policies regarding overloading on units and course dropping/withdrawal deadlines. The policies, despite being well-intentioned efforts to improve student wellness, would have harmful effects on the student body.

One aspect of the proposal concerns overloading, the practice of taking more units worth of courses than is standard in a semester. Currently, first-year students are not permitted to overload in the fall semester. This is a sensible policy aimed at ensuring that students adjust to Carnegie Mellon life and get a sense of how much work they can handle before overloading.

The Working Group's proposal would extend this restriction to the spring semester, which would unnecessarily limit students' flexibility. Many first-year students find it beneficial to overload in the spring semester, and the rationale preventing them from overloading in the fall does not apply to a complete ban on overloading during a student's second semester at Carnegie Mellon. If this policy is enacted anyway, it would be a generous consolation for the administration to consider allowing students to use AP or IB credit to place out of Interpretation and Argument, the first-year writing course required across the university. At least then, many first-year students who previously would have overloaded in order to take an extra course would still be able to take that course by doing so in place of Interpretation and Argument.

The most troubling aspect of the proposal consists of moving the deadlines for dropping and withdrawing from a course several weeks earlier. The proposal suggests two models of changing deadlines which both aim to get students to leave courses earlier in the semester rather than later, but it is possible that the policy would achieve the opposite of its intended goal. A student might remain in the course for an entire semester rather than leaving after the first midterm either out of concern for getting a "W" for withdrawal on the student's transcript, or because the withdrawal deadline, currently at the very end of the semester, might have passed and the student would have no choice but to remain in the class.

The proposed policy limits students' flexibility and paternalistically suggests that students cannot make good decisions about when to leave a course. Ironically, the policy would make it even harder for students to make informed decisions

about dropping a course, because they would not be able to spend as much time in the course and will not be able to receive individualized feedback (such as exam results) before the drop deadline.

The proposal suggests that registering for one too many classes and dropping your least-favorite class during the semester should be discouraged. However, this is actually an effective way to maximize the quality of one's classes, which in turn rewards professors with happier, more engaged students. Therefore, the administration should be trying to promote policies that empower students to make informed decisions about how they spend their time.

The idea that limiting choices can be beneficial does have some basis in social science, but a kinder and more freedom-preserving approach would be to "nudge" students toward choices that promote wellness rather than forcing restrictive policies on them. One of the proposed changes, making students jump through hoops before overloading by getting approval from their associate dean, follows this idea. The majority of the proposals, however,

There's another aspect of the proposal that utilizes manipulative behavioral science to attempt to gain support for this policy. By offering two models, one moderately more restrictive than the status quo and the other far more restrictive than the status quo, the Working Group has (either intentionally or accidentally) framed the moderately restrictive proposal as a sensible compromise choice, when in fact both policies would significantly reduce students' flexibility.

Similarly, in a proposal that takes advantage of the well-documented social science principle that people are influenced by peer pressure, the white paper states that several of our peer institutions have more restrictive policies than Carnegie Mellon. But why should we at Carnegie Mellon adopt inferior policies just because other schools do? Instead, Carnegie Mellon should continue to be a leader when it comes to respecting students' decision-making abilities.

The current state of affairs does not force any student to overload or to stay in a course they do not like for many weeks. Current policies simply allow students to challenge themselves by overloading or by taking a more difficult class with the knowledge that it is possible to drop it without consequences within a period of ten weeks. Carnegie Mellon ought to trust students to know what is best for themselves rather than impose paternalistic policies that restrict their choices.

### **Editorial Board**

JADE CROCKEM\* Publisher

**INDIA PRICE\*** Editor-in-Chief

**SARAH BENDER** 

Forum Editor

### **Editorial Staff**

Pillbox Editor APEKSHA ATAL JULIE SANSCARTIER

SINEAD FOLEY

IAN TANAYA Sports Editor MARIKA YANG

**RUTH SCHERR** Comics Editor Copy Manage. THEODORE TEICHMAN Visual Editor AISHA HAN\* Assistant Sports Editor Visual Editor **COREY EMERY** SIMIN LI Advertising Manager Art Editor

**YIYUAN CHEN\*** Operations Manager VALENE MEZMIN News Editor

SOPHIA CHENG

Business Manager

**GEAR JIANTHANAKANON** 

ZICHEN LIU

Photo Editor

PAULINE TING

Layout Manager

**JOSH ANDAH** SciTech Editor SYDNEY ROSLIN Staffwriter

SARAH GUTEKUNST Contributing Editor ZEKE ROSENBERG ABHISHEK TAYAL\*

member

### **Staff**

COPY

Amelia Britton, Yiyuan Chen, Jace Crockem, Christine Kim, Stephanie Kuang, Charles Li, Robert Widmann, Marika Yang

**ADVERTISING** 

Corey Emery

BUSINESS Sophia Cheng, Lindsey Shi

Anna Boyle/Staff Artist

# THE TARTA



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  ${\bf Editorials}$  appearing at the beginning of the opinion section are the official opinion of  ${\bf The}$ 

Tartan Editorial Board, Columns, Editorial Cartoons, and Reviews are the opinions of their

 $\textbf{Letters to the Editor} \ \ \text{Letters must be submitted by 5 p.m.} \ \ \text{on the Wednesday before publication}$ 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 discretoin upon

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

request, The Tartan reserves the right to rejct any letter.

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



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

# Asian-American band The Slants is empowering, not hateful

Chie Wach

Rock music is rebellion. It is a revolt against power, authority, and social norms. For most bands, their battle takes place on the stage, but for the all Asian-American rock group The Slants, their dissonant defiance takes place in the Supreme Court.

These social justice musicians, in a mix of artistic defiance and dry humor, branded themselves with the most hackneyed stereotype in Asian-American culture: slanted eyes. When Simon Tam, a bass guitarist, founded the group in 2006, he was tired of being the "token Asian" in every band. Tam told the Washington Post that when he was putting together the first Asian-American band, he asked his friends what they think all Asians have in common.

"The first thing they said: All Asians have slanted eyes," Tam said. "I thought, 'That's interesting.' Number one, because it's not even true. But then I thought, I could call it The Slants. It would be this play on words — because we could talk about our slant on life, what it's like to be people of color, to be Asian American."

However, when Tam applied for a

patent, which is a necessity for every band, the U.S. Patent and Trademark Office rejected their application on the grounds that the term "slants" is disparaging to Asian-Americans. True to the defiant creed of rock, they fought back, and now, after a seven-year legal battle, The Slants are finally appearing before the Supreme Court

This audacious practice — to take a slur against oneself and make it one's own — has been in practice long before The Slants made their own ironic, incendiary transformation. It is the center of much intense debate among many artists and racial groups, and many who oppose The Slants do so because they're afraid that it could lead to the sanction of other, much more hateful speech, such as the n-word. Others, however, support the band's desire to take ownership of the "language of oppression" and use it "until the words can't hurt us again," as they declare in their new EP, The Band Who Must Not Be Named.

However, the Supreme Court judges constitutionality, not by clever invectives or Harry Potter references, and so they are evaluating this case for what it fundamentally is: a freedom of speech issue. What many don't realize is that the First Amendment protects even "hate speech,"

which means that whether the word "slants" is considered offensive or not, it is private, protected speech. This is the full power of words in America — the government cannot restrict speech based on their own agenda or others' opinions. The Slants have the constitutional right to use their name to comment on race or politics or society, as musicians have been doing since the birth of rock'n'roll. Yet, after the U.S. Patent and Trademark Office rejected their application, it accepted that of another group with the same name. This alternate group didn't have any Asian members, and so their name wasn't considered offensive to Asian-Americans. The irony is astounding.

From rappers to foot-ball coaches, all inflam-matory speakers await the court's momentous decision, which may expand or contract the limits of free speech in many controversial cases, such as that of the Redskins football team and their painfully banal Native American parody. The Slants are less than thrilled to be associated with other,

more offensive groups, as Tam asserts: "Our case is not the floodgate for hate speech in this country."

While it won't be a "floodgate," this ruling will undoubtedly clarify the true freedom of 'free speech,' and

solidify the constitutional rights of all Americans, Asian or otherwise. The Supreme Court has entertained many eccentric guests in its courtroom, but this Asian-American dance-rock band will be a groundbreaking addition. And, hopefully,



Qingyi Dong/Staff Artis

# Women's March defends equal rights

**ARUSHI MISHRA**Junior Staffwriter

Jan. 21, 2017 is marked in the calendar as the day when the "power" and the "pink rebel" challenged each other. While the power refers to Donald Trump's Inauguration ceremony as the 45th President of USA, the 'pink rebel' points to the Women's March that was the largest one-day protest in US history.

I call the Women's March the "pink rebel" because of the symbolic pink hats that the majority of the people wore that day. The pink hats are aptly called "p\*\*\*\* hats" and were manufactured under the Pussyhat project to denote solidarity and unity among the protesters.

Reports suggest that at least 3.3 million people across the United States took part in the protest. When it comes to Washington, D.C., the source city for the event, the crowd count soared to more than half a million — almost three times greater than the President's Inaugural ceremony! Well, you just need basic math here to measure the success of the events. If there is one thing that I have observed in these days, it is this: The citizens of the country are at unrest. Women, workers, immigrants, LGBTQ, and environmentalists — everyone who makes our society diverse and unified at the same time — now feel insecure about their rights.

Many people did lose faith after the United States' election results, and the Women's March was their beacon of hope. The pink rebel brought together people from across the world to unite for a cause — to

stand and fight for your rights! And by "your" I don't just mean women, but anyone who felt deprived and forbidden of what is theirs. So that day when millions of women protested, a little fire ignited in me, too. I thought, "How often do we see a march led by a community that stands not just for itself but for all? That is so rare!" I could see the immense strength that the pink rebel bore to stand against the current government and to voice its opinion. But as I started building my castles of bright future, I came across various articles and news that showed women of color were annoyed at the

They alleged white women to be fighting for their own cause and also reminding the masses that white women voted for Trump! According to Vox, 53 percent of white women voted for Trump and according to CNN only 7 percent of black women and 25 percent of Latino women voted for him.

And I was back to square one again. My little flame of hope started to flicker and I sighed in despair. I could easily see a tension emerging. I pondered, "How does the skin color or a person's vote preference defy the fact that we are a community first and an individual later?"

If almost half of the women voted for the President, there is a considerable half that did not. Why blame the community for what half of the white women did? Are we not grown-ups and mature enough to live with the reality of the inauguration? After all, we cannot play the blame game for

er! A woman from North Carolina shared her experience as a protester who carried a sign, White Women Elected Trump. In her article, she quotes the comments of passersby as she walked in the protest. According to the writer, she received high-fives and 'thank you's from black women and Latinos and frowns from younger white women. Many of the older white women made angry rejections claiming that they didn't vote for Trump, they voted for Hillary Clinton. The writer said that the whole idea of the sign was to make people uncomfortable as it also made her uncomfortable. Moreover, she says that it's time that white women own what the statistics tell and continue their fight for different causes. In her opinion, the mere idea of acceptance sends a strong message to different women communities — a message that white women stand united with black, brown, trans or queer women.

Every successful event has some shortcomings but the Women's March proved to be powerful even after plenty of criticisms. When millions of rebels join together in a peaceful protest, it does not remain a protest anymore. It becomes a revolution — a change! The rest we can hope is for the government to look after us and our rights. And just so the government does not forget the pink rebels, there is another peaceful protest rising called The First 100 Days of Resistance. Its goal is to show resistance against the government's destructive agenda in the next 100

The government must be for the people, of the people and by the people. Let us just hope that nobody forgets that!

# 'Gag rule' risks women's healthcare, free speech

Que M. Jalun Cassie Scanlon

The day after President Trump took office, women in Washington, D.C. and across the globe marched for women's rights. President Trump walked in on his first official weekday as President, took in the Oval Office, sat down in his comfy leather chair, and picked up his pen. He surrounded himself with seven other men, and with cameras flashing and reporters shouting questions, he used his pen as a weapon to strike women where it hurts the most health care. He loudly reinstated the Mexico City Policy, or the "global gag rule," which is detrimental to women's health care in developing countries and violates the First Amendment right to the freedom of speech.

The global gag rule prohibits organizations from providing abortion-related information to patients, providing testimony or advocating for the legalization of abortion in countries where it is illegal, providing referrals to other organizations who can perform legal abortions, and providing legal abortions.

The organizations affected by this policy are those who provide family planning services, from contraceptives to maternal checkups and, in countries where it is legal, abortions. These organizations, under the Helm's Amendment of 1973 are already prohibited from using federal aid to fund abortions.

The global gag rule affects only international non-governmental organizations. It was first introduced in an executive order by President Reagan, undone by President Clinton, reinstated by President W. Bush, repealed by President Obama, and now reinstated by President Trump

The installation of the global gag rule will have disastrous impacts on the health of women in developing countries. Most organizations choose not to obey the global gag rule — and lose federal funding — as they see the effects of not being able to provide and discuss abortions far worse than the negative consequences that follow losing federal funding.

Not allowing these organizations to discuss abortions does not provide the proper health care women deserve. At a time when a woman dies from preventable causes related to pregnancy and childbirth every two minutes with 99 percent of these deaths occurring in developing countries, according to statistics from the World Health Organization, access to proper prenatal care

has never been more important.

Research from NARAL ProChoice America has demonstrated
that the global gag rule forces
organizations who reject the policy
to close clinics and raise fees at the
clinics that remain open. These
organizations also have far fewer
contraceptives at their disposal, increasing the number of unwanted

pregnancies. Further research from Population Action International has shown that under the global gag rule, more women lose health care, bear unwanted pregnancies, die, or become disabled due to unsafe abortions. Adolescents are "especially vulnerable to sexual abuse and their pregnancies often result from forced sex, rape or incest" as stated in the Women and Health Learning Package: Unsafe Abortions and Unwanted Pregnancy.

The mass majority of Americans, about 81 percent, believe abortions should be legal in a few cases, typically in rape, incest, or health of the mother. They should be appalled that their government does not even allow for discussion with clients about abortion in foreign countries where it is legal, or advocacy for the legalization of abortion in countries where it is illegal.

The global gag rule goes farther than just closing clinics and raising costs: It actually violates the First Amendment. The First Amendment states "Congress shall make no law... abridging the freedom of speech," and while executive orders are issued by the President, they are regarding how to enforce laws passed by Congress, therefore binding them to the First Amendment. Not allowing members of these organizations to even advocate for legal abortions abroad is clearly a violation of the First Amendment. According to case precedent in the United States, the global gag rule would be found unconstitutional in court if it applied to organizations that operated within the United States. Censoring information and not allowing members of non-governmental organizations that help with international family planning to advocate for legal abortion in other countries also contradicts American policies that support women's rights and empowerment abroad.

Sean Spicer, the current Press Secretary of the United States, stated in a press conference last Monday, "I think the reinstatement of this [Mexico City] policy...ensures that we're standing up not just for the life of the unborn, but for also taxpayer funds that are being spent overseas to perform an action that is contrary to the president." But, as previously stated, the money already wasn't going to fund abortions. The Constitution clearly states that the role of the presidency is to execute the laws and Supreme Court decisions, even if these are "contrary to the president" and his political agenda.

Women's health care should be more than a political tennis match. The global gag rule should not be volleyed between presidents in a reinstated and revoked game. Trump's reinstating of the global gag rule highlights that women's health care will not remain a priority or even a concern the next four years. The Women's March on Washington could not have planned for more perfect timing, and the time for women's health advocates is now.

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





Aisha Han/Visual Editor

A6 « thetartan.org The Tartan » January 30, 2017

# DIETRICH COLLEGE

### Dean's List Fall 2016

**Carnegie Mellon University** 

**Dietrich College** Humanities and Social Sciences

On behalf of the faculty and staff of the Marianna Brown Dietrich College of Humanities and Social Sciences, we congratulate the DC, SHS, and BHA undergraduates listed below for earning a place on the Fall 2016 Dietrich College Dean's List.

— Dietrich College Dean's Office

**HIGH HONORS** Elliot Allard Tessa Allen lan Asenjo Meghna Baskar Martin Lorenzo Bautista Robert Beardsley Anna Beck Sarah Bender David Bick Lilia Bidzyan Isabel Bleimeister Cheryl Bond Jennifer Bornemann Anna Boyle Katherine Boyle **Timothy Brooks** Andrew Bryan Lilah Buchanan Natalya Buchwald Yusuf Bulut Buyru Anjie Cao Lisa Carter Gabriela Catala Ji Eun Cha Mantek Singh Chadha Elena Chan Chih Yuan Willi Chang Monica Chang Ann Chen Chen Chen Luyun Chen Sandy Chen Wanhe Chen Xiangting Chen Yiyun Chen Ziyun Cheng Kyle Chin Lilian Chin Hyo Jung Choi Sydney Choi Yeawon Choi Shiqi Chou Rose Ciriello Jordan Cox Aiqi Cui **Tanguy Dauphin Margaret Davis** Kyanna Dawson Adrian Del Bosque Mark Dempsey Michelle Deng Mary Catherine Devine Melanie Diaz Wanling Ding Cameron Dively Hyunji Do Makenzie Donaldson Sihan Dong Eliza Donohue Madeline Duque Patrick Dykiert **Emmett Eldred** Corey Emery Rebecca Enright Leah Ettensohn Zachary Ettensohn Joie Feng **Andrew Ferber Erin Fingleton** Connor Fitzgibbon Sun Fong Owen Fox Cathy Galdamez Rushik Gandhi **Thomas Garncarz** 

Danielle Geimer

Alexandra George

Justin Ghogomu

Evan Glauberman

Jeremy Goldstein

Rachel Gomez

Heather Graci

Shlok Goyal

Daniel Graf

**Hudson Graf** 

Kevin Guan

Grace Guo

Melody Han

Yizheng Han

Brandon Hao

Julie Heming

Benjamin Hecht

**Tess Harty** 

Sebastian Guerrero

Colleen Hamilton

**Robert Gist** 

Julia Gnip

Shivani Goel

Olivia Gladwin

**Augustus Henry** Seth Henry Catherine Ho Jarrek Holmes Rebecca Hong Anwen Huang Kimberly Huang Jian Chao Huo Dylan Hyun Karen Irvine Simran Jagtiani **Amber James** Youce Ji Tianbo Jiang Siting Jin Wenzong Jin Young Min Jin Yudi Jin Elias Joseph Kevin Kallukaran Lauren Kelly Pavel Khokhlov Dana Kim Do Sung Kim Hakyung Kim Hyemin Kim Hyun Hee Kim Jasmine Kim Jun Hee Kim Malkeunhae Kim Samuel Kim Yong Hwan Kim Alexandra Kirshon Benjamin Klingensmith Jack Kroger Justin Kufro Nahyun Kwon Rae Lasko Daniel Lee Daya Lee Eric Lee Grace Lee Kennix Lee Konrad Jun Ren Lee Sangyup Francis Lee Kevin Li Simin Li Vivian Li **Angela Liang** Felix Liu Guannan Liu Matthew Liu Ruoshu Liu Xingyu Liu Xinwen Liu Yu Liu Yuling Liu Emma Lloyd Tristan Lockwood Fei Lu Shannon Lu Yifei Luo **Boxiang Lyu** You Bin Maeng Ryan Maha Zeyneb Majid Siddhardha Malladi Lily Marty Dorsa Massihpour **Lindsey Matesic** Isabel McCarthy Rachel McKinney Yusuf Mehkri Margaret Mertz Valene Mezmin Antonia Miller Cristina Molina Lauren Montgomery Yuka Moroishi Sarah Moss-Horwitz Abbey Mui Louisa Murphy Manvendu Navjeevan Clarence Ngoh Miranda Nguyen Emma Nicklas-Morris Chiamaka Nnebe Noshin Nova Anna Novak Conlon Novak Juliana Odiase Olivia Olshevski Paige O'Riordan James Ormond Satoru Ozaki Gates Palissery Stephanie Pang Jae Pyung Park Alexandra Pasch Kun Peng Pooja Penninti

