

# THE TARTAN

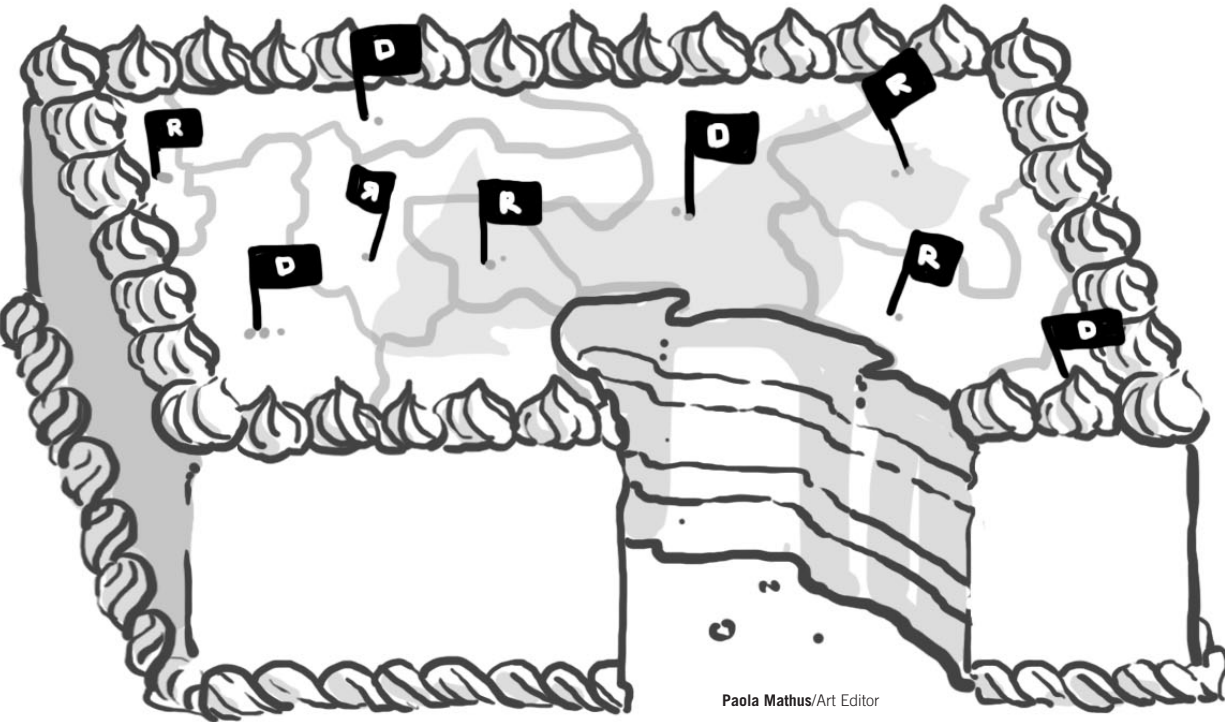
Carnegie Mellon's student newspaper since 1906



thetartan.org  
@thetartan  
The Tartan

November 20, 2017  
Volume 112, Issue 11

## Carnegie Mellon researchers combat partisan gerrymandering



Paola Mathus/Art Editor

EVANGELINE LIU  
Staffwriter

In the United States, as one of the first countries founded on the basis of democratically electing government officials, the practice of gerrymandering, defined as drawing election districts in a way that favors one political party over another, is almost as old as the country itself, starting with some of the first elections in this country. In 1788, Patrick Henry and his Anti-Federalist allies tried to draw districts in such a way to keep James Madison out of the U.S. House of Representatives, although they were unsuccessful.

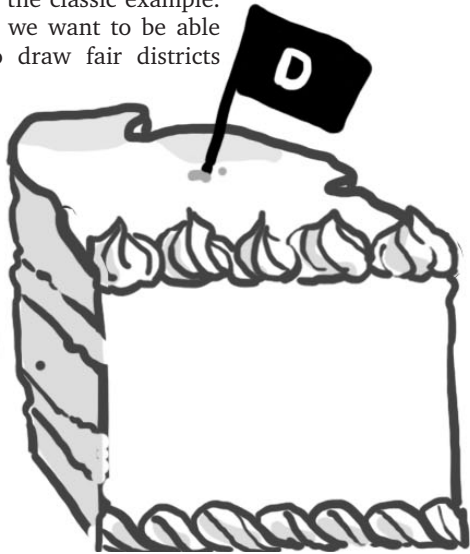
More recently, the GOP has increasingly been criticized for using sophisticated algorithms to draw districts in such a way that heavily favors their own party, using methods such as packing minority voters (who tend to vote Democratic) in as few districts as possible, or splitting opponents' voters into as many districts as possible so the opponents are in the minority. Currently, the Supreme Court is in the midst of a case related to Wisconsin's redistricting practices that some have criticized as unconstitutional. In order to alleviate this problem, some states have hired independent

commissions to draw districts. But Carnegie Mellon researchers see another solution without involving independent commissions. Ariel Proccacia, associate professor of computer science, and Wesley Pegden, associate professor of mathematics, recently submitted a paper detailing an algorithm using computational social choice theory to ensure fair division, research that was supported by the National Science Foundation, the Sloan Foundation and the Office of Naval Research, according to a university press release. The algorithm can be thought of as an extension of

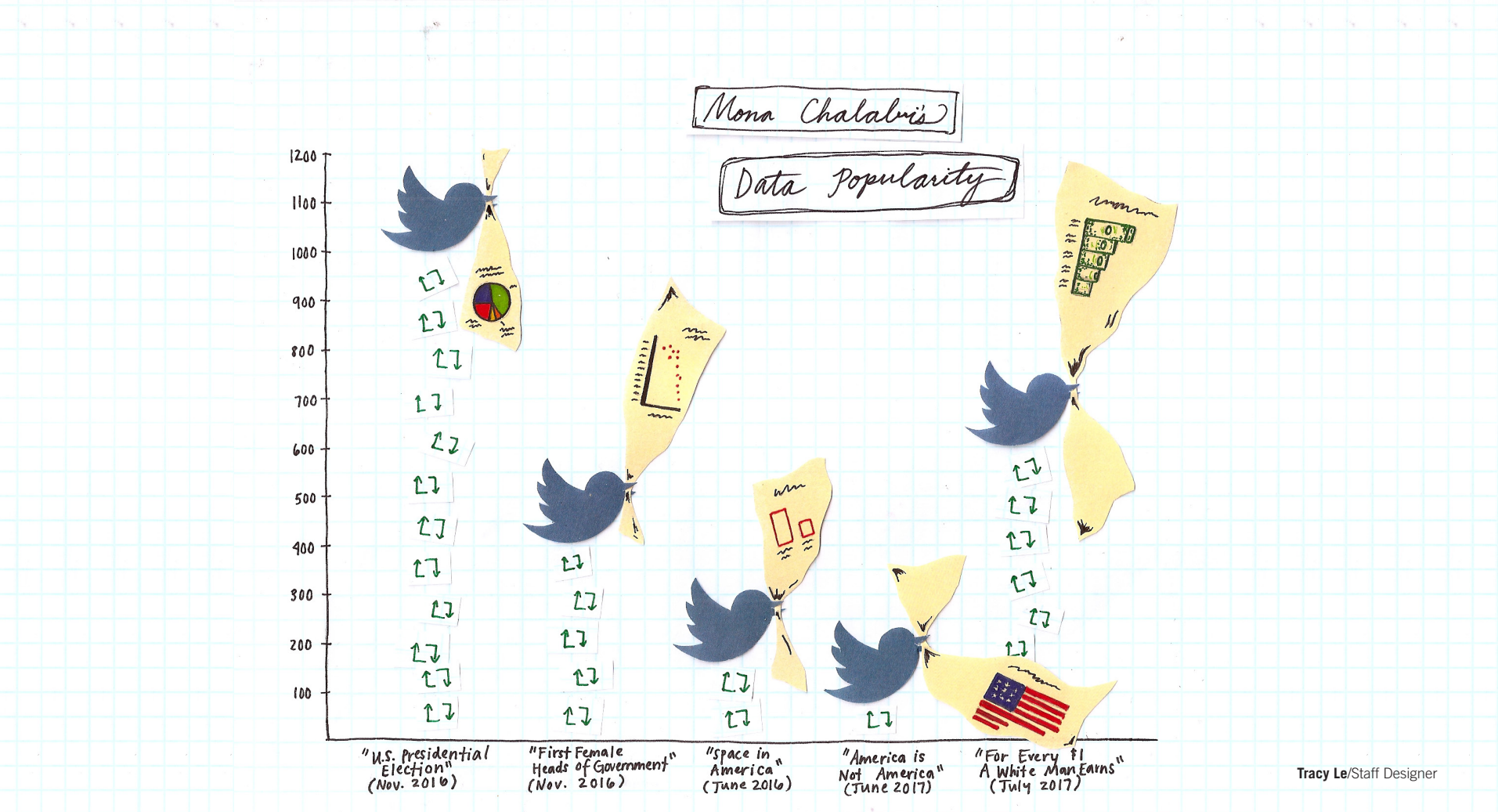
the method children use to divide a cake into two — one child cuts the cake in half while the other child takes his or her preferred piece, reducing envy. Applied to gerrymandering, the algorithm would entail having one party divide up the districts, then having the other party choose one district to “freeze” — or finalize so that no one can subsequently change it — and re-mapping the remaining districts according to its preferences, and so on until all the districts are “frozen”. In their paper, Proccacia, Pegden, and Dingli Yu, a visiting student from China's Tsinghua University, detailed a mathematical