Benjamin Pierce Bharath Prabhu Junyan Pu Shreya Punya Joshua Ragen Syed Rahman Kunal Rajesh Javed Ramjohn Shijie Rao Aisha Rashid Thomas Rasmussen Victoria Reiter **Robert Reynolds** Jae Ho Rhee Gabrielle Rickstrew Charles Rock Jules Ross Rahmon Ross Jacob Rothschild Matthew Salim Abigail Salmon Mrinalini Samanta Julia Scherb **David Selverian** Naveen Shankar **Abdusamed Sherif** Xintong Shi Naomi Shimada Sarah Shy Ryan Sickles Cori Sidell Jamie Slomka Alexa Smith Samantha Smith **Crystal Song Barbara Soques Arielle Spikes Robert Stephens** George Stoica **Emily Su** Eric Su **Angelina Tang** Victor Tavarez Aathreya Thuppul Imogen Todd **Charlotte Townsend Amy Tsai** Alexandra Ulven India Unger-Harquail Jameson Verser John Verser Mikahla Vicino **Emily Vokach-Brodsky Thomas Von Davier** Anna Vonderhaa Kristina Wagner Suren Wanasundera Elizabeth Wang Sarah Wang **Thomas Wang** Vivian Wang Yanru Wang Marianthie Wank Sophia Weisman Kenneth Wells Lauren Wholey Kathryn Williams Nathan Williams Amanda Wilmer **Brady Wilson** Glen Wise **Andrew Wissinger** Gordon Wissinger Jeneni Withers Noa Wolff-Fineout Minnie Wu Yu Wu Jie Xie Yuxi Xie Chong Xu

Jason Xu

Zhuyi Xu

Qiyang Xu

Valerie Yam

Lauren Yan

Kai-Yin Yang

Marika Yang

Qiutong Ye

Victoria Ye

Ah Jin Youn

Christina Yuan

Boyan Zhang

David Zhang

Reed Zhang

Sally Zhao

Kabir Peshawaria

Shaan Phagura

Alice Zheng

Winston Zhou

Yishan Zhou

Zhuoya Zhang

Christian Zeitler

**Chenting Zhang** 

Wilson Yu

Yue Yin

Shichen Yang

Leonor Zubillaga **HONORS** \* Ali Abbas \* Yasmin Abdelaal \* Ahmed Abdultawab \* Haya Abuhamra Adin Adler Andrew Afable \* Rahil Ahmed Smriti Ahuja \* Zainab Akhtar Alec Albright **Mohammed Yaser** Al Khuzaei \* Eman Al-Ansari \* Noor Al-Ansari \* Sara Al-Baloshi Shaikha Al-Darwish \* Mohammed Al-Dosari \* Abdulaziz Al-Haddad \* Roda Al-Hor \* Alanood Al-Muftah \* Amna Al-Sharif \* Fatima Al-Sooj \* Osama Ali **Graham Arthur** Allison Auyeung \* Layan Azem \* Muhammad Bashir **Jacob Bentley** Yuan Bing Nikita Bokil Samuel Bolig Sarah Boyle Ian Campbell **Travis Chambers** Annabelle Chang **Justin Chang** Yoobin Chee Annette Chen Lawrence Chen Sarita Chen Yikun Chi **Edward Yonghee Cho** Kiersten Chuc Blaine Cole Patricio Contreras Calderon Zachary Cree Aditya Dave Zade Delgros Alexander Deluca **Erin Dieringer** Yaramo Dione \* Walter Diong Allison Drazba Alex Du Zeyan Du Mingjun Duan \* Noor El-Sakka **Gordon Estes Anny Fan** \* Sirat Farhin **Emma Flickinger Tony Francis David Frank** David Friedman Kira Fujibayashi David Gao Ningjun Gao Mikhail Gershenzon Amelia Gilson Jun Yong Go Razghiem Golden Zachary Goldstein Sarah Goodman Akshay Goradia Rebecca Greubel Simrin Guglani

Malcolm Guya

Malaika Handa

Max Harlynking

\* Batoul Hasnah

\* Hanan Hassan

Alison Hoffman

Kristen Hofmann

Jacqueline Hon

Jeanine Huang

Tsz Chung Hung

Madeleine Hyde

David Inyangson

Ryan Hoffman

William Holt

Renhao Hu

Xiaorui Hu

Sam Huang

Tori latarola

Peijie He

Vivian He

Apoorva Havanur

Jessica Jackson \* Ali Jafar Srishti Jain James Jameson Hye Yeun Jeon Long Jiang Jared Jory-Geiger Megha Joshi Damin Jung Andrea Kang Ben Kaplan Rebecca Kern \* Maher Khan \* Yasir Khan Saachi Khurana Anne-Sophie Kim Dongyoon Kim Gihyun Kim Ji Hyun Kim \* Jinsol Kim Young Jun Kim Sarah Klotz Eun Kyung Kwon **Brandon Lee** Celine Lee Jeremy Lee Yeuk Yu Lee Amy Li Eric Li Shaowu Li Sammie Liang Victoria Liang Jessica Lin **Quincy Liu** Xiao Liu Xingnan Liu Zhuoran Liu Adila Loh Alan Lu Yingjing Lu Anne Lueh **Grace Lynch** Ken MacMann Yash Maheshwari

Shouvik Mani Andrew Manka Noora Mansour Mehak Manwani Yanning Mao Ariana Mapua **Daniel Marchetto Peter Masters** Hannah McDonald Colin McNeil Caleb Miller Joshua Moavenzadeh Antara Mondal Ally Moon \* Hassan Nadeem Rohan Nagalkar Mohak Nahta \* Hasan Naveed Valeriia Neviadomska **Briley Newell** Erin Nielsen Dee Dee Paik Vidya Palepu Carina Paliocha Jacqueline Pan Sang Hyun Park Psankalp Patro Abigale Pfingsten **Donovan Powers** Xinzhe Qi Ian Quah Lynnette Ramsay Vinitha Ranganeni Ariel Rao Margaret Reager Maria Rodriguez Jordan Romah Avi Romanoff Renee Sajedian

Sophia Makal

\* Farjana Salahuddin **Guthrie Scrimgeour** Karen Segal Fariya Shabbir Fang Shao Yuyuan Shao Andrea Sherwood \* Shashank Shetty Emma Shi Jia Shi Yanan Shi Caroline Shouraboura \* Hanan Shuaib Sina Siddiqi

Paloma Sierra

Surya Singla

Margaret Slevin

Ha Kyung Song

\* Ibrahim Soltan

Ken Situ

Rebeka Almasi Jackson Bahr Shaojie Bai Kaoon Ban Orchi Banerjee **Eric Barrett Taylor Bell** 

Rho Eun Song John Sprong Ritika Srivastava **Kade Stewart** \* Ameera Tag Aileen Tan Oliver Tan Tami Tedesco Sahana Thirumazhusai Alex Tsai Isabelle Tseng Mark Vella Kunal Wadwani Alex Wang **Xueying Wang Madison Watson** Katterin White Anne Widom Cooper Williams Benjamin Winebrake Mikaela Wolf-Sorokin Christabelle Wong **Thomas Wrabetz** Christine Wu **Stephen Yamalis** Jingqi Yang Siqi Yang Seungeun Yi Nathan Yoon Sung Jun Yoon Fang You \* Karen Youssef Quan Yuan Matthew Yudin Mohammed Zakaria Sarah Zebar Masooma Zehra Hanson Zeng Haomiao Zhang

\*Information Systems Program Qatar

### **Bachelor of Humanities** and Arts

Lorraine Zhang

Marianne Zhao

Sophie Zhao

Ziyun Zheng

Yan Zhao

Ruiqi Zhu

Theresa Abalos Amanda Branson Clare Burdeshaw **Bonnie Chan** Connie Chau Nana Cheon Carolyn Chheath Diana Connolly Erika Cox **Anthony Didonato** Spencer Dunnison Aisha Han Eileen Huang Nathalie Kent Bo Kim Janice Kim Bronwyn Kuehler Amy Lin Renee Madrigal Gabriella Orbach **Zachary Rapaport** Morgan Rolland Stefan Romero Caroline Santilli Juliana Schnerr Daniel See **Keaton Shapiro** Olivia Smith Isabella Starvaggi Joni Sullivan Charlene Sun Gowri Sunder Melody Ting Katherine Tsai

### **SCIENCE AND HUMANITIES**

### **High Honors**

**SCHOLARS** 

Pankaj Bhojwani Allison Black Alyssa Brandt Yiran Buckley Alisa Chang Junyu Chen Minghan Chen Ambika Chetal Keven Chionh Minji Chung **Andrew Dates** Sameer Dhavalikar Adam Dickter Ruijie Fu Elani Gitterman Siqi Guo Alexandra Halberstadt Kathryn Hanson Ian Harris **Rvan Harty** Kimberly Hochstedler Haidan Hu Benjamin Junker Catherine Kildunne Hadley Killen Katherine Kim Yeh Jin Kim Jane Kogan Yizhen Kong **Hunter Kready** Stephanie Kuang Victoria Kubyshko Diane Lee Caroline Madigan Roosha Mandal Tristan Marino Maxwell Martin Alexandria Moriarty Lauren Nazzaro Douglas Qian Liyunshu Qian Zachary Roop **Christian Schmidt** Yoona Seon Qian Sha **Zachary Singer** Zun Yi Brent Tan Siri Tembunkiart Victoria Vanbenschoten

Claire Wang Zilin Wang Camille Williams Gregory Woelki Delancey Wu Hao Wu Xinni Wu Brenda Xiao Elaine Xu Jingjing Xu Lantian Xu Shenheng Xu Muyu Yang Yuepeng Yang Hyunho Yoon Ariana Zahedi Joshua Zak Nan Zhang **Zheng Zhang** Yiming Zhao Kevin Zhou Yu Zhou Yiqing Zou

### **Honors**

Alyssa Aburachis Luis Arreaga Amelia Britton Christina Cabana Caleb Eddy Sinead Foley Mingwei Huang Irina Javed Sean Kim Catherine Seung Kim Lydia Kim Zhuoyang Li Andy Lin William Ngo Nicole Nyman Nidhi Patel Mary Safy Naomi Shin Langxuan Su Harika Vedati Yi Yang

Junning Zhu

# Science & Technology

# Scott Institute prepares for annual Energy Week program

**JOSH ANDAH** SciTech Editor

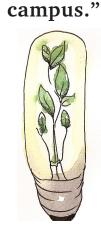
The Wilton E. Scott Energy Innovation is ramping up for its second-ever Energy Week — a program "designed to educate, inform, and debate energy policy, highlight research and innovation, and prepare for the future," according to its website. Energy Week will begin on March 27 and end on March 31.



Each day of Energy Week is themed to emphasize the many caveats of discussions concerning energy. Monday is dedicated to the future of energy, whereas Tuesday, Wednesday, Thursday, and Friday are focused on innovation, research, policy, and education, respectively; this allows individuals to attend events dedicated to the aspect of energy they are interested in. The copious activities of the week range from over 40 talks with influential innovators in the field, such as Tesla Motors' Chief Technology Officer (CTO) JB Straubel, to an energy industry-oriented career fair open to all students, trips to nearby energy production sites, and three engaging student competitions.

The dramatic monologue competition is a crowdfavorite. Engaging the university's arts, the competition "is open to [Carnegie Mellon] drama students who are interested in showing how dramatic words can communicate the concept of energy," as is stated on www.CMUEnergyWeek.org.

"The goal of **Energy Week is** to highlight all our different energy activities around the



— Deborah Stine Professor of Engineering and Public Policy

simultaneous events which occurred during the dramatic monologue competition at last year's Energy Week, Power Source asserted "none could rival the theater," referring to drama student Andrew Richardson's skit depicting innovator Nicola Tesla and his financier J.P. Morgan.

Engineering and Public Policy professor Deborah Stine, who organizes Energy Week, views it as a chance "to highlight all our different energy activities around the campus," as she mentioned in an interview with The Tartan.

Although, the Carnegie Mellon School of Computer Science's breakthroughs are widely acclaimed and popularized, the university also pioneers in the energy field, developing cuttingedge and sustainable technology, such as edible electronics.

Professor Stine believes Carnegie Mellon "is just as active in energy and has a lot of leaders in the field, but [this is] less well-known,"

Despite several other making the Scott Institute's This week-long event thus goal in arranging Energy Week to "increase the visibility of all [Carnegie Mellon] activities" related to energy.

> Indeed, Energy Week demonstrates Carnegie Mellon's influential position in all things energy.

> Moreover, it shows how the city of Pittsburgh has drifted towards a more renewable, sustainable and futuristic energy industry.



serves as a central nexus for all who wish to gain more insight into the energy industry and research taking place in the region.

This time around, Energy Week has a plethora of events coordinated with other universities and organizations, such as an energy law and policy forum with the laws schools of the University of Pittsburgh and West Virginia University. Demonstrably, Energy Week is chance for institutions to mingle and share their ideas about energy.

year's Last Energy Week drew about 700 guests across all five days, according to Professor Stine. Come March, Energy Week will be in full swing and the Scott Institute hopes that number will rise to 1,000.

To partake in the week's activities, register at www. CMUEnergyWeek.org. Registration is free for Carnegie Mellon students.

Simin Li/Staff Artist

# CRISPR/Cas9 genome editing is the future of medicine

Cas9

PAM:

**JULIA NAPOLITANO** Junior Staffwriter

DNA is an incredible thing, carrying precious information in a small space to make you who you are genetically, at least.

This double-helix polymer carries all the information required for growth, development, functioning, and reproduction for all living things. DNA is made up of four nucleotide bases that pair up with each other - adenine (A) and thymine (T), and guanine (G) and cytosine (C). In a hierarchical structure, the base pairs form DNA, and the complete set of DNA forms the genome.

In humans, the genome manifests itself in the form of 23 chromosomes, consisting of 3 billion base pairs. When your cells need to create proteins, the genetic information flows from DNA to RNA through transcription and then from RNA to protein through translation.

With such an important molecule, you may think that the information is set in stone and untouchable, but

in the 1990s, scientists began looking into methods to purposefully affect the genome. When DNA is manipulated by inserting, deleting, or replac-

target DNA

RNA for

gene modification

it is called genome editing. In order to edit a genome, researchers have engineered nucleases, which are enzymes that can cut between the nucleotide base pairs to make smaller segments of DNA. There are currently four types of nucleases: zinc finger nucleases (ZFNs), transcription activator-like effective-based nucleases (TALEN), meganucleases, and the CRISPR-Cas9 system.

stands CRISPR for Clustered Regularly Inter-

tracrRNA spaced Short Palindromic Repeat, and consist of short sequences of RNA (called CRISPR RNA or crRNA) that can guide a system to a speing segments in the genome, cific, matching DNA strand.

crRNA

The CRISPR-Cas9 method consists of Cas9, which is the enzyme that cuts the DNA into smaller sequences, and guide RNA (gRNA), a combination of crRNA and tracrRNA that helps guide Cas9 to the part of the genome that needs editing so it can cut in the right place.

Like DNA, RNA is also made up of four nucleotide bases that pair off — adenine (A) and uracil (U), and guanine (G) and cytosine (C). In order to locate a specific

place in the DNA sequence can include various types science journal, Nature. of the genome, the gRNA will have complementary then follows the gRNA to the target DNA and cuts it in two.

Of the four methods, CRISPR-Cas9 is the simplest, most versatile, and precise method, and was heralded as Science's 2015 Breakthrough of the Year. It can be used to target multiple genes at the same time, which sets this method apart from the rest.

CRISPR-Cas9 genome editing, in general) has a lot of potential to help treat medical conditions that are caused by genetics. These

of cancers, hepatitis B, and even cholesterol, to name only binding to the target from China attempted to alhuman embryos, sparked wide-spread debate regarding the ethics of testing gene-editing technology on humans. Their study concluded that CRISPR was unfit for use in reproductive medicine. Last year, in October, CRISPR gene-editing was testing for the first time on a human subject, by scientists at Sichuan University in Chengdu, China. It was an attempt to treat a patient with aggressive lung cancer,

double strand gene correction

break by Cas9

insertion

deletion

However, as with any emerging biological techbases to the target DNA, thus a few. In April 2015, a team nology, there are ethical concerns that accompany sequence. The Cas9 enzyme ter the DNA of non-viable this method. There are two types of cells in the body somatic cells, which are nonreproductive cells, and germline cells, which are. DNA from germline cells is passed from generation to generation. While gene editing in somatic cells is currently relatively uncontroversial, gene editing in germline cells would be passed to future generations and is currently illegal in many countries. Regardless, scientists continue to make CRISPR-Cas9 even more accurate.

SCITECH BRIEFS

### New species of extinct giant otter found in China

Scientists have described a prehistoric otter species that was "two to three times larger than any modern otter," according to paleontologist De-

Siamogale melilutra lived six million years ago in what is now the Yunnan province of China and, according to the scientists who originally discovered it, would have weighed over one hundred pounds.

The researchers studied a fossilized cranium found in a mine in 2010 and came to the conclusion that it belonged a previously undiscovered otter species, based on a digital reconstruction and analysis of its skull structure. They also believe that some previously unclassified fossils found in 2009 are S. melilutra specimens as well.

The findings were published this week in the Journal of Systematic Palaeontology.

### NASA lanches new project to study cause of auroras

A NASA campaign launching this month aims to learn more about Earth's magnetic field through auroras, the stunning polar light effects at occur at the Earth's poles.

The first mission, named PolarNOx, will study the after effects of the aurora while avoiding interaction with the aurora itself. It will focus on collecting data on atmospheric nitrous oxide, a gas produced by auroras. The PolarNOx rocket launch window closes Jan. 31.

The second and third missions will use two rockets each. Neutral jets — jets that do not interact with the ionosphere – in Auroral Arcs will determine the relationship between auroras and ionospheric electrical fields. The ISINGLASS sounding rocket will fire its identical rockets into two different auroras and investigate how they are affected by the solar wind. The entire project will be completed this March.

### Research explains prehistoric Martian climate change

Though Mars is a notoriously dry planet, its surface contains evidence that it was once covered with liquid water - an established fact in the scientific community. However, it is unknown what prehistoric climate conditions caused Mars to become warm enough for liquid water to exist; the planet's atmosphere lacks enough greenhouse gases to produce a greenhouse effect.

Environmental scientists published a proposal this week that may be the first to successfully explain this climate change, using a principle called collision-induced absorption. They claim that while there may not have been enough individual gas molecules present to create a greenhouse effect on their own, the interaction between these molecules creates a significant amount of heat retention — enough to warm the planet.

### **Distracted drivers** much have lower response times

A study published this week in the journal Human Factors found that drivers in automated cars have a wide range of response times.

The study engaged 26 adults in a simulation with normal driving conditions in an autonomous vehicle. Drivers were asked to perform a distracting secondary task and, at random intervals, they were requested to switch either from manual to automatic or vice versa. The response times ranged from 1.9 seconds to 25.7 seconds; distracted drivers had slower response

times, on average. The authors of the study believe their findings have implications for both road safety and the auto-engineering industry, as vehicle designers try to improve the safety features of their imminently commercial self-driving cars.

### Female scientists usually excluded from peer review

according to an article in the

An analysis of the age and gender data of over 100,000 scientists revealed that women are less likely to be asked to review publications, as compared to their male peers.

The data, collected from American Geophysical Union journal articles, showed that even though female authors are more likely to be accepted for publication, only 20 percent of reviewers are female less than the expected proportion, based on the number of women in the AGU.

The authors of the review note that the bias is present across all age groups, thus "the lower participation by women as reviewers is not just because editors were seeking more-senior reviewers, who are predominantly male."

Female scientists also face bias in award and grant decisions, conference invitations, and hiring and promotions.

### **Extended periods** in space may affect genes and cells

The preliminary data from ground-breaking NASA's "twin study" suggest that long periods spent in space may alter the human body.

In the study, astronaut Scott Kelly spent 342 days in orbit on the International Space Station while his identical twin Mark remained on Earth. Various biological measurements of both brothers were taken before, during and after Kelly's year in space.

Kelly experienced atypically large fluctuations in geneexpression signatures, possibly due to the stress of living in orbit. His genes also showed signs of decreased methylation. These effects and their consequences are still being studied. However, because the study involves sequencing the entire genome of both twins, the complete results may never be published due to privacy

Source: Nature

Compiled by **EMMA FLICKINGER** 

Source: NPR 

Source: NASA

Source: Discover

Source: University of Southampton

Source: Nature

RESEARCH SPOTLIGHT

# Robots programmed to acquire knowledge like children do

**JOSH ANDAH** SciTech Editor

The Robotics Institute at Carnegie Mellon has been known to carry out some of the campus's most futuristic and cutting-edge research. This week's Research Spotlight focuses on experimentation conducted by Assistant Professor of Robotics Abhinav Gupta and his team. Gupta's research aims to improve the coordination of robots via the use of machine learning and visual learn-

ing. The research team and their project will be aided by a three-year \$1.5 million award courtesy of Google.

"If you can get the data faster, you can try more things."

Ph.D. Student

Robots are being used in a variety of fields, and one overarching requirement across the board is that the robots must have dexterity when interacting with objects. This research shows that such nimble and precise movement cannot be achieved directly by hardcoding it into the robot's central processing unit, but rather by allowing it to heuristically learn how to be-—Lerrel Pinto have. Just as a child learns to hold different objects with time, so too do the robots Gupta experimented with.

Whereas research groups learning of yesteryear have suffered largely from data shortage and very expensive robots, Gupta and his team have benefited from the economic advantages of the robotics industry today. "The cost of robots has come down significantly in recent years, enabling us to unleash lots of robots to collect an unprecedented amount of data on physical interactions," commented Gupta in a Robotics Institute article. With more and more data, combined with mostly isolated visual

breakthroughs, robots can now use sensory information to understand the ever-changing physical world they occupy.

Excitingly, if one of these many robots learns something new, it can share that knowledge with the others through an adaptable network. This greatly reduces the learning curve and lessens the man hours such experimentation requires. Lerrel Pinto, Ph.D. candidate and member of Gupta's team, discussed the benefit of this faster data accumulation

technique: "If you can get the data faster, you can try more things — different software frameworks, different algorithms."

Robots that are able to learn and adapt like children, albeit within a slower time frame, are a huge step in the direction toward a more precise artificial intelligence. However, it is this research team's method of data collection that has the ability to benefit fields far beyond robotics.



# **CONGRATULATIONS!**

The School of Computer Science wishes to publicly acknowledge the outstanding academic achievement of the following students who have been named to the Dean's List for the Fall 2016 semester.

### **Computer Science**

Anopa, Sophia — Senior Au, Kevin — Junior Anwer, Harleigh — Freshman Baek, Jongkyu — Junior Bakshi, Shreyan— Freshman Bhagirath, Aditri — Freshman Bhagwat, Apoorva — Junior Bhargava, Abhishek — Freshman Bhatia, Vidhart — Freshman Bing, Zhong Yu — Sophomore Brown, Jordan — Junior Buckley, Jonathon — Senior Burns, Jonathan — Junior Cepel, Sinan — Senior Chai, Alexander — Junior Chakrabarti, Darshan -Freshman

Chang, Chun Yen — Senior Chargin, William — Senior Chatterjee, Rishabh — Freshman Chen, Chonghui— Freshman Chen, Howard — Senior Chen, Michael — Sophomore Chen, Stephen — Senior Chen, Tianming — Senior Chen, Tiffany — Freshman Cheng, Ricson — Sophomore

Cherivirala, Sushain — Sophomore Chhabra, Shantanu — Junior Choung, Lillian — Senior Chua, Jane — Senior Chuang, Xue An — Senior Clark, Stephen — Sophomore Clinch, Eric — Freshman Davis, Ariel — Freshman De Boor, Corwin — Sophomore Diao, Zheng — Junior Ding, Ximin — Junior Direnzo, Dominick — Senior Dong, Zhan — Sophomore Earathu, Alka — Freshman Eliason, Nathan — Junior Eng, Amanda — Junior Evans, Allana — Freshman Fan, Richard — Senior Fan, Weihang — Freshman

Fashimpaur, Jacqueline — Freshman Feldmann, Axel — Sophomore Feng, Zhixin — Sophomore Fernau, Robert — Senior Fischer, Casey — Senior Frieder, Alexander — Senior Friedman, Alexander — Sophomore Gakhar, Sunny — Junior Ganucheau, William -**Junior** Gay, Wei En Colin — Freshman Gothoskar, Nishad — Junior Goyal, Shashank — Senior Gratzer, Daniel — Junior Gu, Rachel — Junior Guo, Yiyang — Freshman Han, Bojian — Senior Han, Deedee — Junior Hashe, David — Freshman Hibshman, Justus — Junior Holladay, Rachel — Senior Hou, Julia — Freshman Hou, Ya Xin — Freshman Hua, Daniel — Senior Huang, Jocelyn — Junior Hwang, Seungmin — Sophomore Hwang, Yeongwoo — Junior Jaffe, Alan— Junior Jain, Rishub — Sophomore Jaisingh, Rahul — Sophomore Jannak-Huang, Ryan — Freshman Jennings, Patrick — Junior Ji, Menglan — Junior Jia, Qiuyi — Senior Jibril, Warfa — Senior Jin, Yang — Sophomore Joshi, Maitreyee — Junior Kang, Raymond — Junior Kang, Vincent — Sophomore Kang, Yijin — Sophomore Kim, Ildoo — Sophomore Kim, Minji — Freshman Kim, Samuel — Freshman

Kulshrestha, Arisha —

Kumar, Ajay — Freshman

Sophomore

Kumar, Ananya — Senior Laud, Prachi — Sophomore Lavicka, Caleb — Freshman Lee, Frederick — Sophomore Lee, Mark — Sophomore Lee, Yang Sheng — Junior Li, Dongyu — Freshman Li, Hongyu — Senior Li, Shangda — Freshman Li, Yifei — Freshman Li, Yucen — Sophomore Liang, Michael — Junior Lim, Wan Shen — Freshman Lim, Yao Chong — Sophomore Lin, Connor — Sophomore Lin, Patrick — Sophomore Lindenbaum, David — Senior Liu, Anatol — Junior Liu, Kaige — Freshman Liu, Roger — Senior Lo, Emily — Freshman Lu, Allen — Sophomore Lu, George — Sophomore Luo, Adriel — Junior Mahmood, Asra — Junior Mankins, Lydia — Junior Manne, Rahul — Senior Mao, Yanning — Junior Meng, Xiangquan — Sophomore Meyers, Aaron — Freshman Miller, Laura — Senior Mohanty, Sidhanth — Junior Morales, David — Freshman Mortension, Aaron — Sophomore Musipatla, Amulya — Freshman Nan, Junyu — Sophomore Nanavati, Amal — Junior Nayak ,Tanuj — Freshman Ney, Brendan — Freshman Ngom, Amadou — Sophomore Nie, Eric — Freshan Ojha, Shashank — Freshman Ong, Theodore Jeremy — Orlowski, Jan — Freshman Peyrot Carrion, Marco Antonio —

Platt, Samuel — Senior

Pratt, Andrew — Junior Rajgarhia, Anaya — Junior Ramachandran, Bharadwaj — Senior Ramamurthy Vijay — Sophomore Ramirez, Lucas — Junior Rathi, Pranjali — Sophomore Reichek, Kevin — Senior Razvi, Rameel — Sophomore Roberts, Nicholas — Sophomore Runke, Samanta — Freshman Sargent, Erik — Freshman Savage, Matthew — Sophomore Schrag, Gabiel — Freshman Scoggins, Clarissa — Freshman Shankar, Vivek — Junior Sharma, Varun — Sophomore Shi, Wenze — Freshman Shou, Changning — Sophomore Singal, Madhur — Sophomore Snow, Zachary — Sophomore Soliman, Yousuf — Junior Soudry, Benjamin — Freshman Stanescu, Alexandru — Freshman Steere, David — Junior Stewart, Evan — Freshman Sun, Alan — Freshman Sun, Bili — Sophomore Sun, Hanqi — Junior Sun, Weijia — Freshman Suri, Ananya — Freshman Sussman, Zachary — Freshman Tai, Priscilla — Junior Tammineesi, Himakeerth — Sophomore Tan, Ruoxi — Senior Tegene, Mera — Freshman

Tong, Kar Leung— Sophomore Tseng, Thomas — Junior Uppal — Uday — Sophomore Vakharia, Tanay — Sophomore Villevald, Ekaterina — Freshman Wade, Zachary — Sophomore Wang, Dennis — Sophomore Wang, Echo — Freshman Wang, Hanruo — Junior Wang, Serena — Freshman Wang, Zirui — Senior

Wang, Ziyang — Sophomore Weinstock, Ariana — Senior Wen, Daniel — Sophomore Wildenhain, Thomas — Freshman Wu, Caroline — Sophomore Xiang, Yiqi — Sophomore Xiao, Alex — Junior Xiao, Sean — Junior Xiao, William — Junior Xie, Newton — Sophomore Xu, Anlun — Freshman Xu, Mengyun — Sophomore Xu, Victor — Sophomore Xu, Ziyu — Sophomore Yadav, Rohan — Sophomore Yang, Ji An — Senior Ye, Jiacheng, Senior Yeditha, Meheresh — Sophomore Yellamraju, Meera — Junior Yiblet, Shalom — Sophomore Yin, Qiya — Freshman You, Stephanie — Freshman Yu, Megan — Freshman Yuan, Chenhui — Sophomore Yuan, Chenxi — Sophomore Yue, Haoxuan — Junior Zarate, Carolina — Junior Zeng, David — Sophomore Zhan, Juncheng — Junior Zhanson, Joshua — Junior Zhao, Yixiu — Sophomore Zhu, Eric — Junior Zhu, Matthew — Junior Zhu, Tiffany — Sophomore Zhu, Zhaoxi — Freshman

### **Computer Science and Art**

Adkins, Sara — Junior Choi, John — Senior Ma, Michelle — Senior Wan, Anqi — Senior Zhou, Emily — Senior

### **Computational Biology**

Casazza, William — Senior Gaston, Jacqueline — Senior Park, Tae Yoon — Senior Ruchi, Asthana — Junior

# **Sleep pattern variation across** cultures caused by evolution

**NAVIYA SINGLA** Assistant SciTech Editor

Sleep patterns in humans today are very different today from what they were a hundred years ago. They have continued to change throughout history, in both quantity and quality. Studying sleeping patterns across cultures over time is important to understanding the effects sleep has on human health.

Thus, researchers are looking to figure out whether this change in sleep was brought about by socioeconomic, technological and political developments or if it is a product of evolutionary mismatch in early human beings' sleeping patterns.

A paper published in the American Journal of Physical Anthropology studied crosscultural sleeping patterns in an attempt to address this

The study conducted by David Samson of Duke University, and his team analyzed the patterns in 33 volunteers of the Hadza hunter-gatherer community in Tanzania over a period of 393 days.

Such societies are typically under-represented in sleep research studies which predominatly comprise of western, educated, industrialized, rich and democratic social groups. The Hazda community represents a small-scale, non-inductrialized population that doesn't have environmental barriers such as air-conditioners, heaters, or sound-proofed rooms that would affect sleep.

As compared to western sleeping patterns, the Hadza community seemed to have shorter and poorer quality of sleep. Besides that, they also took frequent daytime naps for an average of 47.5 minutes. Hazdas seemed to have stronger circadian rhythms.

The researchers used wrist devices to gather information and found that the subjects slept for an average of 6.5 hours per night despite spending a longer time in bed which averages around 9.16 hours per night.

Using a scalp device, on nine participants, the researchers also found that the villagers experienced shorter slow-wave cycles and rapid-eye movement which suggests a biologically relatively light sleep.

As compared to western sleeping patterns, the Hadza community seemed to have shorter and poorer quality of sleep. Besides that, they also took frequent daytime

Minkang Shon

Sarah Simon'

Aria Soltani\*

Baobao Song

Caoxin Tang\*

Jonathan Tsao\*

Sivagnanalingam\*

Subanky

Hutchinson\*

Yashitha Jeet

Chaoran Jin\*

Cody Johnson

Andrew Kwon\*

Julia Koltas

Serhan Kiliccote\*

Liuyu Jin\*

naps for an average of 47.5 minutes. Despite that, Hazdas seemed to have stronger circadian rhythms.

According to an article about the study in Science News, westerners about 500 to 200 years ago had similar sleeping patterns, i.e., two distinct spans of sleep in one day. Thus, this population has a lower sleep efficiency as compared to western, industrialized populations.

Many other sleep research studies conclude that irregular sleep cycles and lack of exposure to sunlight increases risk of heart disease and other health issues. Besides that, use of electronic devices with blue-screens such as mobile phones, laptops, televisions etc. after dark negatively affects melatonin production which delays sleep.

Furthermore, the study concluded that environmental factors such as light and temperature significantly impacted sleep duration and quality. Increased ambient light and temperatures at night were found to increase sleep quality. This observation was interpreted in the paper to mean that experiencing longer days (equivalently more ambient light) and tropical temperatures, implied experiencing longer sleep duration.

Based on other interpretations of the data they collected, the researchers lean towards concluding that sleep plasticity, i.e., variation in sleep quality and quantity has been a product of natural selection in human evolution.

# PARTICIPANTS WANTED: **PSYCHOLOGY** RESEARCH STUDY

Earn \$25 2-hour study Perform behavioral tasks ELIGIBILITY: while we examine your heart 18-30 yrs. old rate and In good health blood pressure Fluent in English For more information, call: The Behavioral Health Research Lab (412-268-3029)

# MELLON COLLEGE OF SCIENCE FALL 2016

# **DEAN'S LIST**

Congratulations! The faculty and staff of MCS are proud of you for your achievements!

Nathan Holzmueller Angela Sun\*

**BIOLOGICAL** Taechawidd SCIENCES Haili Adams Ruchi Asthana Apeksha Atal\* Nilanjana Banerjee\* Tiffany Phan\* Mariel Bedell\* Jeffrey Beyon\* Debarati Bhanja\* Kathryn Bregna Julia Carter\* William Casazza\* Leslie Chen Nathalie Chen\* Jonathan Colarusso\* Sarah Cook\* William Crouch\* Marlena Darr\* **Daniel Evans** Ian Foo\* Timothy Gao\* Joseph Garvey\* Jacqueline Gaston Silvia Giampapa\* Marisa Giglio\* Mauricio Gil-Silva Haonan Guan Sophie Halpern Rebecca Howard\* Katherine Huang\* Ona Ichoku\* Hyemin Jeong\* Jessica Jue\* Barclay Kaku\* Boris Kobilja\* Hannah Kolev\* Amanda Kuhn\* Seh-Joo Kwon\* Tiffany Lau\*

Bo Ri Lee\*

Jessica Lee\*

Serena Lee\*

Victoria Lee

Tammy Luk\*

Vincent Li\*

Jeong Noh Lee\*

Richard Lozano\*

Luke Mcdonald\*

Miranda Mlincek

Frederick Mun\*

Jared Mcphail\*

Nantawisarakul\* Rafae Nasim\* Joseph Park\* Tae Yoon Park Alexander Pomerantz\* Emilio Rodriguez Christopher Rudmann\* Zachary Sachar\* Aliya Saffran\* Julia Schlossman\* Meredith Schmehl\* Erin Sipple\* Linqing Sun\* Chrystal Thomas\* Malcolm- Christ Udeozor Ashita Vadlamudi\* Siyao Wang\*

**CHEMISTRY** Madeline Balzarini\* Jeffrey Bradley Aubry Brown\* Louis Cannatti\* Claire Dingwell\* David Dwyer\* Cole Emanuelson\* Mallory Evanoff\* Jingyi Gao\* Alicia Gong\* Evan Kaaret\* Ashley Kim\* Jia Kim\* Krystle Koe\* William Koshut\* Jennifer Kuflewski\*

Creson Lee

Eunice Oh

Chih-Wei Lin\*

Sabah Qasir\*

Xinyao Ren

Jacqueline

Hudepohl\*

Charles

Sharanya Bhatheja Brandon Rogowski\* Shawn Weng\* Sharon Wu\* Yitong Zhou\* SCIENCES Joshua Ackerman David Altizio Vineet Apte\* Anav Behl Jiaping Bian\* Matthew Bowen Christine Xu Yunwen Cai\* Jamie Yang\* Shengqi Chai\* Daniel Yost\* Ryan Chandler\* Stephanie Youn James Chen\* Lansing Zhang Jingyi Chen\* Jaclyn Zois\* Yijing Chen Yuwen Chen\* Zixuan Chen\* Anqi Cheng Karishma Desai\* Bryan Ding\* Yijun Dong\* Kristen Flint\* Ziyuan Gong\* Tianyu Gu Bradley Guan Xinhui Guo\* Michael Hart\* George Hatzis-

Stephanie Wang Ryan Lapre Jaeyeon Lee\* Joonha Lee Russell Lee\* Beilin Li Mi Li\* **MATHEMATICAL** Ray Li\* Ruohui Li\* Ruoqi Li\* Timothy Li\* Yutong Li\* Hang Liao Abhinav Bheemidi\* Andrew Liu Ganlin Liu Joshua Brakensiek\* Meng Liu Xinran Liu\* Zichen Liu\* Harrison Loomis Andra Marinescu\* Alan Menaged Cameron Montag\* **Drew Moses** Necati Alp Muyesser\* David Neiman William Christerson William Cooperman Diego Olalde Gidon Orelowitz\* Jiayi Pan\* Elijah Peterson\* Jeffrey Phillips\* Yifan Pu\* Jonathan Pyo Zhehao Qiao Nadia Razek Kartik Sabharwal Linh Sack Samuel Schneider\* Schoch\* Lindsay Schnell\* Weng Shian Ho\* Robert Schreiber Raymond Elizabeth Hogenson' Sciannella\* Ran Huan\* Ninghao Sha\* Koutian Huang\*

Gean Shen

Jiaxian Sheng\*

Yangjun Sheng

Moqing Shi\* Xiang Si Nicholas Sieger Steven Silverman\* Varun Singh Ada Situ\* Matthew So\* Maoyuan Song\* Mary St John Sarah Tracy Kevin Wang\* Qingqiao Wang\* Qiuyu Wang Sijie Wei\* Ziniu Wu Huanzhong Xu\* Jiayuan Xu\* Ling Xu\* Sheng Xu Qiming Xuan\* Justin Yan\* Chuning Yang Hang Yang\* Ming Yang\* Xue Yang Yihao Yang\* Ran Yao\* Taisuke Yasuda\* Mihir Yerande\* Yue Yin Xingjian Yu\* Samuel Zbarsky\* Xiaorong Zhang\* Xiyang Zhang Yige Zhang Yue Zhao Quchen Zhou\* Yisu Zhou\*

Joseph Zoller\* **PHYSICS** Kathryn Andenoro\* Can Bostanci\* Robert Buarque De Nimish Sagar Goel Macedo\* Doyee Byun\* Qixiu Han\* Ziheng Cai\* Henry Hausmann\* Sunny Zhiyang He\* Starvaggi\* Jacob Cohen Samuel Dai\* Korey Henderson\* Yi Fan\* Alexis Hoane

Emily Zhu\*

Tiffany Zhu\*

Dominic Zirbel\*

Alex Fernez\* Ian Holst Yiwen Huang\* Luka Jelenak\* Hyunho Jeon\* Mengze Li\* Diamond Moody\* Ruvini Navaratna Patrick Nichols\* Pavitra Ramesh Paul Rogozenski\* Dylan Steele\* Adam Williams Riley Xu\* Yue Xu Andrew Ye Jianwei Zhang Richard Zhao\* **UNDECLARED** Jasper Brown Mary Caffrey\* Yutian Cai\* Haolin Chen\* Kangning Chen\*

Ekaterina

Noah Lee\* Eric Lester\* Eric Li\* Linhong Li\* Zhiyao Li\* Andrew Liu\* Crystal Liu\* Lu Chen David Liu Qingyu Chen\* Kevin Liu Yinglan Chen\* Ruoyuan Liu\* Zizhuo Chen\* Sanjana Mahajan Susan Cheng\* Ian Chiu\* Cecilia Mastrogiacomo\* Seoyoung Choi\* Jiachen Ning\* Maggie Chou James Nobles Charles Clarke Wei Jin Oh\* Wenxin Ding\* Bryce Orloski\* Ye Won Doe\* Bria Persaud\* Puja Dutta Lisa Qian Manaswitha Nicholas Rauen\* Edupalli Ashwin Reddy\* Yanhaomin Fang Ziang Ren Tianyang Feng\* Brian Travis Fu Scheuermann\* Winnie Fu Xiaohua Shi\* Shuyang Gao\* Anne Silbaugh Gracia Genero\* Nicholas Speeney\* Chaitanya Ian Griswold\*