proof of why this division protocol puts both parties on equal footing. “If one party attempts to pack districts, for instance, the other party can simply not choose to freeze a packed district [one where specific concentrations of voters are packed into a district]. And because that party can then re-map the districts to eliminate the packing, the first party would not get the opportunity to freeze a packed district either,” details a university press release regarding the intuition behind the fairness of the algorithm. In an interview with The Tartan, Pegden detailed the motivation behind the project and why he and the team wanted to apply cake-cutting techniques in particular. “The mathematics of fair division is all about leveraging competition between two sides to get a fair outcome; cake cutting is the classic example. If we want to be able to draw fair districts

and we don't know how to find truly independent agents, then fair division algorithms were a natural thing to aim for,” explained Pegden, who had previously done research on detecting gerrymandering. Proccacia saw gerrymandering as a natural extension of the ideas behind cake-cutting. “The viewpoint [behind cake-cutting] seems natural in the context of redistricting (replacing ‘good’ with ‘state’), as we would like to see the two parties interact in a way that gives rise to a districting both sides perceive as fair,” said Proccacia. Pegden and Proccacia's goal is that ultimately, states will adopt this protocol as their method of redistricting. They hope to promote this method through more press coverage and start a grassroots national conversation surrounding fair redistricting techniques.



## Chalabi discusses her work to engage readers through data



Tracy Le/Staff Designer

NORA MATTSO  
Assistant News Editor

We have a tendency to think of data as concrete, as being something that communicates some kind of exact and empirical truth, just because we have found a way to quantify the world around us. However, communicating the uncertainties that come with every dataset is one of the challenges that purveyors of data journalism face today. Mona Chalabi, Data Editor for *The Guardian* US, has found one way to

convey this uncertainty: with illustrations that allow people to both connect and engage with data, but also to not overly state its precision. In a talk last Sunday at the Carnegie Library of Pittsburgh, Chalabi outlined her process when it comes to presenting issues through data. This talk was one of the many events centered around data and its usage hosted by the Carnegie Library over the past months. The Department of Statistics and Data Science

at the Dietrich College of Humanities and Social Sciences is one of the fastest growing departments at Carnegie Mellon University, with the number of undergraduate statistics majors being more than 20 times what it was in 2003. This uptick was attributed to the fact that the department focuses on “problems that are real,” as stated by Professor Rebecca Nugent, director of undergraduate studies. These “real problems” are Mona Chalabi's job. She began her talk by talking

about the myriad issues she had covered during her work as a journalist, bringing up that “whichever of those issues you care about, and hopefully you care about at least one of them, with both data and design skills you can try to make sure that other people care about those issues too.” She outlined the capacity for data visualizations to engage people with different viewpoints, hoping that when the talk was over “that whatever it is that you are interested in, you leave with a bit of

insight into how to communicate your knowledge to other people, maybe even people that are totally different to you.” She also cited spreading knowledge about statistics and data usage as part of the mission of her journalism, hoping that her reporting will leave readers empowered to fact check. She states, “When you read something, it's okay to feel skeptical.” However, she also emphasized that “it's important to channel that skepticism into action and test this stuff for yourself.

And in order to do that, it's important that as many citizens as possible have these skills to be able to do that research.” This commitment to careful and ethical data usage lends transparency and another layer to her work. “Mona commits to transparency at every step along the way by sharing her sources, collaborating with her followers through live streams and comments, and editing her art based on feedback.

See CHALABI, A3







# Forlizzi named head of Human-Computer Interaction Institute

**VALENE MEZMIN**  
*News Editor*

Jodi Forlizzi, a professor in Carnegie Mellon University's Human-Computer Interaction Institute (HCII), was recently appointed the Charles M. Geschke Director of the Human-Computer Interaction Institute.

Forlizzi earned a bachelor's degree in illustration from the University of the Arts in Philadelphia and a master's degree in interaction design at Carnegie Mellon before earning her Ph.D. in human-computer interaction and design at Carnegie Mellon. She has served as a faculty member at HCII, where she specializes in interaction design, since 2000. Her work has focused on designing engaging and effective educational games, designing for health care, and doing research and design work on social and assistive robots. Additionally, Forlizzi is a member of the

Association for Computing Machinery's Computer-Human Interaction Academy, a group of researchers honored by the Special Interest Group on Computer-Human Interaction for significant contributions to the field of human-computer interaction. "Members are selected based on cumulative contributions to the HCI field, impact on the field through development of new research directions and/or innovations, influence on the work of others, and participation in the Association for Computing Machinery's Special Interest Group in Computer-Human Interaction," explains a university press release from the School of Computer Science. She was also honored by the Walter Reed Army Medical Center for excellence in human-robot interaction design research.

The Human-Computer Interaction Institute "is a living laboratory" that investigates relationships between computer

technology, human activity, and society, states the institute's website.

"Founded in 1993, the HCII is a place where we work to understand and create technology that harmonizes with and improves human capabilities, goals, and social environments through interdisciplinary research and education in design, computer science, and behavioral and social sciences... We research how people work, play, and communicate within groups, organizations, and social structures, then we design, create, and evaluate technologies and tools to support human and social activities."

Carnegie Mellon faculty members like Forlizzi continue to be among the most influential researchers in the field of human-computer interaction since the 1960s.

Forlizzi was appointed her new position by Andrew Moore, Dean of the Carnegie Mellon University School of Computer Science.



Courtesy of Ian Smith via Flickr Wikimedia Commons  
Jodi Forlizzi, recently named director of Human-Computer Interaction Institute, speaking in 2010.

# Team of Carnegie Mellon students wins Ford mobility Challenge

**SHRUTI MURALI**  
*Assistant News Editor*

The winner of the Ford College Community Challenge (Ford C3) mobility-themed competition was The Aquaponics Project, a startup company which focuses on urban agriculture by raising aquatic animal and plants in a single, small environment. The company received \$10,000 and a Ford Transit Connect passenger van to transport its portable aquaponics facility for winning the challenge. The project team includes Carnegie Mellon University students Alexis Hoane, a sophomore chemistry major, and Sasha Cohen Ioannides, a sophomore in the College of Engineering. The team also consists of students from the University of Pittsburgh and the University of Michigan.

The goal of The Aquaponics Project is to provide an innovative solution to food production and waste and soil remediation. The startup company was established in 2016 when it created its first aquaponics farm, which produced 50 pounds of basil and 80 tilapia last year.

"The vehicle will improve our aquaponics startup, allowing us to start integrating anaerobic digestion and improve food rescue mobilization in Pittsburgh. This will create a 21st-century food system that we hope other urban areas can model," said Cohen Ioannides, director of design and maintenance for The Aquaponics Project.

The company previously

pitched an idea for an anaerobic digestive system at the 2017 Ford C3 and won \$25,000. The system involved a series of biological processes in which microorganisms break down food waste in the absence of oxygen. The end product is biofertilizer and biogas, which is used for energy and heat.

The Aquaponics Project partners with various organizations around the city including Repair the World, The Door Campaign, and 412 Food Rescue, co-founded by Carnegie Mellon alumna Leah Lizarondo, a 2003 graduate of the Heinz College of Information Systems and Public Policy. 412 Food Rescue provides compost for the startup's anaerobic digestive system.

"My biggest passion is creating accessibility to food," said Ioannides. "The Aquaponics Project allows me to collaborate with other students on and off campus, get out and do the things I'm passionate about and get involved with the community."

The signature Ford Mobility Challenge celebrated the ten-year anniversary of the Ford C3 with a special mobility-themed competition, "Making Lives Better by Changing the Way People Move." Three of the ten original winning teams were invited to

Ford World Headquarters in Dearborn, Michigan, including The Aquaponics Project, to pitch their solutions to a panel of Ford executives for the chance to win the passenger van and additional monetary prizes.

"The future of C3 will broaden our goal to help students create meaningful, sustainable social enterprises to drive change," said Mike Schmidt, director of education and global community development for Ford Motor Company Fund, in a press release on the challenge. "Our goal is to create a movement, not a program, that allows students to be a powerful force for good in this world and to help make people's lives better across the globe."

Home Inc.Ubator, led by Carnegie Mellon architecture major

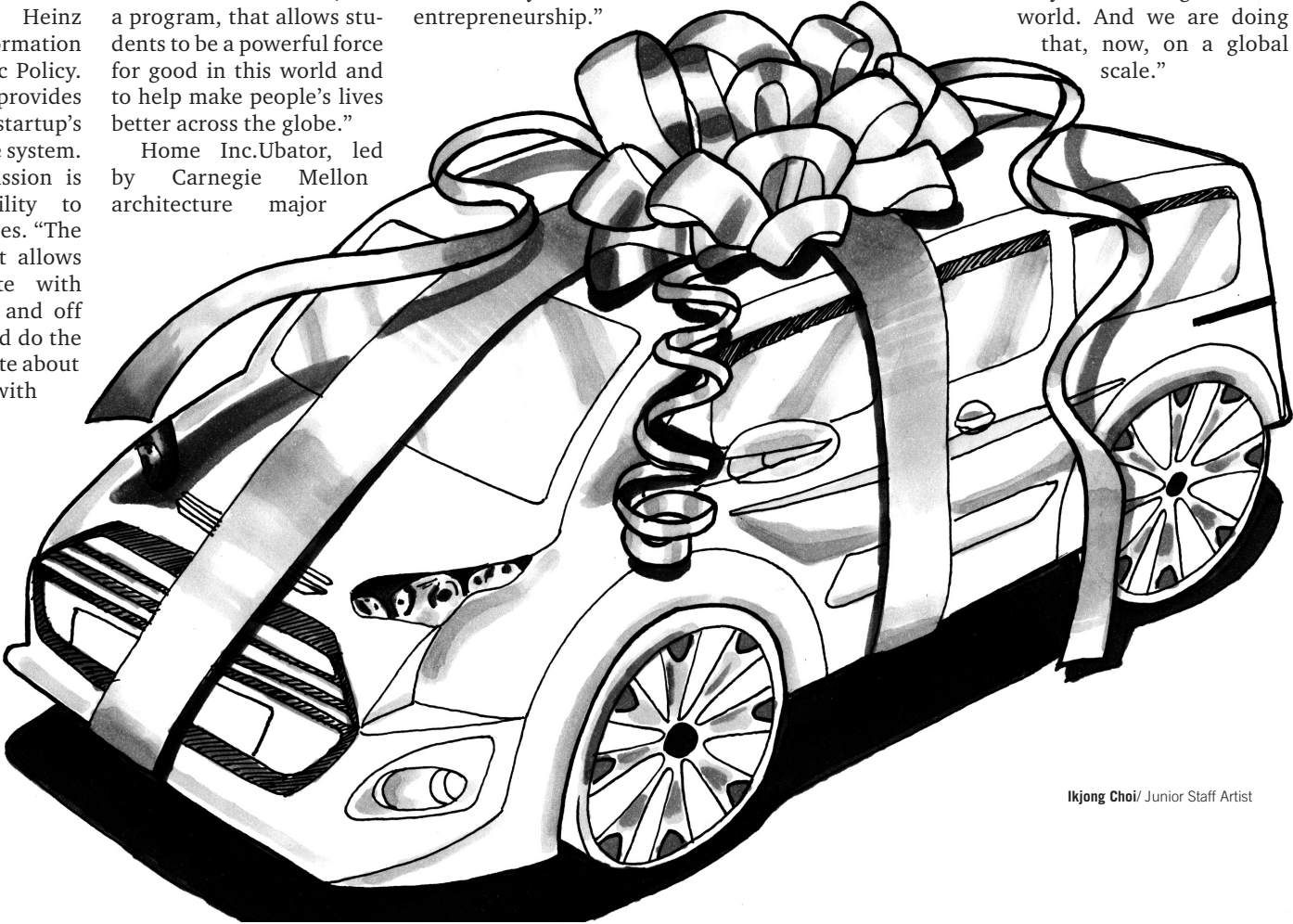
Sophie Nahrman, was an additional 2017 C3 winning team that received \$25,000 for its portable residential housing module prototype, which used virtual reality technology which enables residents to have input on the design of their affordable housing. According to a press release on the challenge, the purpose of the project is to "empower residents to develop affordable housing, foster a more inclusive path to homeownership, contribute to social mobility, provide education/training opportunities, and support community-based entrepreneurship."

In second place came the Olin College of Engineering, where students developed Coahoma Mobile Education, a project which allowed rural youth in Coahoma County, Mississippi to explore topics in the arts, technology, and entrepreneurship. The students will work with the youth to build electric guitars, teaching them electrically, carpentry, and 3D-modeling skills in a mobile space.

Michigan Tech University landed third place. The students built a user-friendly

medical transportation management system to allow their partner organization, Little Brothers-Friends of the Elderly, to maximize their free door-to-door medical transportation service for the elderly.

"Ford C3 has been a tremendously successful program in that it has completely changed our mindset on how we engage with college students," said Schmidt. "Through C3, we recognized that students can be a huge force for good and that if we give them the right support, they can change in the world. And we are doing that, now, on a global scale."



Ikjong Choi/ Junior Staff Artist

# Chalabi discusses her work to engage readers through data



Courtesy of Andreas Eymannsberger via Flickr Wikimedia Commons  
Mona Chalabi, Data Editor for The Guardian US, spoke about creating data journalism Sunday at the Carnegie Library of Pittsburgh.