Srinivasan

Francesca

Jung Joo Suh\*

Elizabeth Sulkin

Kenneth Hong Huachen Sun Jason Hsu Nicholas Tarn\* Haotian Huang' Namita Thomas Wenyu Huang\* Ziqiao Tian Caroline Trueblood Minji Chung\* Elisabeth Iszauk\* So Young Jeon Samanda Valente Suraj Joshi\* Soto\* Prerana Katiyar\* Nicholas Viggiano\* Christian Pederson Alexandra Kennedy Christopher Wallace Caleb Eddy Hee-Jung Kim\* Dongqi Wang\* Jacob Kim\* Jianming Wang\* Jaejoon Kim\* Thomas Wong\* Yeonju Kim\* Juanna Xie Jingyan Xu\* Krakopolsky Yue Yao\* Ye Ji Yim\* Alexa Lansberry Stephen Law\* Isabel Yoon\* Ermina Lee\* Novdano Dede Jaehyun Lee\* Yusuf\* Alexander Zafiris\* Beiming Zhang\* Heyang Zhang Jeremy Zhang\* Xiaomeng Zhang\* Alexander Zheng Yirui Zhu Jonathan Zornio Yiyi Zou\* STUDENT DEFINED **MAJOR** 

Megan Bartoshuk\* **SCIENCE AND** 

Sean Kim

Yeh Jin Kim\*

Jane Kogan\*

Yizhen Kong\*

Diane Lee\*

Andy Lin

Zhuoyang Li

Roosha Mandal\*

Tristan Marino\*

Maxwell Martin\*

Lauren Nazzaro\*

William Ngo

Nidhi Patel

Nicole Nyman

Douglas Qian\*

Liyunshu Qian\*

Zachary Roop\*

Alexandria Moriarty\*

Hunter Kready\*

**HUMANITIES SCHOLARS** Alyssa Aburachis Rebeka Almasi\* Luis Arreaga Shaojie Bai\* Kaoon Ban\* Orchi Banerjee\* Eric Barrett\* Taylor Bell\* Pankaj Bhojwani\* Allison Black\* Alyssa Brandt\* Amelia Britton Yiran Buckley\*

Christina Cabana

Minghan Chen\* Naomi Shin Ambika Chetal\* Zachary Singer\* Keven Chionh\* Langxuan Su Zun Yi Brent Tan\* Andrew Dates\* Siri Tembunkiart\* Sameer Dhavalikar\* Victoria Adam Dickter\* Vanbenschoten\* Harika Vedati Sinead Foley Claire Wang\* Zilin Wang\* Ruijie Fu\* Elani Gitterman\* Camille Williams\* Siqi Guo\* Gregory Woelki\* Delancey Wu\* Alexandra Halberstadt\* Hao Wu\* Kathryn Hanson\* Xinni Wu\* Ian Harris\* Brenda Xiao\* Ryan Harty\* Elaine Xu\* Kimberly Jingjing Xu\* Hochstedler\* Lantian Xu\* Haidan Hu\* Shenheng Xu\* Mingwei Huang Muyu Yang\* Irina Javed Yi Yang Benjamin Junker\* Yuepeng Yang\* Catherine Kildunne\* Hyunho Yoon\* Hadley Killen\* Ariana Zahedi\* Catherine Seung Joshua Zak\* Kim Nan Zhang\* Katherine Kim\* Zheng Zhang\* Lydia Kim Yiming Zhao\*

Mary Safy

Qian Sha

Note: Unfortunately, our lab is not wheelchair accessible.

Alisa Chang\*

Junyu Chen\*

**BACHELOR OF** Stephanie Kuang\* **SCIENCE AND** Victoria Kubyshko\* **ARTS** Sara Adkins John Choi Michelle Ma Caroline Madigan\* Anqi Wan Emilyh Zhou

Yu Zhou\*

Junning Zhu

Yiqing Zou\*

Dean's List Criteria: Only students earning a quality point average of at least 3.5 while completing a minimum of 36 factorable units are eligible for the Dean's List. Those earning a quality point average of 3.75 are eligible for the Dean's List with High Honors (denoted by \*).

A10 « thetartan.org/sports The Tartan » January 30, 2017





The men's and women's track and field teams pose together in victory. Both teams defeated their counterparts from Case Western Reserve University to win the ninth annual Battle of the Obelisk, located in Cleveland, Ohio.

# **Upcoming Events**

Men's Tennis vs. Duquesne at Alpha Tennis Feb. 3, TBA

Women's Basketball vs. Wash. U. at Wash. U. Feb. 3, 7 p.m.

Men's Basketball vs. Wash. U. at Wash. U. Feb. 3, 9 p.m.

**Women's Tennis** vs. Saint Joseph's at Alpha Tennis Feb. 4, 9 a.m.

Men's Basketball vs. Chicago at Chicago

Feb. 5, 12 p.m.

Women's Basketball vs. Chicago at Chicago Feb. 5, 2 p.m.

# **UAA** Basketball Standings

Men's			Women's			
Univ.	W	L	Univ.	W	L	
Wash. U.	7	0	Wash U.	5	2	
Rochester	6	1	Rochester	5	2	
Emory	5	2	Chicago	5	2	
CMU	4	3	CMU	4	3	
Chicago	3	4	Emory	4	3	
Brandeis	2	5	CWRU	3	4	
NYU	1	6	Brandeis	2	5	
CWRU	0	7	NYU	0	7	

## Men's Basketball

BASKETBALL, from A12

Some time later, Washington committed its seventh foul of the half, resulting in one more point for the Tartans. The Bears then proceeded to make another layup and another free throw due to a foul, making it 53-33. Another foul by the Bears gave the Tartans two made free throws, and the Bears committed another foul shortly afterward which gave the Tartans two more points. Two missed shots later, the Tartans committed another foul which resulted in one point for the Bears.

The Bears pushed forward again to get three points out of a layup and subsequent free throw before making another shot. The Tartans finally answered with another shot to bring the score to 59– 39, later adding two more off a layup. Washington made another shot before committing their tenth foul which gave a point to the Tartans. The Bears quickly got down the field to force a foul, resulting in an offensive rebound that led to nothing.

The Tartans tried to quickly get a three-pointer, but they were unable to make it. They were able to get another point out of a Washington foul, and the Tartans later got a quick shot to bring it back to 64–45. Washington made another three-pointer before the Tartans called timeout to substitute all their players. Another three point shot brought the score to 70–45. The Tartans made one more shot before time

While the Tartans were able to jump out into an early lead, the Bears were able to pressure the Tartans with many scoring attempts.

The fouls in the first half added up quickly, and once the Bears took the lead, they moved too quickly to relinquish it. Making the most out of opportunities is something the Tartans were able to do early on, but it was the Bears who were able to make enough opportunities to overcome their early inefficiency.

On Sunday, the Tartans rebounded against the University of Chicago, earning an 89-80 victory that brought the team to 10-8 overall and 4–3 in the UAA.

The Tartans earned the lead quickly and never relinquished it. The Tartans opened the game shooting 10-of-15 from the floor and built a 25–9 lead following a triple by Serbin with 11 minutes to play. The Tartans maintained the double digit lead for the remainder of the half and led 47–32 at the break.

Tartans opened the second frame with two quick baskets and led 51-32 29 seconds in, but Chicago scored 14 unanswered as the lead shrunk to 51-46 at the 16-minute mark.

A traditional three-point play by Crawford eight minutes later pulled the Maroons to within a basket at 64-62, but the Tartans responded with a 10 straight points to push the lead back to double

During the run, Maha accounted for seven points. Carnegie Mellon never saw its lead drop below eight points the rest of the way.

Carnegie Mellon shot 54.2 percent from the floor while Chicago shot 47.5 percent. It marked the third time this season the Tartans shot above 50 percent, winning all three. The program has won 51 of the last 62 contests when shooting better than 50 percent.

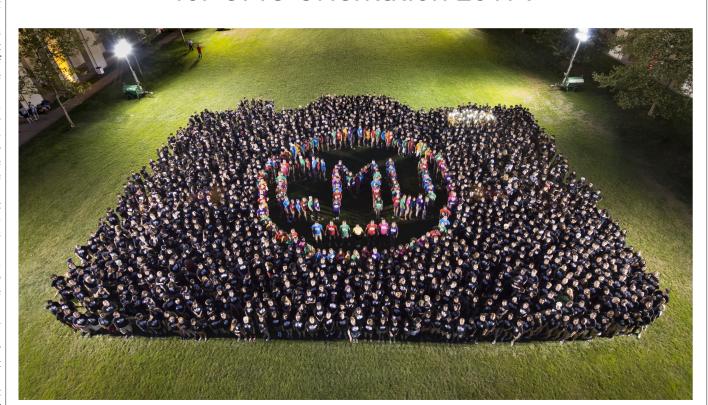
Four Tartans reached double figures in scoring with Serbin leading the way with 22 points. Serbin led all rebounders with 11 boards to record his league leading 11th double-double. Junior guard Ryan Maha poured in 20 points and converted 3-of-4 from behind the arc. Sophomore forward and guard Seth Henry and Mc-Neil each contributed with 12 points. Henry earned his second double-double of the

It's clear that the Tartans took Friday's loss to heart, turning things around on Sunday. They will need to continue to fight hard entering the final month of play.

The Tartans will next travel to St. Louis for a rematch against the Bears on Friday, Feb. 3.

# Interested in becoming an **Orientation Counselor**

for CMU Orientation 2017?



## Info Sessions

WED feb 1 6-7pm | McKenna, Cohon Center

6-7pm | Dowd, Cohon Center TUES feb 7

# **Application Details**

Applications available during this week at: MON feb 6 www.studentaffairs.cmu.edu/first-year/oc

Applications **DUE** WED feb 22

## **Questions?**

email cmuorientation2017@gmail.com!

January 30, 2017 « The Tartan thetartan.org/sports » A11



SPORTS BRIEFS

### Women's Swimming & Diving

Carnegie Mellon women's swimming and diving team traveled to the University of Pittsburgh for the Western Pennsylvania Invite in advance of the University Athletic Association (UAA) Championships to be held Feb. 8-11.

First-year Emma Nicklas-Morris swam to a third-place finish in the 200-yard freestyle with a time of 1:56.12, as junior Mary St. John was third in the 200-yard butterfly in 2:10.04.

Junior Emma Shi earned two fifth-place finishes for the day, first in the 200-yard backstroke in 2:08.20. She then placed fifth in the 100-yard butterfly with a season-best time of 59.31 with sophomore Ellie Walstad just behind her with a season-best 59.40.

Nicklas-Morris later earned a fifth-place finish in the 200yard Individual Medley when she touched in 2:11.44.

The Tartans will take part in the UAA Championships beginning Wednesday, Feb. 8 at the University of Chicago.

### Men's Swimming & Diving

The Carnegie Mellon men's swimming and diving team also traveled to the University of Pittsburgh for the Western Pennsylvania Invite ahead of the UAA Championships to be held Feb. 8-11.

Sophomore Gabe Bamforth finished fourth on the 1-meter board and fifth on the 3-meter board after recording scores of 259.20 and 242.75, respectively.

First-year Daniel Li touched third in the 1,000-yard freestyle in 9:55.13 with senior Sivan Mehta placing third in the 100-yard backstroke in 53.36.

Sophomore Winston Chu also earned a third-place finish for the Tartans when he finished the 100-yard breaststroke in 57.08.

Sophomore Mitchell Riek continued to perform well in the 200-vard butterfly as he touched second in 1:52.24 before finishing third in the 200-yard Individual Medley in 1:56.35.

for the Tartans came from senior Brian Jay in the 50-yard 77–59

freestyle. Jay finished the race in 21.75 seconds before firstyear Sam Hawke was third in the 100-yard freestyle in

First-year Connor Clayton was the first Tartan to finish the 200-yard breaststroke when he touched third in 2:09.30.

The 200-yard freestyle relay finished the meet with a second-place showing behind the swims of Jay, first-year Richard Deng, Hawke and first-year Ryan Fitzpatrick, who completed the race in 1:26.71.

The UAA Championships begin Wednesday, Feb. 8 and will take place at the University of Chicago.

### Men's Track & Field

The Carnegie Mellon men's track and field team traveled to Cleveland, Ohio on Saturday to compete against Case Western Reserve in the ninth annual Battle of the Obelisk. The men swept three events, Another third-place finish two in the field and one on the track, to beat the Spartans

Sophomore Reed Farber cleared a career-best height of 1.93 meters in the high jump to lead the sweep of the event for the Tartans. Senior Tanguy Dauphin and junior Cameron Smith placed second and third after clearing the bar at 1.90 and 1.75 meters, respectively. Dauphin's height was a career-best.

The Tartans' second field sweep came in the triple jump where junior Eloy Fernandez led the way with a jump of 12.96 meters. First-year Fred Dauphin leaped 12.93 meters to place second while Farber turned in another career-best mark on the day with a jump of 12.57 meters to place third.

Senior Don Boyer recorded a career-best mark in the long jump to win the event. In the pole vault, the Tartans placed first and second with junior Tommy Mansfield winning after clearing the bar at 4.28 meters. Senior Kyle Weaver took second with a height of 3.98 meters.

Sophomore Kenny Sladick took first in the shot put with a mark of 14.46 meters and junior Jacob Schofel placed second with a career-best distance of 14.06 meters. Schofel also won the weight throw with a toss of 15.51 meters.

On the track, the Tartans swept the 3,000-meter run with all three runners finishing within .37 seconds of each other. Senior Curtis Watro

crossed in 8:58.63 followed by sophomores Jacob Halasowski and Jared Moore in 8:58.90 and 8:59.00. Sophomore Mark Moody won the mile run after crossing with a career-best time of 4:24.74.

The distance medley relay team of first-year Josh Kalapos, sophomore Isaac Mills, senior Owen Norley and sophomore Andrew Harter won in 10:38.25.

The Tartans will next compete at the Denison Bob Shannon Invite on Feb. 4 in Granville, Ohio.

### Women's Track & Field

The Carnegie Mellon women's indoor track and field team also traveled to Cleveland, Ohio on Saturday to compete against Case Western Reserve in the ninth annual Battle of the Obelisk. The women defeated the Spartans for the first time in the nineyear event winning 70-66. Combining the score with the men, Carnegie Mellon won the 2017 title of the Obelisk Trophy by a combined score of 147–125.

Senior Grace Yee won the time of 12:50.40. pole vault clearing a school record height of 3.53 meters. Yee topped first-year Michelle Karabin's school record of 3.52 meters from a week ago. This week, Karabin recorded a mark of 3.38 meters to place second behind Yee. Junior

Sarah Miholer completed the sweep for the Tartans in the event after clearing the bar at 3.08 meters to place third.

Sophomore Tessa Allen placed first in the high jump with a height of 1.50 meters. In the long jump, the Tartans placed one-two with sophomore Debarati Bhanja taking the top spot with a jump of 5.25 meters. Sophomore Autumn Hair took second with a jump of 5.00 meters.

Senior Sarah Cook turned in two individual victories on Saturday. The senior won the 400-meter race in 1:00.22 and the 200-meter dash with a time of 27.84. Junior Jerilyn James placed second in the 200-meter dash with a time of 28.07.

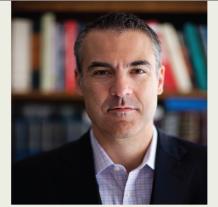
Three first-years turned in top finishes for the Cardinal and Gray. Kate Reilly crossed first in the 800-meter run in 2:25.01. Rachel Reolfi ran the mile with a time of 5:43.55 while Leah Kendrick ran the 60-meter hurdles in 9.51.

The distance medley relay team of Reolfi, Reilly, sophomore Rose Ciriello and senior Ariel Tian placed first with a

The Tartans will next compete at the Denison Bob Shannon Invite on Feb. 4 in Granville, Ohio.

> Compiled by **MARIKA YANG**





# John Fabian Witt

- Duffy Class of 1960 Professor of Law at Yale Law School
- · Author of awardwinning Lincoln's Code: The Laws of War in American History

A professor in Yale's history department, Witt teaches the history of American law, the laws of war, and the law of torts. In addition to Lincoln's Code, he is the author of Patriots and Cosmopolitans: Hidden Histories of American Law and The Accidental Republic: Crippled Workingmen, Destitute Widows, and the Remaking of American Law.

UNIVERSITY LECTURE SERIES / PHI BETA KAPPA VISITING SCHOLARS PROGRAM "The Switch: The Twentieth-Century Reinvention of American Freedom"

Thursday, February 2, 2017, 4:30 – 5:30 PM Porter Hall 100 (Gregg Lecture Hall) On the Carnegie Mellon University campus

Parking available on Frew Street behind Porter Hall, or in the Carnegie Mellon University East Campus Garage (http://www.cmu.edu/about/visit/campus-man-shtml)

Modern constitutional law is full of veneration for the generation of George Washington and James Madison, or for the Republican legislators of Reconstruction. But the inescapable fact of American constitutional law today is that its basic logic is a product of the twentieth century. Values like free speech and race equality are products of modern American history, not of ur constitutional past. This lecture takes up the story Roger Baldwin, founder of the American Civil Liberties Union, to show how along with a small cast of like-minded characters, he helped create the constitution of civil rights and civil liberties that, for all its limits, forms the centerpiece of American constitutional culture today. Baldwin's story of social experiment and constitutional transformation explains our constitutional past and offers powerful, if sometimes troubling, implications for our constitutional future.

To register, visit: https://goo.gl/forms/fpJWUcGFgeudsLHB2

The Carnegie Mellon University Lecture Series, & The Upsilon of PA Chapter (Carnegie Mellon University) of the Phi Beta Kappa Society

**Carnegie Mellon University** 





### The PHI BETA KAPPA Society

Founded in 1776, the Phi Beta Kappa Society is the nation's most prestigious academic honor society. Its mission is to champion education in the liberal arts and sciences, to recognize academic excellence, and to foster freedom of thought and expression.

### 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.)

# Sports

# Women's basketball falls to Wash. U., will seek revenge

MARIKA YANG

Assistant Sports Editor

The Carnegie Mellon women's basketball team fought in a gripping, close game against University Athletic Association (UAA) rivals the Washington University Bears, falling just short in the final minutes of their second game of the season.

Scoring first, the Tartans got to a quick start, but soon found themselves trailing early in the first quarter after several consecutive baskets by the Bears. Neither team's offense dominated, with the great defense of both sides dictating the flow of the game. The Bears' stellar defense forced the Tartans to attempt several contested shots and make errant passes that the Bears turned into steals. The Tartans, however, refused to allow the Bears to run away with the same, keeping the score close and ending the first quarter with the Bears leading 17-12.

The second quarter continued the low scoring and kept the defense at the forefront. The Bears maintained their momentum and pulled away from the Tartans, extend-

ing their lead to nine points. The Tartans answered, led by senior guard Lisa Murphy, fresh off her Division III Player of the Week honor from the U.S. Basketball Writers Association and a career performance last Sunday, who continued her superb play, leading the Tartans' attack to put the squad within two points at 29–27 with 1:31 remaining. The Bears responded, ending the half with a 33-29 lead over the home team.

Both teams began the second half with fast starts, trading baskets. Each team gained the lead by a basket, only for the other to quickly tie the game. The rest of the third quarter saw the game at a stalemate, with neither team building any momentum nor willing to give the other any advantage. The third quarter ended with the score tied 55-55.

Entering the fourth and final quarter, the Bears focused on an aggressive attack, scoring right at the start, only for the Tartans to tie the game up again. Just like the third quarter, no team could establish a flowing offense or dominance, with no lead more than three points. How-



Courtesy of CMU Athletics

Senior center and forward Lisa Murphy fights through three Washington University players. She scored 32 points in the loss to the first place Bears.

ever, in the final minutes, the Bears surged, finding the same power they had in the second quarter, and slowly built a lead over the Tartans, going on a 6-0 run and maintaining their strong defense. The Tartans tried very hard, using fouls and timeouts to design a comeback, but could not gain an upper hand over the Bears to clear the point deficit. The game ended with the score of

78–72, with the Bears having the edge over the Tartans.