**CHALABI, from A1**

By providing a window to her methodology, Mona allows her audience to fully engage with the data and art," stated Eleanor Tutt, Open Data and Knowledge Manager at Carnegie Library of Pittsburgh in a follow-up email to the talk.

Her social media usage is not the only thing that distinguishes her journalism. She firmly believes that all charts she makes should reflect something about their subject matter. She displayed generic charts and bar graphs and opined that while they were "powerful, I guess, in terms of their clarity, but if you were to remove the labels these could be about absolutely

anything, and I think charts should connect to the subject matter that they are depicting."

Though Chalabi focused a lot on how to analyze and present data, she views her job primarily as that of "a journalist who really loves numbers." While she works as a designer and with data, she primarily views herself as a journalist. "My job is to find reliable, recent numbers and get them in front of as many people as possible. Sometimes those numbers are buried way down deep in a database, sometimes they're in the appendix of a PDF. But my job is to track them down and translate them from endless possible iterations of digital page to either words or images."



# Forum

FROM THE EDITORIAL BOARD

## Historic local elections show the power of voters

After the elections of 2016, it would be easy to become disillusioned with the idea of representation, to begin doubting that your vote can make a difference. But after a hard year of unethical policies and unintelligible claims from the government, this year’s elections across the country have brought some much-needed hope to America. Those elected to office include many Democrats as well as many firsts, from the first black mayor in a number of towns and cities, to the first Latina and Asian American women, to the first transgender people, all serving in various states and even nationally.

In Framingham, MA, Yvonne Spicer is not only the first black female mayor but also the first mayor in Framingham’s 317-year history, as the residents narrowly voted to change from a town to a city form of government in April. At 39.1 percent, voter turnout was a record high for the last 25 years in this historic election, and Spicer won with 58 percent of the vote. A native of Brooklyn, NY, Spicer has a doctorate in educational leadership and works to build capacity for STEM programs in schools. She will take office on Jan. 1, 2018.

Vi Lyles will become Charlotte, NC’s first black female mayor as well — with 58 percent of the vote, she easily beat her Republican opponent Kenny Smith. Over the past three decades, she has served as a budget official and assistant city manager in city hall. North Carolina had a high voter turnout as well — for this election, it was about 20 percent, which was higher than the predicted rate.

Jonathan McColiar will become the first black mayor of Statesboro, GA, unseating the current mayor with his progressive platform and 52 percent of the vote. Cairo, GA also voted for their first black mayor: Booker Gainor, who is only 28 years old. Brendon Barber and Ailment Collins became the first black mayors of Georgetown, SC

and Helena, MO, respectively. And in Milledgeville, GA, Mary Parham-Copelan won the election for mayor by a margin of only six votes, making her the first woman and African American to be elected mayor.

Elizabeth Guzman and Hala Ayala became the first two Latinas elected to the Virginia House of Delegates, also turning their districts from Republican to Democrat. Guzman immigrated from Peru to create a better life for her children, pursuing first a community college degree and then several others. Ayala is a cybersecurity specialist who was involved in organizing the Women’s March last January. She supports raising minimum wage, equal pay and access to health care for everyone, and increasing the percentage of women in government to ensure all voices are heard.

Kathy Tran, the first Asian American woman elected to the Virginia House of Delegates, fled Vietnam with her parents when she was a baby. She supports strengthening public schools, the economy, and environmental protection, preventing gun violence, and immigration reform. Ravinder Bhalla, who was elected the mayor of Hoboken, became the first Sikh mayor in all of New Jersey. He wants to upgrade Hoboken’s infrastructure, balance the budget, and push for environmentally sustainable policies to help residents in both the short and long terms.

Jenny Durkan previously made history as the first gay U.S. attorney in American history, and has now become the first lesbian mayor in Seattle. Some of her goals are to create affordable housing, help the homeless, and reform the criminal justice system. Zachary DeWolf, Seattle’s first openly gay school board member, wants to close the gap created by differences in individual students’ circumstances, and create a safe environment for everyone to learn.

In Provo City, Utah, Michelle Kaufusi will be sworn in as the first female mayor on Dec. 5. She emphasizes strength

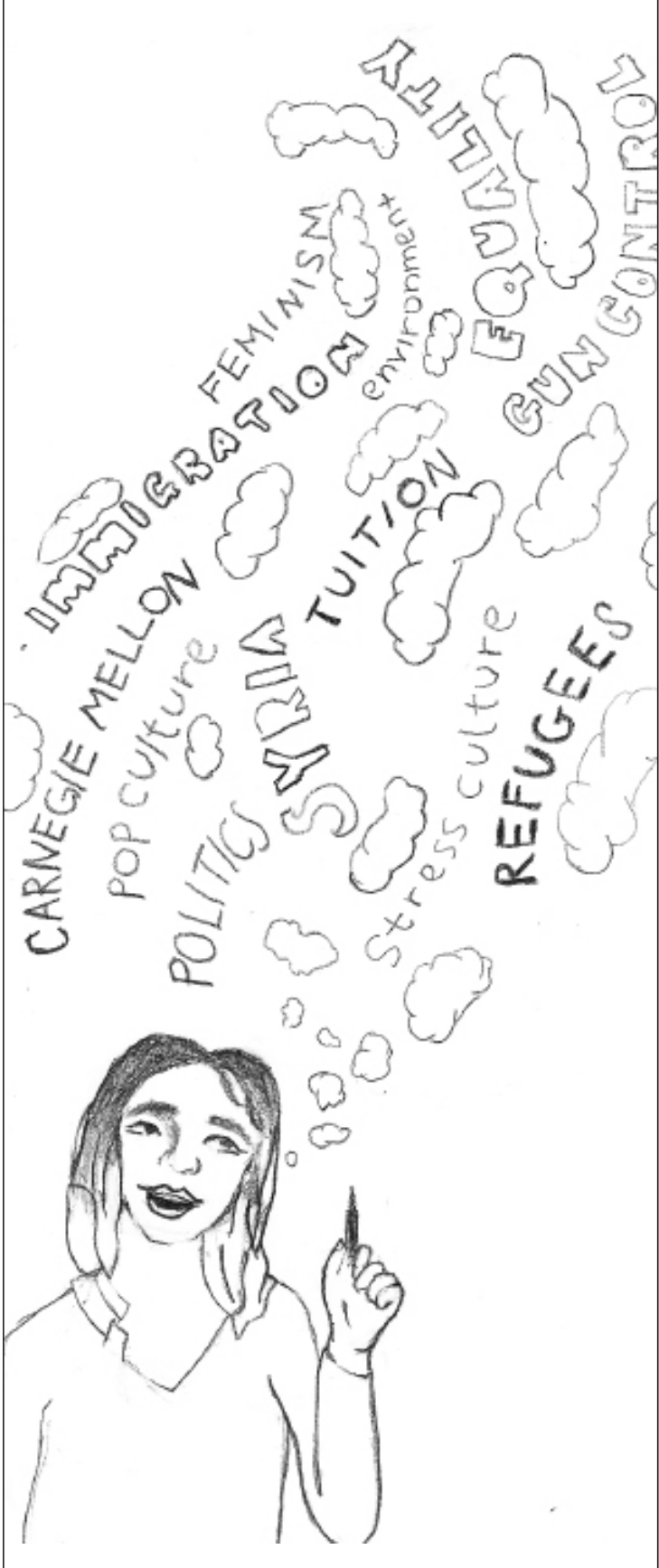
when considering issues, and intends to focus on creating strong neighborhoods, strong budgets and other forms of fiscal management, a strong economy through businesses, and strong engagement from all residents.

In the Virginia state senate, Democrat Danica Roem became one of the country’s first transgender elected officials — she defeated Republican Rob Marshall, who has been elected 13 times in 26 years, wrote Virginia’s discriminatory “bathroom bill,” and referred to Roem with incorrect pronouns throughout the election cycle while at the same time refusing to debate with her. She plans to focus on four things: a traffic problem that arises during rush hour, increasing and improving jobs by conducting studies and raising minimum wage, aiding schools by bringing in more commercial taxes, alleviating overcrowding, and increasing teacher pay, and striving toward equality for those of different religions, races, genders, sexual orientations, and disabilities.

In addition, Andrea Jenkins, who has been elected to the Minneapolis City Council, is the first black, openly-transgender woman ever elected to a public office. She is a poet, activist, and historian, and curator of the Transgender Oral History Project at the University of Minnesota.

Despite the discouraging claims and actions that have been put forth by our national government over the past few months, it is uplifting to see an effort to incorporate so much diversity into our local elections. The people elected to these offices can have meaningful impact on our day-to-day lives, and Americans have shown through our votes the issues that are important to us as a nation to address. Voters being aware of current events and showing up to cast their ballots played an important role in bringing about this change — it is important to remember the ways we can shape policy and make a difference as we move forward into the future.

# SPEAK YOUR MIND.



forum@thetartan.org



Paola Mathus/Art Editor

### Editorial Board

JADE CROCKEM\*  
Publisher

INDIA PRICE\*  
Editor-in-Chief

SARAH ELIZABETH BENDER  
Forum Editor

VALENE MEZMIN  
News Editor

JOSH ANDAH  
Staffwriter

YIYUAN CHEN  
Staffwriter

SYDNEY ROSLIN  
Staffwriter

### Staff

#### COPY

Sinead Foley, Lydia Green, Stephanie Kuang, Nora Mattson, Ian Tanaya, Marika Yang

#### ADVERTISING

Benjamin Stern, Andy Gao

#### BUSINESS

Lindsey Shi

### Editorial Staff

LYDIA GREEN\*  
Operations Manager

NORA MATTSON  
Assistant News Editor

SHRUTI MURALI  
Assistant News Editor

MADELINE KIM  
Assistant Forum Editor

SINEAD FOLEY  
Pillbox Editor

APEKSHA ATAL  
Pillbox Editor

IZZY SIO  
Assistant Pillbox Editor

NAVIYA SINGLA  
Scitech Editor

EMMA FLICKINGER  
Assistant Scitech Editor

JULIANNE SANS CARTIER  
Comics Editor

IAN TANAYA  
Sports Editor

MARIKA YANG  
Assistant Sports Editor

COREY EMERY  
Advertising Manager

SOPHIA CHENG  
Business Manager

GEAR JIANTHANAKANON  
Systems Manager

RUTH SCHERR  
Copy Manager

JUHYUNG PARK  
Assistant Copy Manager

KATRINA WONG  
Assistant Copy Manager

THEODORE TEICHMAN  
Visual Editor

\* Denotes executive committee member

AISHA HAN\*  
Visual Editor

PAOLA MATHUS  
Art Editor

ANISHA JAIN  
Assistant Art Editor

ZICHEN LIU  
Photo Editor

PAULINE TING  
Online Editor

ABHISHEK TAYAL\*  
Layout Manager

## THE TARTAN

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

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

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

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

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

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



# Foreign students deterred by visa complications and politics



One of the greatest powers of the United States lies in the ability of its higher education system to attract diverse and talented students from all over the world. According to the 2017 Open Doors Report by the Institute of International Education, the international student population in the United States increased by 3.4 percent to 1,078,822 students this year. This large presence of international students amounts to around \$32 billion that is brought into the U.S. economy.

Recently, however, many universities around the U.S. have seen a dip in the number of foreign applicants. A survey of 250 colleges, conducted by the American Association of College Registrars and Admissions Officers (AACRAO), has found that “39 [percent] of responding institutions reported a decline in international applicants.” The survey further observed that the highest declines in applicants were from the Middle East, while the number of applications from India and China was also impacted.

“[Many international students] said they were concerned about the Trump effect,” said Wim Wiewel, President of Portland State University, in an interview with *The New York Times*. “I’d say the rhetoric and actual executive orders are definitely having a chilling effect.”

Indeed, many call this decline in applicants an outcome of the “Trump effect:” the effects that President Trump’s actions, words, and political agenda bring to the U.S. both on a domestic and an international level. From what I

see, this decline in the number of foreign applicants to U.S. colleges can be divided into two main attributes. First, the visa application process has become more difficult under the Trump presidency, especially for students in the Middle East, preventing many students who wish to come to the U.S. from pursuing such an academic career. Second, the political climate of the United States has put much worry into many families around the world, prompting many students to look to domestic higher education systems or those of other countries like China, Japan, France, and the United Kingdom.

As an international student myself, I have experienced both of these challenges in choosing to come to the United States for college. While I was fortunate to reside in the United States previously, making my visa application process easier than most, I have a couple of friends in South Korea who were caught in the bureaucratic mess of the visa application process, which prevented them from attending U.S. colleges in the fall of 2017. As for the political climate of the U.S., Trump and his agenda have instigated a changed reputation of the United States in the eyes of countries around the world. The words and actions of the President — the travel bans imposed by the administration, for example — and the many displays of violence and national division — mass shootings and the more public presence of white supremacy, to name a couple — have certainly proven to many families around the world that the sentiments of isolationism and nationalism are growing. In essence, it has become harder and less attractive to be an international student in the United States.

“Are they going to be welcomed in the United States? Are the Americans going to treat their sons and daughters well? Are they

going to be safe on U.S. campuses and in U.S. cities?” asked Gary Bergman, founder, and president of College Study US, in an interview with Newsweek. “A lot of the comments that are coming out of the current administration are leading a lot of families to really take a step back and wonder if the U.S. is really a good place to go for their education.”

As Bergman comments above, for many foreigners, the United States is no longer seen as the “land of immigrants.” The once deeply held values of diversity and openness seem to have changed to become more exclusive rather than inclusive. As such, it is expected that fewer and fewer students will choose the U.S. as their destination for higher education; it is the reputation that the U.S. displays on the international stage that has caused such a phenomenon. In order for the U.S. to continue enjoying the large presence of international students on its campuses, its reputation in the international community must be revived. If the Trump administration continues its agenda on immigration, maintaining its stance and proceeding to make negative remarks on foreigners or immigrants, the United States will no longer be at the frontiers of higher education and

potentially risk the intellectual leadership of many of its academic institutions.

Juhyung Park (@juhyungp) is the Assistant Copy Manager for The Tartan.



# MakeApp threatens women’s agency over appearance



“Take her swimming on the first date” is a common saying circulating on the internet and being shared among men who joke about how women “hide” behind layers of makeup, thus deceiving the world with artificially good looks. However, this statement has become more than just a silly meme. Ashot Gabrelyanov created an app called MakeApp that essentially makes a camera filter that predicts what women look like without makeup.

As a makeup enthusiast, I obviously had to give this app a try. For an app that costs money, I was not impressed with the results. Despite the poor estimate of what my bare face looks like, I could not help but laugh. There are men out in the world who may take a photo of me in my usual “cake face,” toss it through this app, and decide whether I am attractive enough to be associated with — all without knowing anything about me.

There has been heavy criticism targeted at the app. Many articles have claimed that such

a “removal” of makeup is sexist because it makes men use a makeup-less woman’s appearance be a dealbreaker for whether he wants to pursue a relationship with her. Buzzfeed pointed out that a man — not a woman — was in charge of the creation of the app in the title, heavily hinting that Gabrelyanov had sexist intentions behind the app.