This game was very close, a competitive contest from start to finish. The Carnegie Mellon and Washington University teams were very evenly matched. Though the Bears ultimately won, they did not dominate the game. The field percentage of the teams were comparably similar, Carnegie Mellon with 39.1 percent and

Washington with 42.4 percent. They had the same number of points in the paint (36) and nearly the same number of assists and turnovers. However, the Bears won the competition for points off of turnovers (14 to the Tartans' 5) and for points off the bench (29 to 9). For the Tartans, Murphy continued her impressive season finishing with 32 points, 11 rebounds, and a perfect 10 for 10 in free throws. Senior guard Jackie Hudepohl added 25 points. Though a loss to a UAA rival at home is hard, the Tartans played with resilience and toughness, battling the equally great Washington University Bears.

With their record now 15–2 overall (4–2 UAA), the Tartans will next travel to St. Louis for a rematch against the Bears on Friday, Feb. 3.

# Men's basketball loses to Bears, perseveres past Maroons

IAN TANAYA

Sports Editor

The Carnegie Mellon men's basketball team returned home to face Washington University in St. Louis on Friday. The Tartans fell to the Bears 70-47, bringing the Tartans' overall record to 9-8 and their University Athletic Association (UAA) record to 3-3.

the opening tip-off, but it was the Tartans who struck first, scoring seven unanswered points before the Bears finally made their first shot to make it 7-2. After a second threepointer for the Tartans and a pair of Tartan fouls that resulted in two points for the visitors, the Bears capitalized off a turnover to make a slam

The Bears got the ball from dunk to send the message that they weren't going to give up easily. The Tartans settled into patient defense, keeping Washington from converting opportunities before making another three pointer to extend their lead to 17-6. The Bears continued to take shots but found themselves unable to make many of them before a Tartan foul gave them one

more point off a free throw. Scoring for the Bears continued to be limited, with sophomore forward and center Patrick Ehland often interrupting Washington's scoring opportunities. Coming out of a timeout,

the Tartans rushed to make a three-point field goal, but the clocks malfunctioned, causing the points to be rendered void. The Tartans were still able to get 2 points to go up 21-13 before the game stopped again due to a malfunction in the shot clock. A dropped ball gave the Bears an easy two points, and after a series of turnovers, the Bears made another two points despite protests that senior center Chris Shkil had been pushed down. Another shot for the Tartans and two free throws for the Bears later, the Bears mounted an offensive assault that was stopped by the Tartan defense many times. One free throw and another shot brought the Bears to a 23–21 deficit, and a missed threepointer allowed the Bears to get downfield where the ninth team foul for the Tartans almost cost the Tartans the lead. A lane violation and a miss allowed the Tartans to escape,

but the failure to get points on eventually forced a jump ball offense gave the Bears another chance. The Tartans fouled for the tenth time, and this time the Bears made both attempts to tie the game at 23 apiece. The Tartans made their way back downfield where two fouls allowed the Tartans to take time off the clock and the chance to retake the lead; however, both free throws missed, and the Bears made a buzzer beating three-pointer to take the lead 26-23 going

into halftime. The Bears got the ball to start the second half and got another shot after the ball changed sides twice. Senior forward Jack Serbin brought it back to 28-25, but the Bears quickly made another shot and to extend their lead to five. After a foul against Shkil resulted in one made free throw attempt, the Bears struck again, extending their lead to 32-26 before the Tartans took a timeout to try and stop the game from falling out of their reach. The Tartans began to push forward more aggressively, drawing another foul that resulted in two points. The Tartans were able to knock the ball out on the Bears' next possession, and

to get it back. Unfortunately, Serbin was unable to get in a two point shot before the shot clock ran out, giving the ball back to Washington. Another foul by the Tartans gave the Bears two more points, extending their lead to 36-28 before another takeaway from the Bears resulted in a further two points. A missed threepointer by the Tartans was followed by a made three-pointer by the Bears, bringing the score to 41–28.

After another timeout, the Bears earned two more points before first-year guard Colin McNeil made a layup and an additional free throw due to a foul. After another shot clock expired on the Tartans, the Bears made another three point shot, and another foul by the Tartans gave the Bears two free throws and brought the score to 48-31. The Tartans advanced again and got one point off a Washington foul, but the Tartans fouled again two possession changes later, allowing the Bears to make two more free throws to take the score to 50–32.

See BASKETBALL, A10



### Julie Sanscartier/Comics Editor First-year guard Colin McNeil advances the ball in spite of the ever increasing odds of defeat against Wash. U.

# Plaidie Daddies, Dreamland Warriors advance to finals

IAN TANAYA

Sports Editor

While everyone (hopefully) had an enjoyable break to get ready for this semester, the Tartan II fantasy football league concluded its four weeks of playoffs. Editor-in-Chief India Price's Plaidie Daddies upset the heavily favored DeMarco DePolo of Zeke Rosenberg to make it to the fantasy championships, while my Dreamland Warriors came back from behind to squeak past Publisher Jade Crockem's Mr. Rodgers' Neighborhood. With so much action over these weeks, the final results will have to wait to be chronicled until next week. Until then, here's a recap of the first round of playoffs.



VS.

What an upset! In Week 14, the Plaidie Daddies got off to a massive 153-104 lead driven by Denver Broncos wide receiver Emmanuel Sanders, the Atlanta Falcons defense, and Philadelphia Eagles tight

quarterback Matt Ryan and Green Bay Packers wide receiver Jordy Nelson gave over 20 points each to Rosenberg, an injury to San Diego Chargers running back Melvin Gordon and poor performances by Tampa Bay Buccaneers wide receiver Mike Evans and the Detroit Lions defense put him into a deep hole that his team was unable to escape from.

While the scoring output for the Plaidie Daddies declined to 92 points in Week 15, DeMarco DePolo was unable to capitalize due to underwhelming performances by Miami Dolphins running back Jay Ayaji, Pittsburgh Steelers wide receiver Antonio Brown, and Evans. Such is the cruel twist of fate that can befall a team that dominated the regular season but came up short in the playoffs.



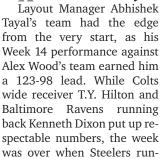


Crockem amassed an impressive 120-92 lead over my team in Week 14 thanks to the play of Broncos wide receiver

end Zach Ertz. While Falcons Demaryius Thomas, Packers quarterback Aaron Rodgers, and Packers wide receiver Devante Adams. On my end, Indianapolis Colts wide receiver Donte Moncrief left his game due to injury, resulting in zero points. Other players who underwhelmed with single digit performances were New Orleans Saints quarterback Drew Brees, Arizona Cardinals wide receiver Larry Fitzgerald, and Tennessee Titans tight end Delanie Walker.

Crockem's good chance of victory faded away in Week 15 after a 149-111 score in my favor. Brees put in a strong 29 point rebound, while Bills running back LeSean McCoy and New York Jets running back Bilal Powell finished with high scoring performances as well. Mr. Rodgers' Neighborhood saw tremendous output from Packers running back and wide receiver Ty Montgomery, Dallas Cowboys running back Ezekiel Elliot, and Thomas, but shortcomings from Adams and Minnesota Vikings wide receiver Adam Thielen cost the team victory.





Week 14 performance against Alex Wood's team earned him a 123-98 lead. While Colts wide receiver T.Y. Hilton and Baltimore Ravens running back Kenneth Dixon put up respectable numbers, the week was over when Steelers running back Le'Veon Bell earned a massive 51 points against the Buffalo Bills, hiding four single point outputs behind a tremendous day for Bell.

The 103-91 edge Tayal earned in Week 15 sealed his victory. Both teams matched up evenly: a strong performance for the Loquacious Losers by Dolphins wide receiver Jarvis Landry was balanced out by Panthers quarterback Cam Newton. A poor performance from Washington Redskins tight end Jordan Reed was negated by a marginally better one from Seattle Seahawks tight end Jimmy Graham. Both kickers also gave

than ten points. With nothing to break past what was essentially a stalemate, not even the Loquacious Losers could lose to the extremely trash team.





Pillbox Co-Editor Sinead Foley may have had a relatively hands off approach to fantasy football, but it was still enough to take down Sarah Gutekunst's team. Week 14 basically decided this matchup as Foley climbed to an insurmountable 105-54 lead. Lions quarterback Matthew Stafford and Colts running back Frank Gore were the only two players to score double digits for McManus's Anus, while only two players scored single digits for Foley's team.

With such a huge deficit, a 91-86 score in favor of What is going on? certainly did not help Gutekunst's case. With nothing left to play for, it seems both teams were content with letting single-point players litter their rosters. It appears that Gutekunst's first

their respective teams more year in fantasy did not give her much of an edge against the competition this year.

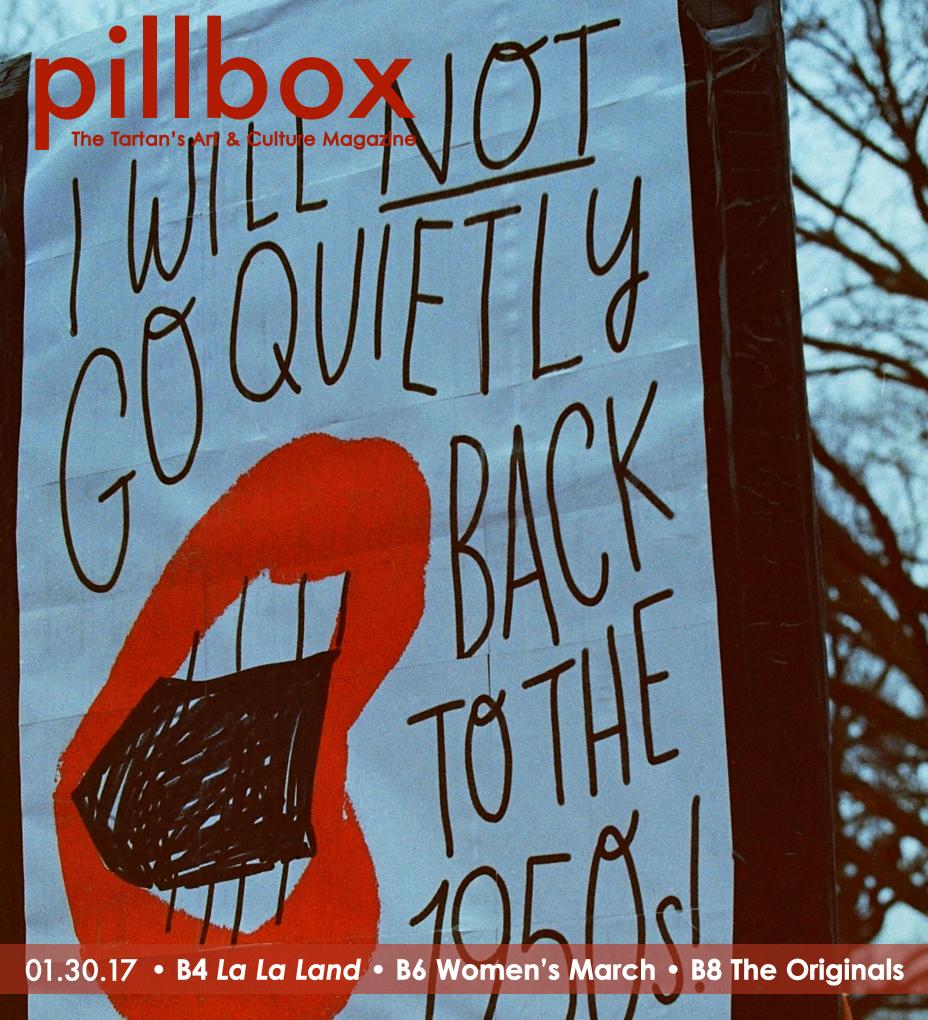


VS.

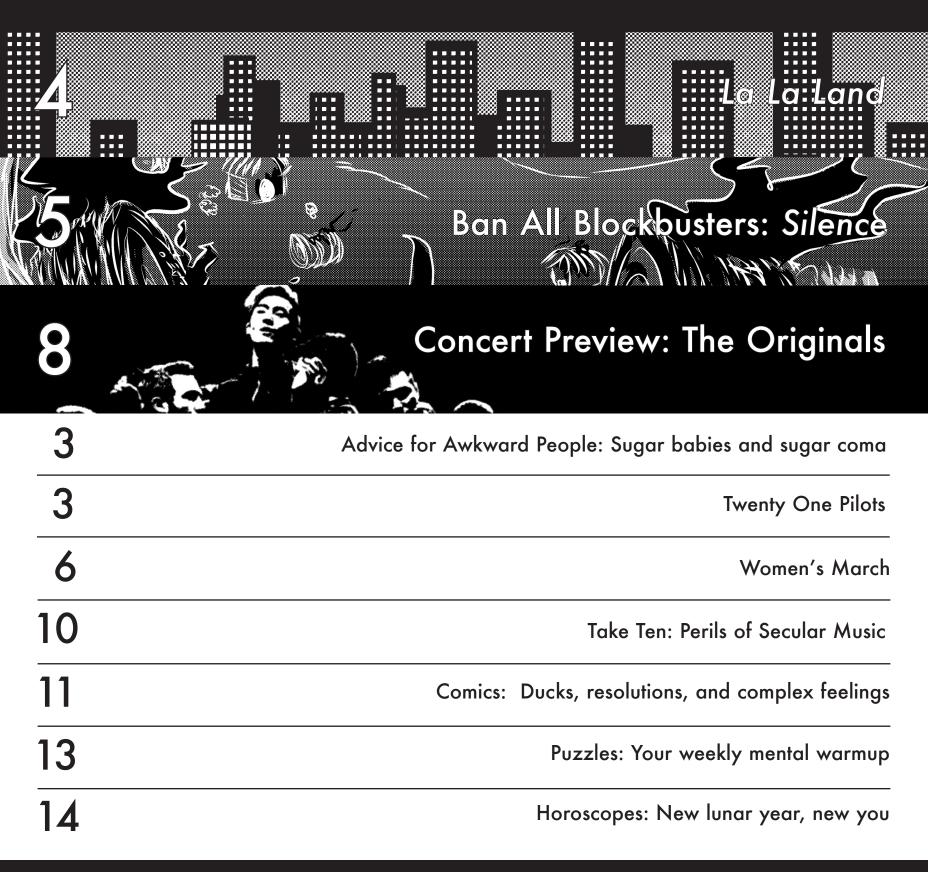


Like most of the other matchups this round, Lula Beresford's Masshole Knickerbockers earned their victory in Week 14, crushing Foley's second team 125-77. Though four players for Beresford's team scored in the single digits, strong performances by New England Patriots quarterback Tom Brady, Cincinnati Bengals running back Jeremy Hill, and Bengals tight end Tyler Eifert overwhelmed Foley's team, which only had San Francisco 49ers running back Carlos Hyde to parade.

While Foley's team tried to come back in Week 15, an 86-66 margin was not enough to make up for the Week 14 thrashing. Falcons running Devonta Freeman's 32-point performance was the dominant performance in a matchup that featured 11 single digit players, many of whom had sustained injuries.



## table of contents



### Sarah Gutekunst | Contributing Editor

# Advice for Awkward People

Overcoming insurmountable obstacles

### Dear Sarah,

Yesterday when I woke up, I went to check the news, as I always do, on Facebook trending. I was prepared for just another sign of the apocalypse, but the one that I got shook me to my core.

Wet Seal will close all of its locations. No one could have seen this coming. I've been shopping there to stay at the forefront of sugar baby fashions ever since my parents gave me my first AmEx. When this season's Wet Seal goes out of style, I don't know what I'm going to do. I need to transition to a new line by summer without missing a beat. What are my options?

### Sincerely, Rest In Panties

### Dear RIP.

Girl, I know exactly how you feel. Facebook trending really ruined my day with this one. We sugar babies have to stick together through this.

I've planned the ultimate shopping trip, only requiring one quick bus trip. Start out in Oakland

on Forbes Avenue at the hottest spot in the neighborhood: Rue21. You may have to push through crowds of Pitt students getting after the latest in choker trends, but it's worth it. Then walk just a block and a half to catch the 75 inbound from Fifth and Atwood, then get your little booty off at Sidney and S. 28th and you're basically at Forever 21. Shop till you drop, but if you don't drop, you're still walking distance away from Urban Outfitters, H&M, American Eagle, and BCBG!

Try not to max out! Sarah

### Dear Sarah,

I'm feeling really stressed about this first 112 lab, and all I want in the whole world is a pint of Ben and Jerry's Coffee Toffee Bar Crunch. The crunchy, rich pseudo-caffeination calls my name, singing sweet songs of sweeter dairy-induced comas. The only problem? It is too freaking cold to go outside right now, let alone down a pint of frozen sugar. My heart and soul need the ice cream. This lab is creating a hole in my heart that is exactly Ben

and Jerry's shaped. But I get full-body chills just thinking about bearing the elements for a block of ice. What should I do?

### Sincerely, Seriously Troubled and Upset Coding Kid

### Dear STUCK,

You know what you need to do. There is no question that you must embark on this mission, but it will require much preparation.

First, you must put on three layers of the warmest clothing you possess. Second, you must do jumping jacks to work up an intense sweat that cannot escape your poly-blend cocoon. Finally, wrap up till you can't move your arms. After that much ice cream you probably won't be able to anyway. Now, you are ready for whatever may lie ahead, muscles warm enough to jog if need be, and body temperature elevated enough to almost enjoy the chill.

Enjoy! Sarah

# Twenty One Pilots Concert

In the spirit of the Emotional Roadshow's stop in Pittsburgh, a glimse into a TØP show

It is the second night of the Columbus-based musical duo Twenty One Pilots' Emotional Roadshow World Tour, and flocks of cars slowly inch their way to the Webster Bank Arena in Bridgeport, CT on Jan. 18. I walk up to the entrance and see empty water bottles as the remains of teenage girls' efforts spent waiting for the chance to see this revolutionary band bring their "ukulele screamo," "schizophrenic pop" music to my hometown.

Performing before the alternative hip-hop duo was alternative bluegrass folk rock band, Judah and the Lion. With their banjos strumming, the band refused to show anything but their true selves, performing covers of T-Pain's "Booty Wurk (One Cheek at a Time)," complete with twerking, and The Killers' tried-and-true classic "Mr. Brightside" with their own hits from their latest album Folk Hop 'N Roll. The band brought an Imagine Dragonslike vibe to their voice and music, making them an unexpectedly pleasant, odd, yet wonderful surprise. Before playing their last song "Take It All Back," the band thanked Twenty One Pilots for the invitation to tour with the band, praising how their alternative and unique brand of music helped

pave the way for similar artists to break out to wider audiences, and for burgeoning musicians to explore more of the vast realms of music.

Next fellow breakout musical act and American rapper and hip-hop artist Jon Bellion took the stage with Travis Mendes. Bellion's recent fame comes from his hit "All Time Low," which had just hit Platinum at the time of the concert. He brought even more excitement to the huge crowd, performing hits from his latest album The Human Condition. Travis Mendes accompanied Bellion as the latter freestyled, and Mendes provided smooth vocal accompaniment and chemistry to Bellion's dance moves and style. Bellion was also extremely thankful to Twenty One Pilots for the last minute addition to the tour, saying "it was only the second night of the tour and it already had felt like we had become best friends."

When Twenty One Pilots finally made an appearance on stage after what felt like ages to the fans around me, they refused to disappoint. Throughout the night, they kept the audience riding a huge high, incorporating the pit crowd in their crazy stunts that ranged from crowd-surfing

with a giant hamster ball to playing drums in the crowd, truly making the audience a part of the experience. They performed a mix of songs from their most recent hits "Heathens" and "Ride" to some of their older classics like "Ode to Sleep."

Izzy Sio | Staffwriter

Other highlights included a moving cover of My Chemical Romance's "Cancer," mixing the moving and emotional roots of the original song with their own style, creating a heartfelt masterpiece. The duo also brought back Judah and the Lion and Jon Bellion on stage for a few covers, including the Blackstreet classic "No Diggity," The Black Eyed Peas' "Where is the Love," and House of Pain's "Jump Around."

Twenty One Pilots' songs are not just rap and hiphop. They're rap, alternative, hip-hop, rock, even pop, and they fuse these genres to create music that's alluring and wholly original in a time where it's difficult to stand out in the music industry. And that individuality has created a wave of change in its wake. Yet throughout their sudden rise to fame, the duo has always remained humble and thankful, hoping that their audience — whether it be two people or two million people — enjoy their show.

"How can you be a revolutionary when you're so busy being a traditionalist?"