What some feminists and some men fail to realize is that a lot of people don’t wear makeup because they feel ashamed of their appearances. I don’t deny the possibility that there may be someone out there who cakes on makeup to hide insecurities. If that someone is reading this article, I hope there soon comes a realization that one’s beauty and one’s worth does not lie in makeup. However, for many people, makeup is a creative outlet. Much like wearing a nice outfit instead of pajamas, it can boost one’s confidence and make one feel more prepared to face the day. No amount of makeup in the world changes the value or beauty of a person. Kim Kardashian is the same reality star with and without her famous dramatic contour. Similarly, a person hasn’t shape-shifted by applying makeup (and frankly, did not invest so much money to impress someone who demands all the products to be

washed down the drain).

What’s notable is that Gabrelyanov claims that the app could be used to identify victims of human trafficking. “In most of these cases, makeup is heavily used to disguise the age and/or identity of these people,” he said in an emailed statement. “If human traffickers can hide these victim’s identities, their chances of rescue are low.” Of course, the app has a long way to go, but this is a possibility. However, if this is the direction the app is heading, something to consider would be to change the image of the app. Instead of marketing it as an app where a user can play around with camera filters for fun to see what a potential girlfriend would look like bare-faced, further emphasize its potential usage to identify victims who may be heavily disguised with makeup.

If you insist on being outraged by makeup, I suggest you look into the lack of racial inclusiveness in the beauty industry that conveniently excludes consumers with darker skin colors. Just let people use makeup as they feel comfortable and realize that they aren’t “hiding” something from you.

Madeline Kim (@madelink) is the Assistant Forum Editor for the Tartan.



# LETTER TO THE EDITOR: CMU MUST DEFEND GRADUATE STUDENTS

Graduate students are under attack in the latest House tax bill. The GOP’s plan is to tax our tuition waivers as if they were income, and to remove student loan interest deductions, making graduate school substantially more expensive. According to an analysis by our very own Graduate Student Assembly (GSA), some Ph.D. students may owe \$10k annually in taxes under this bill. This is unacceptable.

The first Carnegie Mellon University responses to the bill came from our GSA (see their appearance in several articles, including in *Wired*). Carnegie Mellon administrators seem to have been

caught unaware and uninformed. Yet this information has been public since Nov. 2, when the House Bill was first released, and at the time of writing, the administration still has no public plan.

In fact, in Interim President Jahanian’s only email to the University at large, he mentions only “proposals to tax graduate student stipends,” which is not even the correct issue. The proposal is to tax our tuition, not our stipends. This response fails to inspire confidence. By way of contrast, Cornell and Notre Dame have already released definitive statements about whether their students are affected by the

proposed tuition tax. Why has our administration not made a similar statement?

Either the administration simply does not know, or it is deliberately keeping us in the dark to prevent a panic.

Perhaps the administration is genuinely clueless, due to CMU’s decentralized nature. Without central oversight, there is wild variation in how tuition, stipends, fees, and health insurance are handled across the college.

What seems likely is that, as a private school with extremely high tuition, CMU will be hurt a lot more by this tax bill than public R1 universities. It’s bad enough that

we students pay \$2,000 plus tax for health insurance. This additional tax burden will make graduate school fiscally untenable. Either the university will shoulder the financial burden or students will choose to go elsewhere.

Ph.D. students commonly do not take classes after their first two years, but tuition is still paid on their behalf. So what does our tuition fund? Our previous president made nearly \$900,000 annually, while annual stipends for CMU Ph.D. students can be as low as \$13,500 per year (for reference, according to one I-20, the cost of living in Pittsburgh is \$20,500).

And what if the bill passes?

The Trump administration wants this signed by Thanksgiving and telling ourselves “it will never pass” is delusional. If not passed, the bill could come back in some watered-down form, likely still harmful (like Trump’s immigration ban and healthcare bill). We need to be prepared to fight a long fight against this provision whenever it appears.

If passed, the bill will take effect April 6, likely affecting every graduate student on campus, and the University needs a plan for when that happens.

Signed,  
Concerned Graduate Students



# Hyperpartisanship blurs moral lines in Alabama election



MADELINE KIM

Yet again, America finds hyperpartisanship interfering with ethics. On Dec. 12, voters in Alabama must decide on a senator to represent their state: Democratic candidate Doug Jones or Republican candidate Roy Moore. But these candidates differ on more than their parties. Moore has been accused of sexually abusing minors by at least four different women, who were all in their teens at the time of the alleged assault.

What should be a simple choice — a choice between a man who prosecuted members of the Ku Klux Klan and an alleged pedophile — is apparently a difficult question being raised and warranting heated debates.

Alabama is not known to be the most liberal state. Gallup considers Alabama to be the fifth most conservative state in the U.S., and conservatives outnumber liberals by approximately 30 percentage points. Thus, it comes as no surprise that Moore had enjoyed being in the lead up until recently despite voters knowing that they are potentially supporting a pedophile.

Additionally, Alabama is not known to be the most accepting of change or authority. Years back

during the Civil War, Alabama proudly joined the secession to keep allowing slave ownership. It was one of the last states to racially integrate schools and was reluctant to allow marriage equality. Today, party chairwoman Terry Lathan stated that “Alabamians will be the ultimate jury in this election, not the media or those from afar,” pushing away anyone outside the state of Alabama. Loyalty is an admirable quality. However, this intention to defend and protect Alabama by mindlessly defending its every action regardless of right or wrong ultimately hurts Alabama. Voting for a Democrat does break the Republican status quo of the state, but this choosing a candidate to represent Alabama just because of political affiliation does anything but protect Alabama. It’s committing state suicide.

Although Jones led the polls by five percentage points as of Nov. 18, it is frightening to think that just four days prior, Moore maintained a lead in a poll.

Even some of those who believe that Moore is a child molester consider Moore to be the more qualified candidate. Right-leaning author David Horowitz tweeted “electing a Dem strengthens a party that defends [criminals such as Obama and Clinton whose] crimes are far far worse,” Jones is automatically an inferior choice. Others on Twitter have shared this common sentiment. These votes

are not swayed by actual policies or morals; they are made solely by party affiliation. This is not an issue that only Republicans or right-wing parties are susceptible to, but we are in a situation where there is a great political division and exacerbated by a president that further perpetuates a division between the two prominent political parties.

Controversial blogger Elizabeth Johnston, known as The Activist Mommy, posted a meme on her Twitter, placing Moore on a higher moral ground than Jones. The meme argues that since Moore allegedly molested a child but Jones definitely advocates for what she calls “actual infanticide,” Moore is the more ethical choice. Additionally, she has spoken to support Moore, whom she believes is “the greatest judge in America who has faithfully fought for 20 years for the unborn, traditional marriage, the 10 commandments, and the constitution.” Her defending Moore is not that surprising, given her perception that Christian America is under attack. However, it is disheartening to know that she influences thousands of people on the Internet and can potentially validate hardcore Republicans who ultimately decide that party is more important than policy or ethics.

I understand that topics such as abortion are sensitive and topics of great gravity. However, latching onto a candidate because of one stance and disregarding

everything else about the candidate is uneducated at best. Moore “fighting for the unborn” does not erase the striking evidence that states he preyed on young and vulnerable girls.

Hyperpartisanship is a growing problem in the U.S., and it is not hard to see why it has increased in intensity over the years. Echo chambers and social media algorithms strategically lay out what media we surround ourselves with. Thus, we are more likely to be surrounded by media that aligns with our preexisting beliefs. Seeing something that contradicts our paradigm can be upsetting

and unenjoyable for someone with strong opinions on a particular topic. However, this kind of group polarization that transforms what would be moderate stances into polarized stances.

I have lived in Alabama for ten years of my life. Am I surprised that my home state is choosing party over ethics? No. Am I ashamed and wish that I could be registered to vote in my home state instead of Pennsylvania? Yes. With less than a month remaining until the election, all I can hope is that we can separate Moore from the party that he so poorly represents.



Paola Mathus/Art Editor

## Beliefs can cast light on character

JENNY YU  
Junior Staffwriter

Many of us have most likely grown up with parents or teachers instructing us to not judge others simply because their beliefs are different from our own. While this surely has its merits, it is intended to be applicable in a very general sense, with glaring exceptions.

I certainly would never judge someone harshly for their taste in food or music — well, perhaps only jokingly — but I do believe that politics is a key belief that lies outside the realm of that piece of advice. It should be perfectly acceptable to be judged for one’s political views.

I do not mean this as a hard-and-fast rule, however, as everyone should be left to his or her own devices to decide to what degree, personally, politics play a role in his or her evaluation of someone. What I do argue, instead, is that people should not be deemed closed-minded or otherwise for choosing to let politics color their opinions on someone else.

Relationships in life are often based on things shared and other commonalities, as many of them seemingly arise out of shared circumstances. Therefore, I hold the belief that it is definitely easier to befriend someone who holds the same set of political views.

Of course, I definitely am not

saying that, for example, Republicans have trouble befriendng or cannot befriend those who are Democrats or vice versa, as those friendships often occur. Furthermore, the variation within those two ideologies is as varied as the political spectrum itself, so one may find themselves sharing many opinions despite identifying as a part of completely different parties.

My message is that, should someone choose to not enter into a relationship with someone, romantic or platonic, they should be allowed to cite politics as a reason why. People should be held accountable for their beliefs, even if that accountability amounts to judgment. For example, while I am perfectly happy to and do have friends who are more conservative than I am, I cannot see myself dating someone who has views that deviate far from mine.

Some people would personally not associate themselves with those who are rude or those who partake in activities against their own morals, such as doing drugs, so why should politics be any different? By choosing to espouse and stand behind a certain set of stances, you indicate to others exactly what is and isn’t important to you as a person. Abortion rights or no abortion rights, affirmative action or no affirmative action, gun control or no gun

control — what you think affects how you behave and how you vote, which in turn affects those around you.

Being offended has turned into an ugly term in recent years, as more people nowadays are being mocked for being “overly sensitive” or “easily triggered.” But, if what another says or believes affronts, invalidates, or belittles your own views, you have a right to be offended, to judge another for thinking that way, or to choose not to associate with them.

There can certainly be harmful political beliefs, such as being against gay marriage or being for neo-Nazism, to name some of the ones that are more unilaterally believed as problematic. As for the most controversial ones, it will be up to each person individually to decide what it is and where his or her boundaries lie.

In a tumultuous time and country like the contemporary United States, we find it harder and harder to separate politics and our everyday lives. Even in the most recent presidential election, I am sure that many people have or have seen their friends be shocked when someone they know come out in support of a candidate that they themselves despise.

I’m here to say that it’s a reasonable, logical reaction and that their judgment is perfectly warranted.

## FROM THE HEINZ JOURNAL: DINNER WITH SIDE OF DATA

Tech has infiltrated every aspect of our lives: Uber has displaced taxi cabs, Airbnb has transformed hotels, and Amazon has started to crush brick-and-mortar retailers. While disruption has uprooted countless industries, it has had a limited impact — so far — on the hospitality industry. Restaurants have experienced only moderate disruption due to technology and high-end restaurant options have been particularly spared. These fine dining establishments may allow guests to make reservations online or read a menu on their webpages, but that is generally the extent of technological involvement. This will not last forever, though, as fine dining establishments begin to integrate more data-driven technology into their daily operations to boost their bottom line.

Until recently, most technologies in restaurants were focused on the front of house – employee interactions with customers. These technologies included reservation systems, customer data aggregators and order management systems. New technologies are beginning to move to other parts of the restaurant, like the kitchen itself. One nascent product, Foodpairing, helps chefs discover new combinations of foods that can surprise and delight the palette. Combinations include items ranging from common spices to unique varieties of fish. While new pairings were previously discovered through a basic guess-and-check method, Foodpairing claims to analyze “unique scientific and consumer data sources in combination with big data... for identifying the successful flavors of tomorrow.” This methodology may generate some peculiar-sounding combinations on menus, but they’ll be worthwhile if a desirable flavor is produced and customers return for more.

Outside of the kitchen, fine dining establishments are also investing in data analytics to drive profits. New systems, such as Upserve, track every detail related to a diner’s experience, including their contact information, visit history, past expenditures and individual food and drink orders. This data is compiled across the restaurant and can unveil powerful insights about the restaurant’s operation. For instance, Upserve’s platform automatically generates a scorecard that ranks menu items in comparison to each other and identifies what types of diners are most likely to order each dish. A repeat customer may select an entrée that is rarely ordered by first time diners, so this dish would be classified as a “hidden gem.” Upserve claims that this meaningful data

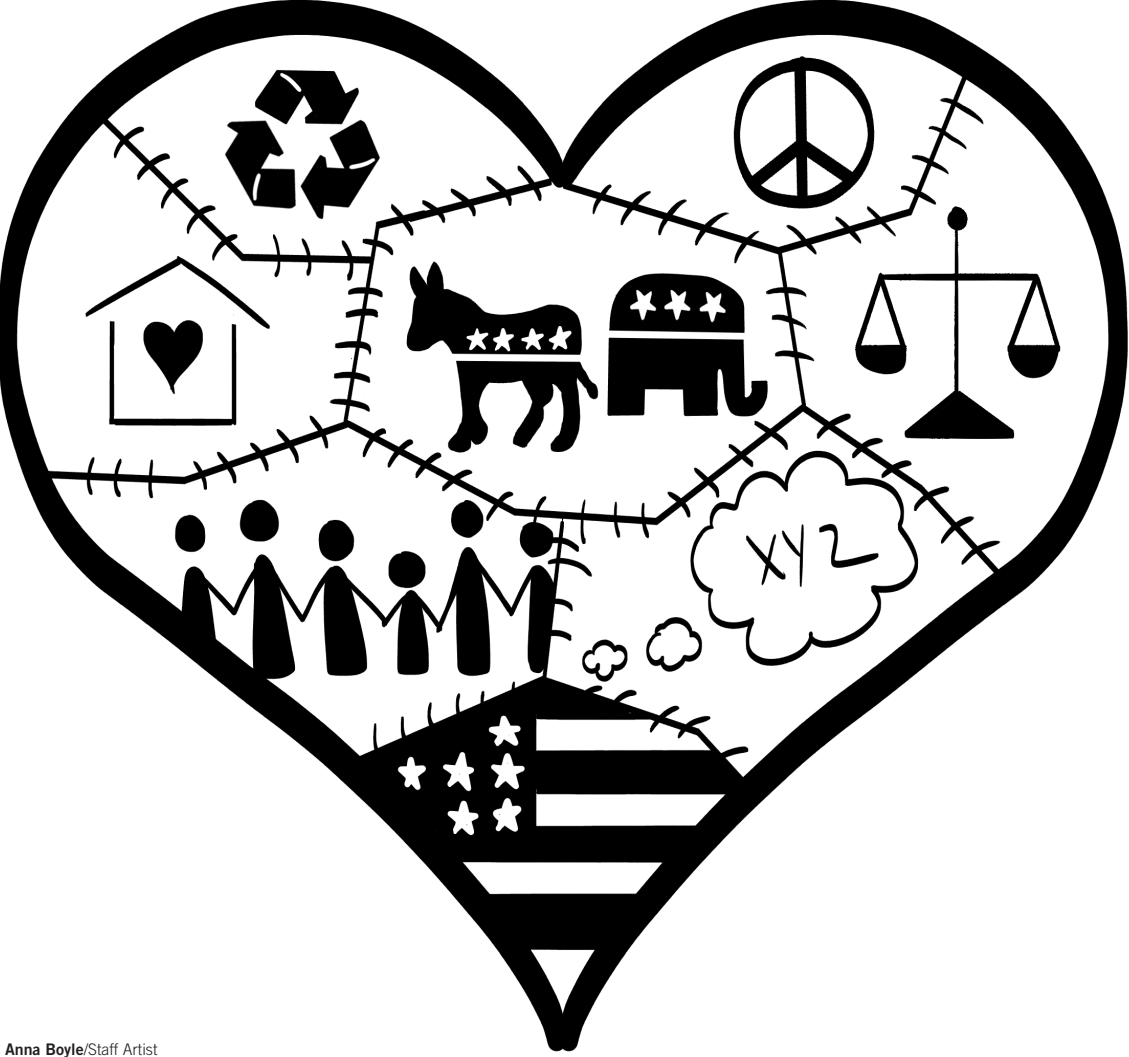
can help servers give recommendations and help restaurants retain their customers over the long term by providing better service.