La La Land challenges its viewers to put themselves in the shoes of Seb, portrayed by Ryan Gosling, and ask themselves this question. In the movie, Keith (played by John Legend) uses this question to taunt Seb, convincing him that the route to making genuinely revolutionary music is breaking free from his purist jazz roots.

The same question applies to movies themselves. In an industry dominated by mass marketed franchises on one side, and expansive sociopolitical musings on the other, is there room for a good old fashioned musical? In an era when 'great' and 'different' have become practically synonymous, can a simple love story — the relatable kind, that has been told a million times before — possibly be considered revolutionary? La La Land is evidence that some tropes never go out of fashion.

For all the hype and noise around it, what struck me most about La La Land was the raw, unsophisticated joy to be had within it. The protagonists are Seb, a struggling jazz pianist and Mia, played by Emma Stone, a struggling actor. La La Land is

the story of their relationship, from its sexy beginning to its bittersweet conclusion.

Set against the backdrop of the stunning Los Angeles, the movie paints its leads as flawed dreamers — fighting for a break in jazz music and acting, both brutally unwelcoming industries, with little more than sheer talent and a deep, inspiring passion for their respective fields. Watching Seb sit down at a piano and convey more through melody than words could ever capture, we are introduced to his understated, under-appreciated genius. Later on, Mia toils away, day and night, on a play she writes, organizes, and is the sole cast member of, even without the guarantee of an audience.

Through his leads, director Damien Chazelle plumbs human nature to explore why some of us follow our dreams with such a passionate fervor. Why do we persist, even when the odds are thoroughly stacked against us? *La Land* tells us that as great as romantic love is, the greater love is a love of ideals, which translates into a love for work and ambition.

La La Land may be simple, but it is not simplistic. The movie's visual aesthetic is arguably the most unique since 2009's Avatar. Every single shot is composed in a way that can only be described as a live painting. The city of Los Angeles is Chazelle's canvas, which he washes in soft pastel hues that serve to humanize the glamor and ethereality of Hollywood. The cinematography and color grading lend a poetic and overwrought sense of beauty to the proceedings. When Seb and Mia finally kiss at Griffith Observatory, the entire scene is perfect, as if that moment was long written in the stars.

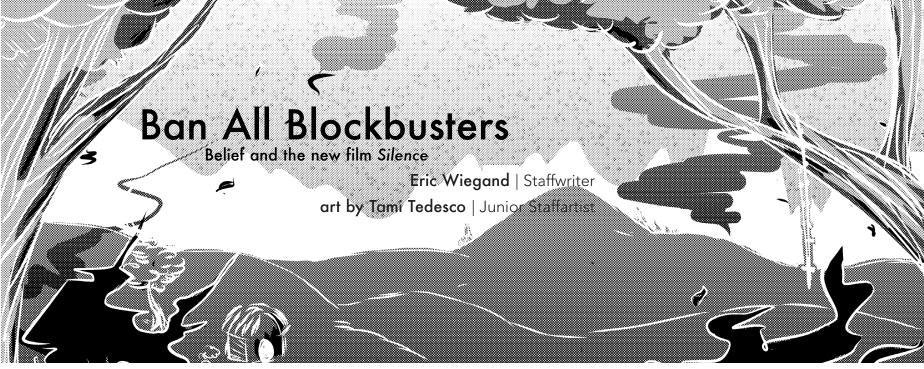
The music and choreography effectively use technology to liven up a traditionalist ethos. The movie opens with a massive musical number in the middle of a Los Angeles freeway. This scene, shot outdoors on a busy thoroughfare, is full of long cuts and fluid camera

motion capturing literally hundreds of extras. This is impossible without the relatively lightweight, mobile digital cameras that modern directors often use for large outdoor scenes. Another iconic scene, Mia and Seb's first dance, is shot on location in Griffith Park at night. The spectacular sunset backdrop and lighting effects that make the scene pop would be impossible in low light without the digital color grading that is brilliantly applied in post-production.

The songs themselves tell a similar story. They are reminiscent of musicals from the '30s and '40s — slick, simple, and just a little pulpy. And yet, it all seems sharpened and enhanced with modern sensibilities and recording techniques. Both leads are good singers, and Ryan Gosling as a pianist is a revelation. The melodies themselves toe a fine line between authentic jazz and cross-cultural appeal, as is expected with film soundtrack music.

For all its overwrought emotion, La La Land works best in its subtler moments — Seb hopelessly trying to negotiate his setlist with a by-the-books restaurant manager, Mia intentionally requesting he play an out and out commercial song to bug him, or Seb turning around to walk back to his car after spending 10 minutes walking her to hers.

La La Land, through its simple "boy-meets-girl", "dreams and ambitions" story reminds us why we go to the movies in the first place.



Silence is a new film directed by Martin Scorsese and starring Andrew Garfield, Adam Driver, and Liam Neeson, based on the 1966 novel of the same name by Shūsaku Endō. The story centers around two Jesuit priests in the 17th century sent from Portugal to Japan to spread thier faith. It was shown by Pittsburgh Filmmakers at the Harris Theater, and is now playing at AMC Loews Waterfront 22.

Recently, the idea of a "happy ending" has become tenuous. From where I stand, and in the news I read and hear, the notion that the moral arc of the universe must bend, eventually, toward the light has become a bit difficult to swallow. I think I've believed that concept, without too much consideration, for my whole life. I'd go as far as saying that most people surrounding me through the years have had this subconscious faith as well: that although shadows will inevitably cross our paths, the story can never culminate in anything other than triumph, confident and untouched by doubt.

Many of us are raised to believe in watchful eyes and attentive ears, something bigger than us guiding that moral arc, caring for us. It can be "God," but call it what you will. We wrap ourselves up in the warm security of a divine purpose, and many of us may never be given a reason to doubt. In Silence, Garfield's character, Father Sebastião Rodrigues, could easily have felt this unconcerned security in faith until he died. But instead, he and fellow Jesuit Father Francisco Garrpe, played by Driver, in an effort to rescue a priest, played by Neeson, lost in his mission to an anti-Christian

nation, set sail for Japan. The year is 1639. The film is spent in quiet, the first hour made to feel arduous, uncomfortable, long. From the moment the priests set foot in Japan, expectations are raised and shattered, reflecting the experience of these men of extreme faith. In a land entirely strange to them, the discomfort of an ascetic life is only the most superficial beginning to how they will be tested. But even the idea of "testing" becomes questionable. Who is doing the testing? If it is God, then is every event a reflection of his will? If these men are here on a truly holy mission, then how does one explain the horrors they unintentionally inflict upon innocent strangers? And with all these auestions pounding relentlessly in their minds, the absence of revelation becomes increasingly intolerable. The unanswered deaths of good people are underscored by nothingness, the camera itself giving the impression of a casual, uncaring observer to this extreme drama.

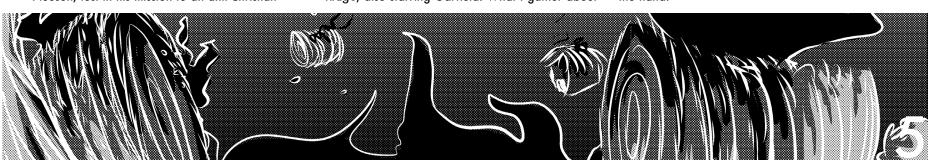
As Endō describes in the original novel, "behind the depressing silence of this sea, the silence of God ... the feeling that while men raise their voices in anguish God remains with folded arms, silent."

To my mind, there were very few films released this past year that matched Silence in its ability to speak truth to the human condition. Scorsese's obsession with adapting the 1966 novel, a mission he shouldered for decades, picks him out as one of the most interesting spiritual investigators in film today. Silence has been compared to another recent, well-received movie, Mel Gibson's Hacksaw Ridge, also starring Garfield. What I gather about

the comparison applies if you compare Silence to any number of other spiritually-minded movies: Silence is uniquely ambiguous. The movie submits questions and issues which get progressively more complicated and challenging as the story moves forward, only to end in an ellipsis.

The thought of an alternate universe where Father Rodrigues stays in Portugal and continues to emulate Christ with impunity, zealously spreading the word he loves so sincerely, is an exceptionally relevant point. Within certain communities, it is entirely possible to believe in the simple, moral righteousness of the universe. What appeals to me so dearly about Silence is its admission that reality is not nearly so simple. Our platitudes and notions that bring us comfort can be helpful, of course, but it's ridiculous to imagine that the world is so straightforward. How do we allow inarguable tragedy into our belief systems? How does our view of the universe cope when faced with purposelessness?

Silence does not provide the answers. This is not a detriment to the movie, but rather an enormously mature attribute. Although full of hope and happiness, the world is an inevitably difficult place, and we do it a disservice to pretend that the right path will always, ultimately, be taken. We do ourselves a disservice to think that it's not worth critically thinking about our actions and the grey area of consequences that result. Silence compels us to understand that, although God or meaning could exist, neither will guide us so assuredly by the hand.



# Women's March, Washington, D.C.

An emotional day for us all

I almost didn't go.

Around Christmas, the highly contentious debates I had with my parents about social issues and identity politics came to a point of eruption when I mentioned that I was (and am) a feminist. I had successfully avoided the topic with them for six years, knowing my explicit honesty and progressive stances were unwanted in the house.

Amidst the yelling and interruptions, my Dad shouted, "If you go to that women's march, I won't be speaking to you for a year." That finally shut me up, because I knew he meant it. But my thoughts kept racing. Was he being unreasonable? Was I supposed to choose family over my beliefs? If I chose to go, I would disrespect the views of my elders, and cause them to lose face within our community. If I didn't go, I would abandon my own values and morals, and silently imply that I was perfectly fine with inaction in a pressing time of need. The central question was, which one was worse? I decided the latter was and quietly drove to Washington, D.C.

I attended the Inauguration ceremony on Friday, and wedged myself between Trump supporters and protesters on Pennsylvania Ave. across the street from the Trump International Hotel. Primarily looking to snap a few good pictures of the historic moment, I quickly began to realize how uncomfortable I was about the situation. Trump's voice permeated the area, his words slightly distorted by the overhead speakers. The dismal weather cast a washed-out and pale look across people's faces. Many fights broke out, eruptive and intense like firecrackers placed randomly along the blocks. Looking up at the American flag, I feared for the country's future and overall well-being of its citizens. I witnessed individuals incapable of rational and civil behavior, instead preferring to exacerbate the hostile environment. They jeered and intimidated others, and oftentimes engaged in physical altercations. They looked like strangers to empathy. I think that's what scared me the most. Whatever idea I initially had that this event would provide didactic potential and enlighten me on issues I overlooked died.

At the other extreme was my experience at the Women's March the very next day. Being a part of the nation's largest one-day protest in history was empowering and uplifting. Standing in the Dupont Metro while watching carts loaded with warmly dressed women, men, and children, I knew the turnout rate would be far greater than I initially expected. I stepped onto the National Mall crowded with kindred souls, streams of people headed towards the various rallies and music installations that blared from a distance.

heared intermittent cheers and roars of celebration as I squeezed my way through, eager to catch a glimpse of the action.

My arms ached from holding my sign, demonstrating my years of athletic inactivity. My back ached from the hours of standing I did the day before as well.

I didn't really care, though. Initially disheartened by the apparent misalignment of America's values shown by the outcome of this election, I found solace in marching alongside 500,000 other people who had not forgotten about the importance of the equal, fundamental rights we deserve, protected by the principles of our nation. I felt the power of an effort that will be in it for the long-haul, a movement that stands in solidarity for the protection of women's rights, health, and safety.

The spirited people surrounding me echoed this message in a myriad of ways. Some angrily, some joyfully, some just wanting to add humor, to shed some light following a dark day. Eager to denounce the billionaire Republican President whose attention on women is likened to that of a rapist, people held signs with clever slogans that were peppered throughout the crowd. Some of the highlights were "We shall over comb," "Trump is the BLOTUS: Biggest Liar of the United States," and "It's not the Bill of Suggestions," among other (more vulgar) phrases.



# Photos by Aisha Han | Visual Editor and courtesy of Ethan Paul

Feminist icons like Gloria Steinem, Cecile Richards, and Alicia Keys not only attended the march but also spoke at the rally, reinvigorating the audience with preachings of their visions of a better, more equal world for our children. The long crowd made its way to the White House and then beyond, inevitably spilling into streets not even planned for the march. Individuals really couldn't escape the crowd, much less ignore the message we were delivering. I chanted, "This is what democracy looks like" and "our bodies our rights" until my voice broke. Although I was often lost in the sea of people, pink hats, and handmade signs, I never felt drowned out or forgotten.

However, I am well aware of the shortcomings of the Women's March. In its effort to collectivize and brand itself, the march has inadvertently left out key players of the community. It has received backlash for the pink, cat-eared hats worn during the march, popularly labeled as the "p\*\*\* hats," as the vagina is not a fitting symbol for those who identify as female but don't have one. I personally saw that many disabled people struggled to enjoy the moment as much as others, their wheelchairs stuck in the same place as marchers carried on, disregarding them.

Some activists, notably Angela Peoples, took the opportunity to point out the distinct polarity between white women and black women that undoubtedly marked the 2016 election. In her viral photo, Peoples holds a sign that reads, "Don't forget: White women voted for Trump." Her stoic demeanor provides a stark contrast to the white women wearing the pink "p\*\*\*\* hats" whose attention on their phones and selfies epitomize the attitudinal divide between the two demographics. Many women of color contended that failure to address these disparities will make them invisible in the movement. Their views are valid: often times movements meant to elevate the rights of those more vulnerable to prejudice and discrimination prioritize the voices of women who are able-bodied, straight, white, and cisgendered. We should constantly make provisions for the diverse nature of women in the U.S. and around the world when advocating for our rights. If we normalize such conflicting behavior, we are thenexposed to our own hypocrisy.

The new administration needs to be reminded that the citizens they were sworn to dedicate their service to include people of all ethnicities, backgrounds, race, sexual orientation, religion, class, etc. Diversity is our strength. Women are our strength. Protect the rights of those who are most vulnerable. Don't be an a\*\*\*\*\*.









# Strange EST. 96

### Michelle Madlansacay | Staffwriter

Classy. Honest. Innovative. Those are the three words that best describe Carnegie Mellon's all-male, award-winning a cappella group, The Originals. Classy, because of each member's evident poise and charm; honest, because of the genuine passion and soul they bring to their songs; innovative, because their performances are for sure unlike anything you've ever seen or heard before. Getting to spend some time with them before their Thursday night rehearsal really helped me get to know the group better. Before my meeting with The Originals, I didn't know too much about them or the world of a cappella. I entered their rehearsal in McConomy Auditorium having absolutely no expectations.

While walking down the stairs of the auditorium, I was greeted right away with a friendly "hi" from one of the members, Leo Galvan. He seemed to be the only one in the room at the time. As I took a seat, a few more members of the group came from the side doors, laughing and talking with each other; I could already get a strong sense of their supportive and brotherly group dynamic. They all welcomed me, and they were very excited to promote their upcoming performance on Tuesday, Jan. 31 at 8 p.m., where they'll be opening for the hit a cappella group MIX.

MIX is a co-ed a cappella group from the University of Colorado Denver that has won many awards, including first place in the International Championship of Collegiate A Cappella (ICCA). They're currently touring around Pennsylvania on their PA Takeover Tour, and excitingly one of their stops is right here on campus in the Cohon Center's Rangos Ballroom. Galvan, a sophomore tenor in The Originals, commented on having the opportunity to open for such a successful group like MIX: "We've actually never opened for a professional a cappella group, and this is really an amazing opportunity to

talk and interact with and see people who do this for a living ... it'll actually be such an incredible experience and we're really excited to share it with the community." Sophomore JP Leigh, who does vocal percussion for the group, also talked a bit about how sharing the stage with MIX will benefit their work. "It's always good for us to see other a cappella groups to help us improve, because we'll maybe see something inspirational from them that we can put into our future performances. [That] goes along with watching and enjoying it, it's also an educational experience."

As more and more members of the group began to arrive for rehearsal, I started getting a much clearer picture of the family-like bond The Originals share with one another. There are eleven members in the group, all representing different grades, with two fifth-years, three juniors, three sophomores, and three first-years. The underclassmen look up to the upperclassmen, and they all treat each other like brothers. The group dynamic was one of the reasons why first-year Ben Stern, a baritone in the group, decided to join The Originals last semester. "They're really a great group of guys. We're all happy and it's like a family here." Already having a sense of The Originals' fun and friendly personalities, I couldn't wait to watch them rehearse a bit of their performance for Tuesday.

The group started off rehearsal with some vocal warm-ups. Now, this was my very first time ever seeing an a cappella group perform live, and I was honestly left speechless from just hearing The Originals practice harmonies. Once they began rehearsing two of their songs for Tuesday's performance, renditions of "Home Alone" by Ansel Elgort and "Closer" by The Chainsmokers, I actually wanted to start singing along with them. You could really feel the passion and energy they gave to their singing, and their stage presence really made it clear that each and every member loves what they're doing. For The

Originals, it's all about conveying passion, honesty, and getting a message across to their audience. Nitsan Shai, a Fifth Year Scholar and baritone in the group, talked more about the group's sound: "We really pride ourselves in performing very honestly. If there's a song that has a lot of meaning to us, we try to project that as much as we can emotionally in a performance." Earlier, the group had even recalled a recent performance in Atlanta, Georgia that "challenged gender and masculinity standards," where one of the members, sophomore baritone Ramsey Pack, dressed up in drag during a performance of Beyonce's "I Care". "It was a statement piece where everyone around us was represented, the masses that help out and support the LGBTQ community. We

"[Choreography] basically helps us tell the story, even beyond the song. What the song can't tell, we tell with our bodies." — Leo Galvan made that statement and after everyone came up to us and was like 'We really appreciated how honest you were in your performances,' Leo explained. "What we put out on stage is what comes from our hearts and what we really believe."

Besides their singing, another way in which the group is able to speak to their audiences is through their choreography. Leo elaborated on that by referring to another one of their songs they'll be performing on Tuesday, "Cellophane" by Sia: "For Cellophane, it actually tells the story of mental illness, so we have a lot of cage-like choreography moves. And basically it helps us tell the story, even beyond the song. What the song can't tell, we tell with our bodies." Unfortunately I was unable to see their choreography during rehearsal, but it definitely sounds like they'll be putting on a powerful performance.

It was an absolute pleasure getting to spend time with The Originals, and I have no doubt that the group and their audience will have an amazing time on Tuesday. It will surely be an experience like no other to watch a live a cappella performance, especially from two very talented groups. Tickets for the show are available online at *carnegiemellontickets.com* or at the door Tuesday night for ten dollars. It's an opportunity you won't want to miss.



## Take Ten: The Promise & Perils of Secular Music

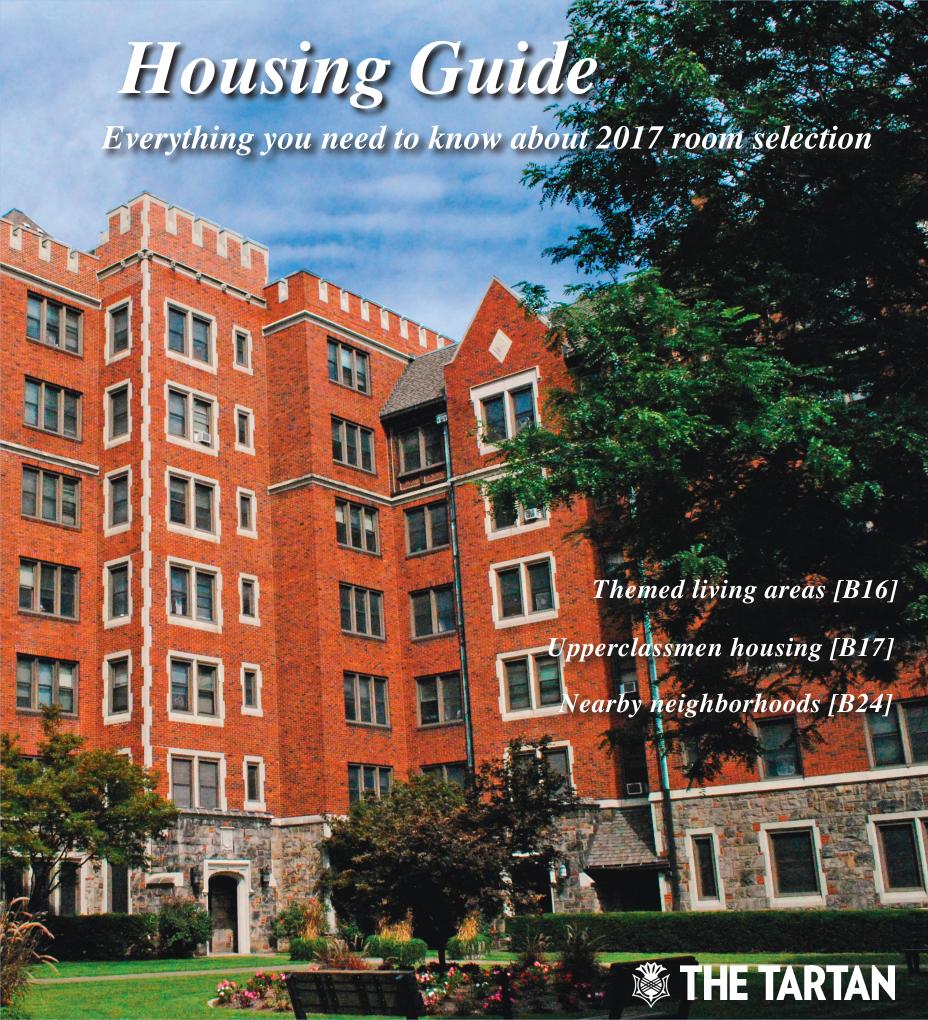
Courtesy of Steve Chab



Sidewalks of paranoid locals study me. A rough man grips a large, nearly empty bottle. I struggle to make eye contact. He lifts his vice and slurs, "D'ya know what this's for?" He throws it to the ground. Glass shrapnel pegs my shoes. He is now out of alcohol. I keep walking. Loiterers on the opposite side of the street blast peculiar music: Black Sabbath's "Nativity in Black." Recognizing the opening bassline, I stop. The street ends with a glass entrance. I open the doors to a colorfully dim binge where N.I.B. is inexplicably louder. I weave through the crowd as Lucifer sings his mantra: "please take my hand." A tall, gothic woman rushes towards me. Startled, I notice a second set of doors, but my putty hands are useless. My body becomes numb. The room spins, and I sink to the floor as the final guitar solo blares in full effect. Holding a syringe, the woman approaches me and coldly utters, "I don't know why you do this to yourself," as she injects me.

Editor's Note: "Take Ten" is a weekly column, where Pillbox features creative writing by students from the Carnegie Mellon community. If you are interested in having your work published in the coming weeks, email any submissions or queries to pillbox@thetartan.org.





# HOUSING GUIDE 2017



Above and page three: Clyde House, Carnegie Mellon's themed house touted as a global living-learning community. File photos by Braden Kelner

ARLE OF COL	NIENIS
13 Room Selection explained	Going through Room Selection for the first time? Read up on phases of the process and learn the terms used for different housing options.
14 Phase deadlines	Findoutwhat has changed for this year's Room Selection process. Also, choose which Room Selection phase is best for you.
15 Living on vs. off campus	If you're unsure about whether to live on or off campus next year, these guides and questions will help you decide.
16 Themed housing	If you're looking to learn more about Carnegie Mellon's themed living communities, look no further.
17 Upperclassmen housing	Getthescooponupperclassmenhousing options on campus, including building overviews, location information, and amenities.
23 Graduate housing	See which housing options are now available through the university for graduate students.
24 Nearby neighborhoods	Looking to move off campus? Use the seneighborhood reviews of housing, dining, shopping, and transport to help you make your decision.
25 Open house dates	Checkouttheseupcomingopenhousedatestovisitandtourthecampushouses

Locate your first choice on-campus housing option on this map, which details all a substitution of the contraction of the con26 Housingoptionsmap upperclassmen housing options, from Fairfax Apartments to Resnik House.

you are considering.

# Room selection explained

Terms and technicalities to guide you through the process

RoomSelectionoffersstudentsseveraloptions:roomretention,roomwitharetainer(alsoknownasa"pull-in"),blockhousing,general room selection, themed housing, RA/CA housing, gender-neutral housing, and open assignments.

MoststudentswillparticipateinoneofthreeRoomSelectionchoices:roomretention,roomwitharetainer,orgeneralroomselection. However,awidevarietyofhousingoptionsisavailabletoallstudents.RoomSelectionbeginsonFeb.22,soallstudentsreturningnext year should be actively thinking about their housing plans for the 2017–18 school year.

### Room retention

Room retention, the first phase, is for students planning to retain their current room for the next school year. Although there are some exceptions, room retention is available to most upperclass students, except those in themed housing, a first-year residence hall or apartment, or an RA/CA room. First-year students are not eligible to retain their rooms, regardless of their room location. Students considering room retention should remember that once they retain, they cannot change or cancel their housing assignment until the open cancellation period begins.

### Room with a retainer

Students retaining their rooms during the first phase are required to fill any vacancies in the room, suite, or apartment with "pull-ins." In order to be "pulled in" to a room, students must be eligible to participate in Room Selection and must not have already selected an assignment for the school year.

### Block housing

The block housing phase of room selection allows groups of students to select a "block" of rooms near each other in one of the applicable residence halls or apartments. Students electing to apply for block housing must identify a group representative who will be responsible for setting up their block housing group on the housing application and will remain the main contact point between the group and Housing Services.

### General room selection

General Room Selection is the final phase of Room Selection. During this phase, students eligible for housing who haven't participated in the preceding phases choose a room from the remaining spaces. Students planning to participate in general Room Selection must apply online. They are then given a random timeslot for Room Selection.

### Themed housing

Themed housing allows students to apply for housing centered around a certain interest or theme. Themed houses are detailed on page six of this guide.

### RA/CA housing

RA/CA housing is only available for those students holding an RA or CA position during the 2017–18 school year. These students will not be eligible to participate in Room Selection, and will instead be assigned a room through the application and selection process carried out by the Office of Student Life.

### Gender-neutral housing

Gender-neutral housing, available in the Oakland Community Apartments, permits upperclass residents of different genders to reside in the same room. There will also be a gender-inclusive housing-themed living community in Morewood Gardens.

### Open assignments

Due to fluctuating availability in room assignments, some students are given an open assignment. This means that while they are guaranteed a room for the 2017–18 academic year, they will not immediately know where that room will be located, or what style of room they will be assigned. After receiving an open assignment, students wait until they receive an offer for a room for the upcoming year. After receiving their offer, they can decline the offer and cancel their housing agreement within three days without penalty, even if the offer was made after the open cancellation period ends.

For more details about the Room Selection process, visit www.cmu.edu/housing/roomselection.



### Phase deadlines and other information

What's new for 2017 Room Selection and selection phases

### Housing Cancellation Fee to replace current Housing Reservation Fee

Starting with the 2017-2018 academic year, the current \$400 Housing Reservation Fee will be replaced with a Housing Cancellation Fee, which will only be assessed to those residents who are canceling their housing contracts. All housing cancellations made after the April 7, 2017, Open Cancellation deadline will only be granted if the student is leaving the university for an approved reason (leave of absence, withdrawing, studying abroad, academic or financial suspension, part-time status, etc.) and will be subject to the Housing Cancellation Fee. The Housing Cancellation Fee will be \$400 for students who cancel for or during the fall semester or full academic year, and \$200 for students who cancel for the spring semester only. Seniors who are graduating in December and exchange students who will only be here for the fall semester should be especially mindful of this cancellation fee, since

failure to pay it in a timely manner may delay release of your transcripts.

### Block Housing Leader Responsibilities and Building Options

Beginning with the 2017-2018 academic year, the Block Housing Group Leader will have the added responsibility of being the liaison between their group with RA, CA, and Housefellow staff. Should there be any issues with members of your group during the year, house staff will contact the Block Leader to address those concerns and the Block Leader is expected to be responsive to this type of outreach. Morewood Gardens will continue to be an option for groups of six to 12 residents applying for Block Housing, in addition to Fairfax, Webster, and Shady Oak Apartments. Additionally, there will be two 6-occupant block options in Neville Apartments, one 8-occupant block option in Margaret Morrison Apartments, and one 8-occupant block option in Resnik House.

# ROOM SELECTION 2017: FIND YOUR PLACE!

### SELECT THE PHASE THAT'S BEST FOR YOU

Students eligible for Room Selection should select the phase that best fits their housing needs and then follow the steps below.

### THEMED LIVING

I want to live in Clyde, Henderson, Spirit, gender inclusive, or pet-friendly housing, or in the Upper-class BXA community.

Apply via The Bridge by February 12.

### RETAIN YOUR ROOM

I want to stay in my current room and building.

### Retain your room by February 24 at noon via the Housing

Portal\*.

You may also opt for an Open Assignment (when rooms open up during the cancellation period) or participate in Extended Selection (when you don't need to fill a room with roommates).

### \*Housing Portal becomes available Feb. 22.

MORE INFO AT CMU.EDU/HOUSING/ROOMSELECTION.

Ouestions? Contact rmassign@andrew.cmu.edu or 412-268-2139.

### PULL-IN A ROOMMATE

I need a roommate for my retained room or I need pulled into another room.

Attend a pull-in mtg: Feb. 24 (2-6 pm) or Feb. 27 (2-5 pm) in the Res on 5th.

> Block Leader attends the assigned Block appointment on March 1 or 2 in the Res on 5th.

### **BLOCK** HOUSING

I want to move to a residence hall or an apartment with a group (6-12 people).

Apply for Block Housing by Feb. 27 at noon via the Housing Portal\*.

Apply for General Room Selection by March 3 at noon via

the Housing Portal\*.

GEN. ROOM

SELECTION

I want to live

on campus

and select my

room based on

available

spaces.

Select your room **ONLINE** during your assigned time slot:

March 6, 7, or 8.

Carnegie Mellon University

**Housing Services** 

Courtesy of Housing Services

**14** Housing Guide

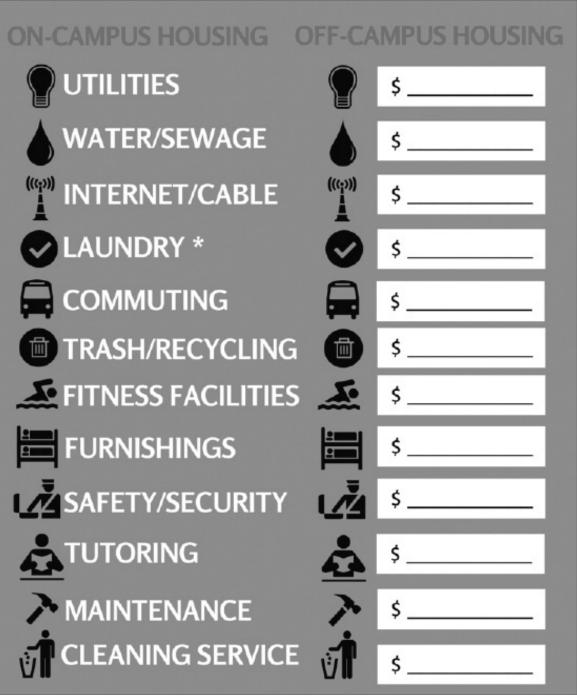
# Living on campus vs. living off campus

Questions to ask and tools to help you decide

Deciding whether or not you want to live on campus next year can be a tough decision. Both on-campus and off-campus living have their appeals, and the right option will almost definitely come down to each individual's unique living needs.

Use the chart below to determine the costs of living off campus versus living on campus. The column on the left shows what is included in on-campus housing. Ask prospective landlords the cost of each of these items listed below and fill in the dollar amount next to the appropriate icon. For items or services that you do not believe are applicable to you, write 0 in the blank. Total all costs and compare to the cost of living on campus as you make your decision for next year. Chart provided by Housing Services.

If you do choose to live off campus next year, Carnegie Mellon's off-campus website is a good resource: https://offcampus.housing.cmu.edu/



### Questions to ask when deciding where to live:

If you are considering moving off campus, be sure to ask these questions, provided by Housing Services, before you sign a lease:

### Rent and Additional Costs

Is there an application or holding fee? If yes, what is the cost?

What utilities are included in the rent?

How much is the security deposit?

When is the rent due?

### Leases

In case you plan to study abroad for part of the school year or summer, are variable lease options available (six, nine, or 12 months)?

Is individual lease liability offered?

How many people is this unit legally zoned for? In the city of Pittsburgh, it is illegal for more than three unrelated individuals to live together in a residential dwelling.

Do you have a rental license on file with the city of Oakland?

Will I be able to sublet my unit in the summer or for study abroad?

### Repairs and Maintenance

Will any repairs be made to the unit prior to move in? How quickly do you make repairs when there is a work request or maintenance issue?

Do you take before and after pictures to help guarantee I get my security deposit back?

### Amenities

What type of security does the building offer?

What type of parking is offered?

What appliances are provided, and how old are they?

Who is responsible for yard maintenance and snow removal?

# HOUSING GUIDE THEMED HOUSING



### **CLYDE HOUSE**

Location: On Clyde Street, across from Shady Oak Apartments Styles of housing: Efficiency (two- or three-student) apartments

Size: 24 residents

Other amenities: Fitness equipment, TV room, community kitchen, laundry facilities,

and lounges on multiple floors.

Clyde House is touted as the university's "global living-learning community." For students who have intercultural interests and want to discuss global citizenry, this is the right house. As an added bonus, the facilities are some of the nicest on campus.

### GENDER INCLUSIVE HOUSE

Location: Within Morewood Gardens

Styles of housing: Prime doubles, prime triples

Other amenities: TV room, quiet study lounge, computer cluster, workout facility, recreation room, makerspace, and two laundry facilities in the basement.

As part of an initiative to make on-campus housing safe, inclusive, and welcoming for all students, Housing Services created the Gender Inclusive House (GIH) to allow any student to live in the same room with any other student regardless of sex, biological gender, gender identity, gender expression, or sexual orientation. GIH is a voluntary option open to any upperclass student eligible for campus housing, and any first-year student, but is specifically designed for students who are LGBTQ, non-binary, exploring gender identities, or allies.





### PET-FRIENDLY HOUSING

Location: Doherty Apartments Tower A

Styles of housing: Triples

Other amenities: Kitchens in each apartment. Study and TV lounges, recreation room, and exercise and laundry facilities.

As part of a pilot program developed by a Carnegie Mellon fifth-year senior, pet-friendly housing will be available in Doherty apartments Tower A (triples). Pet-friendly housing is open to all upperclass students who are eligible to live in campus housing who would like to have their own family pet living on campus with them or who will not be bringing their own pet, but would like to live in a pet-friendly environment. One one pet is allowed per apartment. Dogs and cats under 50 pounds that have been a pet of the student for at least six months are eligible to apply.

# MOREWOOD GARDENS

Location: On the corner of Forbes and Morewood avenues

Styles of housing: Standard singles, prime singles, prime doubles, prime triples

Size: 443 residents; some first-year students

Other amenities: TV room, quiet study lounge, computer cluster, workout facility, recreation room, makerspace, and two laundry facilities in the basement. Kitchens on the second, fourth and sixth floors. Lounges on every floor.

Close to campus, above The Underground, and equipped with a cluster, this dorm is one you'll never have to leave. Lounges can be a gift for social students, but a pain for those who want quiet. Rooms are hit or miss, so check them out before locking in your choice. Morewood Gardens will include a gender inclusive-themed living community for the 2017–

18 academic year.





### **WELCH HOUSE**

Location: On the "Hill," behind first-year Scobell House Styles of housing: Prime singles and prime doubles

Size: 56 residents

Other amenities: TV and study lounges on the building's ground level, along with a kitchen, laundry facilities, and recreation room.

The most important thing to know about this house is that it has a 24-hour quiet rule. This rule means that the dorm has a different atmosphere than other dorms. Students tend to keep to themselves, but you won't be distracted by noise.

## McGILL HOUSE

Location: On the "Hill," across from Boss, in front of Hamerschlag

Styles of housing: Prime singles and prime doubles

Size: 72 residents; open to first-year students too; all female

Other amenities: One kitchen and lounge on each floor, as well as a main lounge with a

study lounge on the first floor. Laundry facilities.

McGill House is an all-female dorm with rooms arranged in suites. Rooms are small and many residents loft their beds, but semi-private bathrooms are a plus. The dorm is close to a number of eateries, including Carnegie Mellon Café and nearby food trucks.



### **WEST WING**

Location: Adjacent to Gesling Stadium, next to the University Center Styles of housing: Prime single, prime double, suite single, suite double

Size: 108 residents

Other amenities: Kitchens on some floors. Lounges on each floor. Laundry facilities, television room, recreation room, and computer cluster. Mindfulness Room on the ground floor.

West Wing is primarily made up of suites with two doubles and a single, along with a common bathroom and suite lounge. There are some prime singles and doubles. West Wing is popular because it is suite-style and in the center of campus.

### RESNIK HOUSE

Location: Next to West Wing

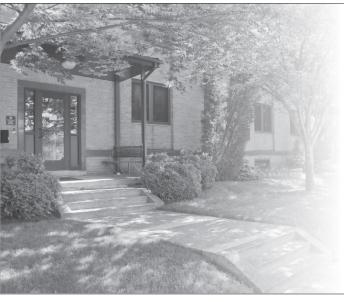
Styles of housing: Prime singles, prime doubles, suite singles, suite doubles

Size: 150 residents

Other amenities: Kitchens on some floors. Lounges on each floor. Laundry facilities, television room, recreation room, and computer cluster close by in West Wing.

Like West Wing, Resnik House primarily has suites with two doubles and a single. The suites have a common bathroom and lounge. Some prime singles and doubles exist. Don't need to travel far for food. The Carnegie Mellon Café is on the first floor. The Upperclass BXA themed living community will be located in the Resnik 580 suite.





### DOHERTY APARTMENTS

Location: Across the street from the East Campus Garage

Styles of housing: Efficiency (two-person) and one-bedroom (three-person) apartments, a five-person apartment in the basement

Size: 152 residents

Other amenities: Kitchens in each apartment. Study and TV lounges, recreation room, and exercise and laundry facilities.

Doherty is close to campus and only a few minutes away from most classes. The apartments are divided into four separate towers with their own RAs. The rooms can be small, but are bigger than first-year dorms. CMU EMS resides in the basement. Pet-friendly housing will be available in Doherty Apartments Tower A (triples).

### WEBSTER HALL APTS.

Location: On the corner of Fifth Avenue and North Dithridge Street

Styles of housing: One-bedroom (two-person), and two-bedroom (three-person)

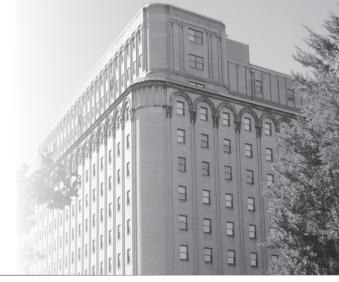
apartments

Size: 256 residents

Other amenities: TV room, quiet study lounge, workout facility, recreation room, and two

laundry faclities.

Webster Hall Apartments is far from campus, but has some of the nicest living arrangements, with furnished living rooms, kitchens, and bathrooms. There's a deli in the building, and laundry rooms on each floor. Rooms are expensive compared to other university options.





### FAIRFAX APARTMENTS

Location: On Fifth Avenue, close to South Craig Street

Styles of housing: Efficiency (two-person), one-bedroom (two-person), and

two-bedroom (three-person) apartments

Size: 355 residents

Other amenities: Workout room, laundry facilities, recreation room.

Like Webster, each apartment in Fairfax has a bathroom and kitchen, and they are some of the nicest offered by the university. This building hosts a number of non-college students and is a great transition from college life. Like in Webster, rooms here are expensive.

### SHADY OAK APARTMENTS

Location: On Clyde Street, close to Clyde House

Styles of housing: Efficiency (two-student) apartments, as well as two- and

three-bedroom (three-student) apartments

Size: 79 residents

Other amenities: Fitness room, laundry facilities, TV room, and lounge with couches and

a TV. Street parking available on Clyde Street.

Each apartment in Shady Oak has a full kitchen with a dishwasher. The layouts vary greatly from apartment to apartment, with some having single bedrooms and no common living space, others having shared bedrooms with spacious living rooms, and others having a combination of the two.



### WOODLAWN APARTMENTS

Location: On the corner of Forbes Avenue and Margaret Morrison Street Styles of housing: One-bedroom (three-student), two-bedroom (three- or four-student), and four-bedroom (seven-student) apartments

Size: 33 residents

Other amenities: Laundry facilities. The Frame gallery is on the first floor facing Forbes Avenue.

These apartments, close to campus, have kitchens, living rooms, and plenty of space. The bathrooms are also newly renovated, and feature heated towel warmers. The Frame gallery always has something quirky going on.

### ROSELAWN HOUSES

Location: Off Margaret Morrison Street, next to the Margaret Morrison Apartments

Styles of housing: Five-person houses (one single, two doubles)

Size: 60 residents

Other amenities: Living rooms and kitchens in each house.

Residents in Roselawn have access to a large living room, but small bedrooms. Laundry is laundromat-style, and students have access to Margaret Morrison's lounge and exercise room. Roselawn Apartments, as well as Spirit House, are the only house-style living options offered by the university.





### SPIRIT HOUSE

Location: Off Margaret Morrison Street, next to the Roselawn Houses

Styles of housing: House singles, doubles

Size: 6 residents

Other amenities: The building has a spacious TV and recreation lounge, as well as laundry facilities. Students have access to the Margaret Morrison plaza fitness facility and study lounge.

Spirit House is open to students who are a part of SPIRIT, a student organization dedicated to promoting African-American awareness on campus. There is a separate application process to live in Spirit House via the Bridge.

### MARGARET MORRISON APTS.

Location: On Margaret Morrison Street, across from the food trucks Styles of housing: Two-bedroom (four-student), four-bedroom (eight-student)

Size: 112 residents

Other amenities: A shared fitness room, lounge, and laundry facilities.

With lounges and kitchens in each two-story apartment, these living areas are some of the largest on campus. They offer a sense of freedom from the traditional dorm, but are so close to everything on campus that you never have to worry about being late.





### GREEK QUADRANGLE/APTS.

Location: Across the street from the University Center, on Morewood Avenue; apartments are next to McGill House on Margaret Morrison Street

Styles of housing: Mostly doubles, a few singles and triples

Size: Number of residents varies by year and house

Other amenities: A community of students in your fraternity or sorority. Kitchens and large living rooms with study areas and recreation rooms.

Want to be surrounded by the brothers and sisters of your Greek organization? Then Greek housing is for you. These are some of the nicest places to live on campus, with large shared living spaces, but standard dorm-like rooms. Greek houses can get loud when members come to visit, but offer a tight-knit community of close friends. This year, students currently living in Greek houses have the option to participate in room selection.



### **NEVILLE APARTMENTS**

Location: On the corner of Fifth Avenue and Neville Street

Styles of housing: 5 to 6 person apartments with single and double rooms

Size: 22 residents

Other amenities: Kitchen and living room in each apartment. Common basement space.

Each apartment in this complex contains two bathrooms and two kitchens, perfect for a vegetarian kitchen separate from a meat-lover's kitchen. Living rooms are decently sized, and there are also separate dining areas or, if you want, second living rooms. Laundry is in the basement, which is only accessible by traveling outside. It's not too far from campus, but not too close, either. As an added bonus, Craig Street is nearby.

### THE HIGHLANDS

Location: Next to Clyde House, across the street from Shady Oak Apartments Styles of housing: 32 singles and 1 double

Size: 34

Other amenities: The university's newest building, includes bike storage and air conditioning.

Nestled in the small but growing cluster of housing including the Shady Oak Apartments and Clyde House, The Highlands is a bit of a walk from campus, but has amenities to make up for it. The building is almost completely single rooms, which is great if you want to live alone, but still be part of campus housing. The building includes laundry facilities, air conditioning, bike storage, and a study/community lounge.



# HOUSING GUIDE FOR GRADUATE STUDENTS

### SHIRLEY APARTMENTS

Location: North Dithridge Street, next to Webster Hall Styles of housing: One-bedroom (two-student) apartments

Size: 41 residents

Other amenities: TV room, lounge, and laundry facilities.

Shirley Apartments has a floor plan similar to Webster's floor plan. Each apartment has a bedroom, a living area, and a kitchen. Shirley is, admittedly, the farthest university arrangements from campus, but it's not much farther than Webster or Fairfax, and it's so close to Craig Street that you'll never go hungry. The bedrooms in Shirley Apartments are air conditioned, which is always a plus in the hotter months at the beginning and end of the academic year.



# HOUSING GUIDE NEARBY NEIGHBORHOODS & GUIDE

### SHADYSIDE

Shadyside is home to upperclassmen from Carnegie Mellon and the University of Pittsburgh, graduate students, and young working professionals. Accessible by bus, it tends to be slightly pricier than Oakland or Squirrel Hill; however, it is the most charming of the areas surrounding campus, with its tree-lined streets and boutiques. The neighborhood is best known for two things: shops and bars. Walnut Street is lined with a wide variety of shops, and cozy restaurants like Mercurio's and The Yard Gastropub are interspersed among the shops.

While the area near Shadyside's bars can be particularly loud from Thursday to Sunday, Shadyside is generally a very relaxed, quiet area. The young professionals and the college students who live there are diverse — from artists to technical majors to medical students. Shadyside is a great area for anyone looking for either an escape from campus or a popular shopping and nightlife experience.





### **SQUIRREL HILL**

Squirrel Hill starts just up the big hill on Forbes Avenue. It is either a 20-minute walk or a three-minute bus ride from campus, and the buses are very frequent. The cost of living in Squirrel Hill is higher than in Oakland, but lower than in Shadyside. In addition to housing upperclass students from Carnegie Mellon, Squirrel Hill is also home to faculty and Pittsburgh families not associated with the university. Squirrel Hill has a diversity of restaurants, from Thai food at Silk Elephant to breakfast at the original Pamela's Diner. The restaurants are dispersed among small shops, including those on the main thoroughfare of Forbes Avenue.

It is not a college neighborhood like Oakland and Shadyside, and it does not have a prominent bar scene. It does have a residential atmosphere, however, that the other two areas lack. For someone looking for a short ride or walk from campus with all the necessities within walking distance and a wide variety of cuisines, Squirrel Hill may be the right place to look for a home to rent.

### OAKLAND

Just a 10-to-15-minute walk (or five-minute bus ride) from campus lies Oakland, the home of late-night food, University of Pittsburgh pride, and a population made up almost entirely of college students.

Oakland is home to some of Carnegie Mellon students' favorite restaurants, including Conflict Kitchen, Chipotle, Fuel and Fuddle, and The Porch. For students over 21, Oakland has a solid group of late-night destinations, such as Hemingway's, Mad Mex, and a liquor store with an extensive selection. Another benefit of Oakland is the availability of affordable housing close to campus. Oakland Avenue and Atwood Street are lined with housing for both Carnegie Mellon and University of Pittsburgh students.

Most people living here are always up for fun; if you're looking for a quiet neighborhood, Oakland may not be your cup of tea. Oakland should be noted for its lively atmosphere and is ideal for anyone looking for college-oriented surroundings.



# Choosing the right place: open house dates

When to tour the on-campus options on your 'Top 5' list

Below are a number of open houses and information sessions offered by Housing Services to help you make your choice next year. This year, open houses are grouped by area of campus and neighborhood, and are designed for you to see the buildings you might want to live in.

Info sessions will take place in residence halls around campus based on the schedule below. During information sessions, students can ask Housing Services staff questions about the room selection process and campus housing in general.

### Open House Dates

### Central Campus:

Morewood Gardens, West Wing/Resnik, and Doherty Apartments

Wednesday, Feb. 8, 7-8:30 p.m.

Dining Services will be hosting a soup crawl during this first

Room Selection open house!

### The Intersection and The Hill:

Margaret Morrison Apartments, Roselawn, Woodlawn Apartments, Welch House, Henderson House, and McGill House

Tuesday, Feb. 14, 7-8:30 p.m.

### Dakland:

Fairfax Apartments, Webster Hall Apartments, Shady Oak Apartments, Neville, The Highlands, and Clyde House

Wednesday, Feb. 15, 7–9 p.m.

### Info. Session Dates

Wednesday, Feb. 1, 4:30-6 p.m. Morewood E-Tower Thursday, Feb. 2, 4:30-6 p.m. Residence on Fifth Monday, Feb. 6, 4:30-6 p.m. Boss Tuesday, Feb. 7, 4:30-6 p.m. Stever Thursday, Feb. 9, 4:30-6 p.m. McGill Monday, Feb. 13, 4:30-6 p.m. Morewood Gardens Thursday, Feb. 16, 4:30-6 p.m. Mudge Monday, Feb. 20, 4:30-6 p.m. Donner Tuesday, Feb. 21, 4:30-6 p.m. Hamerschlag Wednesday, Feb. 22, 4:30-6 p.m. Shirley

For more details about open house dates and information sessions, visit <a href="http://www.cmu.edu/housing/roomselection/timeline/index.html">http://www.cmu.edu/housing/roomselection/timeline/index.html</a>.



# Housing Map 2017



- 1 Greek Quad
- 2 Clyde House
- 3 Doherty Apts.
- 4 Sustainability House
- 5 Fairfax Apts.
- 6 Spirit House
- 7 Henderson House

- 8 Margaret Morrison Apts.
- 9 McGill House
- 10 Morewood Gardens
- 11 Neville Apts.
- 12 Roselawn Houses
- 13 Resnik House
- 14 Shady Oak Apts.

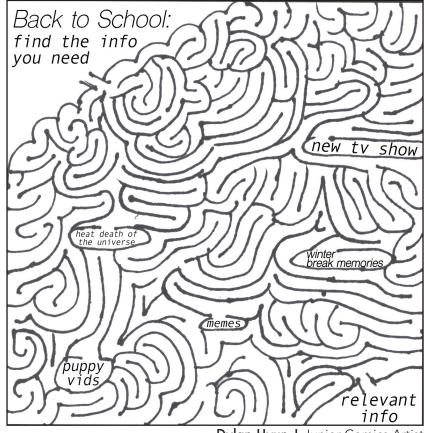
- 15 Shirley Apts.
- 6 Webster Apts.
- 17 Welch House
- 18 West Wing
- 19 Woodlawn Apts.
- 20 The Highlands

### sudoku

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

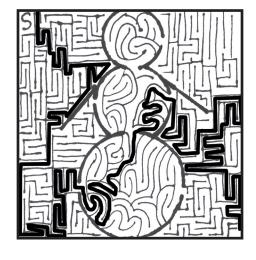
sudoku courtesy of www.krazydad.com

### maze



Dylan Hyun | Junior Comics Artist

### Solutions from Dec. 5



# New Year's Resolutions by xkcd



AS MY EMAIL BACKLOG APPROACHES 10 YEARS, I'M STARTING TO HAVE DOUBTS ABOUT MY APPROACH.

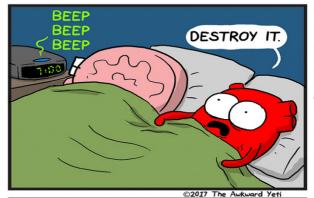
xkcd@gmail.com

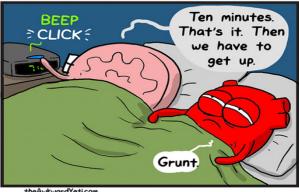
xkcd.com

### Dinner by Brian Gordon



fowllanguage.com







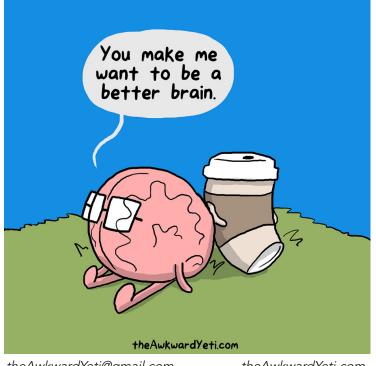


Alarm Clock by Nick Seluk

theAwkwardYeti@gmail.com

theAwkwardYeti.com

H+B2: Coffee by Nick Seluk



theAwkwardYeti@gmail.com

theAwkwardYeti.com

### horoscopes: the signs for the Lunar New Year

### **Aries**

You will enjoy successful and happy events.

### Taurus

april 20-may 20

march 21-april 19

You will experience unforeseen and exciting events this year.

### Gemini

may 21-june 20

This year, devoted friends will come to your aid when you least expect it.

### Cancer

june 21-july 19

If good news is what you need this year, you'll get it!

### Leo

july 20-aug. 22

This is your year to stand out and shine, Leo.

### Virgo

aug. 23-sept. 20

Change is coming, and you've got it covered.

### Libra

sept. 21-oct.19

Prepare to work hard this year and to have great experiences to balance that out.

### **Scorpio**

oct. 20-nov. 20

Your romantic life will take a new turn.

### **Sagittarius**

nov. 21-dec. 20

You'll receive a lot of support from those who care about you this year.

### Capricorn

dec. 21-jan. 19

Difficulties may arise, but you are strong and confident and can handle them.

### **Aquarius**

jan. 20-feb. 20

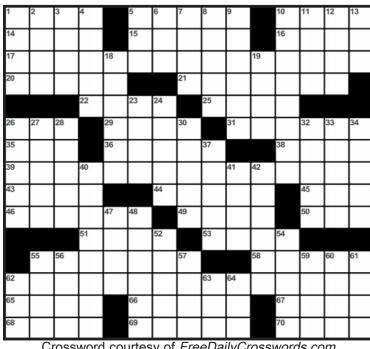
This year will be a busy one, but you have the patience for it.

### **Pisces**

feb. 21-march 20

Unexpected reunions are up your alley this year.

### crossword



Crossword courtesy of FreeDailyCrosswords.com

### across

- 1. High-fives
- 6. Bounce back
- 10. The \_\_\_ the limit! 14. French textile city
- 15. Hgt.
- 16. Gator's cousin
- 17. Bury 18. Infrequent
- 19. Verdi heroine
- 20. Preserve
- 22. Wheel 24. Story
- 25. Normally
- 26. Most reasonable
- 29. French summers
- 30. Cockney greeting 31. Concerned with childbirth
- 37. Doughnut-shaped surface
- 39. End for Siam
- 40. Turkish palace 41. Secondary
- 44. Franklin D.'s mother
- 45. Lethargic
- 46. Regard
- 48. Marsh gas
- 52. Organization to promote theater
- 53. In danger
- 54. Engrossed
- 58. Storage shelter 59. Canadian gas brand
- 61. Alamogordo's county
- 62. Golf's Ballesteros
- 63. Age unit
- 64. Bottled spirit
- 65. Greek goddess of strife
- 66. Transmitted
- 67. Perfect places

### down

- 1. Meager
- 2. Director Wertmuller
- 3. Prefix with meter
- 4. Abundant
- 5 Some mattresses
- Causing goose bumps
   Scottish social unit
- 8. Not him
- 9. Supervise 10. Milan's La
- 11. Shrimplike crustaceans
- 12. Warble
- 13. Fearsome
- 21. Choir member
- 23. Boots
- 25. Say26. Tennis matches are divided into these
- 27. Baseball family name
- 28. Workers' rights org.
- 29. Blue book filler 32. Light grayish brown
- 33. Turned over again
- 34. Dies
- 35. Part of TLC
- 36. Former name of Thailand
- 38. Eliot's Marner
- 42. Asses 43. Hankerings
- 47. Straight man
- 48. Pool stroke 49. Early anesthetic
- 50. Rome's Fontana di \_
- 51. Conceals 52. Scrub (a mission)
- 54. Slippery \_\_\_ eel
- 55. Nota \_
- 56. "\_\_\_\_ Brockovich" 57. Female rabbits
- 60. Spot

### all week

01.30.17-02.04.17

Oakland Restaurant Week Jan. 30-Feb. 4 Oakland, Pittsburgh, PA

Ever wanted to try out new restaurants in Oakland, without worrying about your budget? This week, you'll be able to enjoy \$6 lunches at participating restaurants, throughout Oakland. The list of participants boasts 17 locations and the opportunity for restaurant goers to win free lunch for a month and many other exciting prizes.

For a full list of restaurants visit: onlyinoakland.org/events/oakland-restaurant-week-january-2017/

### monday

01.30.17

ASL/Sign Language at Hollywood Lanes Hollywood Lanes

2961 W Liberty Ave, Pittsburgh, PA 15216

Pittsburgh's local "ASL Masters" Richard Mcgann, Frank Sankey and Maryjean Shahen, will be at Hollywood Lanes every week, starting this Monday, to facilitate a unique combination of sign language and bowling. Pay a flat rate of \$17 for two hours of bowling (including shoes), and access to an open bar.

### tuesday

01.31.17

PA Takeover Tour: MIX ft. The Originals

8 p.m.-9 p.m. Rangos Ballroom, Cohon Center Tickets Available for \$10 at: https://carnegiemellontickets. universitytickets.com/w/event. aspx?id=1501&cid=160&p=1

The incredibly harmonious a cappella group MIX, hailing from Denver, Colorado, is "taking over" Pennsylvania, and stopping by Rangos Ballroom on the way. This Tuesday, MIX will be showcasing their voices, with one of Carnegie Mellon's very own a cappella groups: The Originals. Grab your tickets before they sell out!

Ms. Lauryn Hill 8 p.m.-11 p.m.

Heinz Hall for the Performing Arts 600 Penn Ave, Pittsburgh, PA 15222

Tickets Available starting at \$49.50 at: www.pittsburghsymphony.org/production/51091/ms-lauryn-hill

The Grammy-winning powerhouse performer is gracing the stage of Heinz Hall this Tuesday as a part of her MLH Caravan Tour. Hill is using this tour to reach back to her African roots and is promoting themes of unity, expression, and empowerment through her music.

### wednesday

02.01.17

The Power and the Soul: Artist and Curator Talks Wednesday, Feb. 1, 9 p.m. The Frame Gallery 5200 Forbes Avenue, Pittsburgh, PA 15213

The Power and the Soul is a multiartist collaborative exhibition that has been on display at The Frame since Jan. 27 as a part of MLK weekend. To complement themes including diversity and social justice, and the implications of expressing these themes through the art on display, artists from the exhibition will be there to talk through the work, and facilitate stimulating discussions. Another discussion will be held on Saturday, Feb. 4 at 2 p.m.

### thursday

02.02.17

Modern Mindfulness

6 p.m.-7:30 p.m.
Carnegie Museum of Art
4400 Forbes Ave, Pittsburgh, PA
15213
Free Tickets Available at:
tickets.carnegiemuseums.org/cmoa/
CMASE\_CMASE\_AMINDFUL22

Author Rohan Gunatillake and Dr. Lanie Francis of UPMC will be facilitating discussions about mindfulness, this Thursday at the Carnegie Museum of Art. Gunatillake, an app developer and advocate of meditation, will be talking about the importance of the practice, while Francis will be sharing the importance of mindfulness in oncological care. The event will be followed by a book signing.

### friday

02.03.17

Lohri Bonfire
6 p.m.-8 p.m.
Stever House
1030 Morewood Avenue

Come relieve the winter chills with a warm bonfire behind Stever House this Friday, as OM celebrates Lohri, a Punjabi folk festival. Food will be plentiful, including Indian treats and snacks that can be toasted and enjoyed. The winners of OM's Pics with Punjabis contest will also be announced. To partipicate in the contest, check out: www.facebook.com/events/772347912920819/

### sunday

02.04.17

Mind Body Spirit Summit 11:30 a.m.–2:30 p.m. Cohon Center, 5000 Forbes Avenue Free tickets at: https://goo.gl/ forms/sfbomXlmm4tZZI8B3

As campus culture is taking a shift towards the mindful, CMU Fit, CaPS, Dining Services, Health Promotions, and the College of Fine Arts are bringing Carnegie Mellon's first Mind Body Spirit summit to campus. A huge variety of wellness activities will be available to participants throughout the day. Register by Feb. 3 to secure your spot! A full schedule of events can be found at: www.facebook.com/events/984963054939175/permalink/985024711599676/





# Hack-A-Song

On Saturday, Jan. 21, teams of 3–5 musicians from all around campus gathered together to write, arrange and perform original music in one day, as a part of Hack-A-Song. The original music performed was varied and innovative, with songs blending elements of rock, punk, folk, hip-hop, and trance in interesting ways.

Photos by **Theodore Teichman** | Visual Editor Design by **Abhishek Tayal** | Layout Manager