Another domain affected by an increased role of technology is in neither the kitchen nor the restaurant itself, but rather on the web. Online social media giants like Instagram and Facebook, as well as online review aggregators such as Yelp, are a dominant technology in the hospitality industry. Diners are eager to share pictures of their meals “tagged” with the restaurant’s name, especially at exclusive and trendy restaurants. “The average guest takes pictures for 10 minutes before ordering anything,” says Madelyn Markoe, owner of Media Noche, an Instagram hot-spot restaurant in San Francisco. Often, restaurants even have their own Instagram pages to promote seasonal menu items or nightly specials. While the free marketing is valuable, restaurants must now dedicate additional time and energy to fully engage with customers online.

To help restaurants optimize their online presence, Avero, a long-standing hospitality technology company, launched Avero Buzz in December of 2016. Avero Buzz is a “social listening tool” offering a centralized platform for communicating with customers across all online platforms. This service is particularly impactful for restaurant groups with a portfolio of different fine dining establishments, each with its own account on Yelp, Instagram, and Facebook. It integrates restaurant data with social data and generates analytics measuring the effectiveness of social media marketing campaigns. Though there are many ways to measure campaign effectiveness, the Avero Buzz platform focuses on changes in customer volume and customer behavior over long-term periods. By recognizing these changes and adapting to them, restaurants can derive real value from their customers’ online habits.

Across restaurant operations, data is playing an increased role. The data of flavor is helping chefs try new pairings and combinations. The data of customer history is shaping profitability and the dining experience. And the constant chatter of customer interactions across various social platforms online is a low-cost yet meaningful opportunity for publicity. Yet as these technologies and others continue to integrate into restaurants, other forms of innovation seem far off. Hopefully the 3D-printed hamburger is not in the near future.

By Henry Yelin.  
For more articles on policy and research, see [journal.heinz.cmu.edu](http://journal.heinz.cmu.edu).



Anna Boyle/Staff Artist



# Science & Technology

## Scientists study effectiveness of opioid treatments

**SARAH KIM**  
*Staffwriter*

In an era where drug overdose deaths are the leading cause of injury and death in the United States, the abuse and misuse of opioids is a growing, alarming public health issue — namely, the “opioid crisis”. According to the United States Health and Human Services, 12.5 million people misused prescription opioids in 2015 alone, 2.1 million of those

being first-time offenders. Clearly, this is a dangerous social problem that doesn’t seem easy to prevent. The government has been trying to tackle this issue since the late 1990s, but there are few solutions with much scientific proof or potential. Suboxone, a relatively mild opioid containing a combination of buprenorphine hydrochloride and naloxone hydrochloride, was approved by the United States Food and Drug

Administration (FDA) as an effective treatment of opioid addiction in 2002. Patients undergoing treatment take daily doses of Suboxone either in the form of strips that dissolve on the tongue or tablets to minimize withdrawal symptoms. Although much more expensive, this is preferred to another addiction medication known as methadone because it can be prescribed by primary doctors, and does not require

specially licensed clinics. Vivitrol is a relatively new form of addiction medication approved by the FDA only in 2010. This injection of naltrexone blocks the effects of opioids is taken once a month, as its effects last slightly over 28 days. According to Alkermes — a global biopharmaceutical company, it is by far the most expensive opioid addiction treatment substance, costing \$500 per shot through Medicaid and \$1,000 through pri-

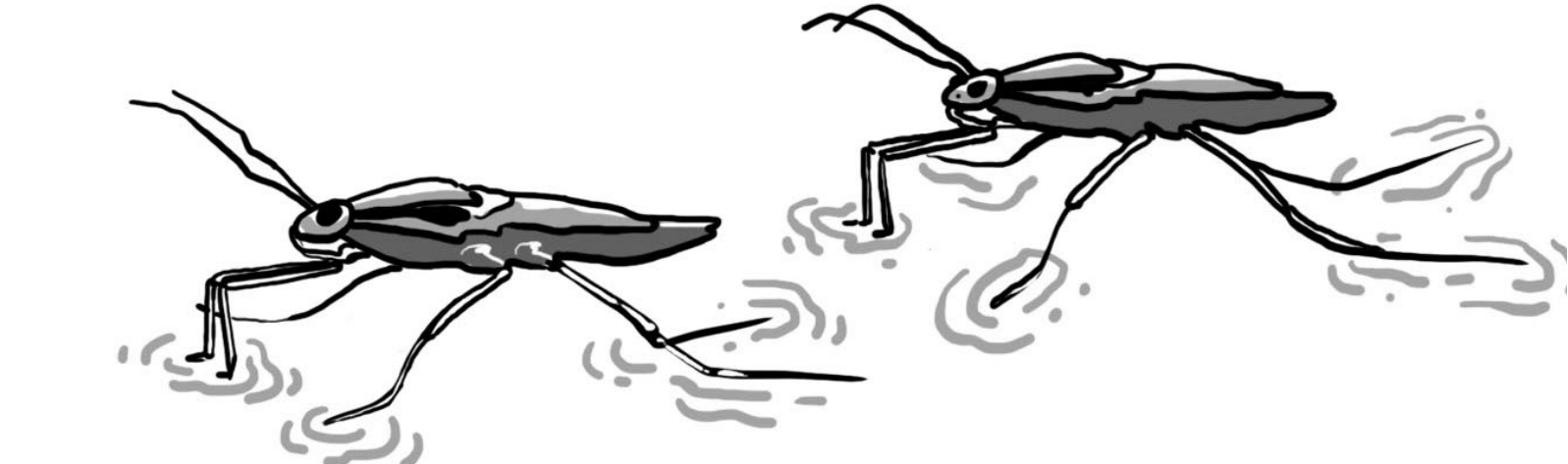
vate insurance. Despite its high cost, Vivitrol has been supported and encouraged by Alkermes as an alternative for Suboxone, as many people view Suboxone as simply substituting a deadly opioid (heroin) with another addictive but less dangerous opioid (Suboxone itself.) In an article in the *Washington Post*, Dr. Nora Volkow, director of the National Institute on Drug Abuse, explained that Vivitrol offers “a tremen-

dous advantage” to rural patients who cannot easily access trained doctors and specialized daily treatment. She says, “this study removes a barrier, the belief that (Vivitrol) was not as good a medication.” A study comparing these two forms of treatment medication was published in *The Lancet* on Tuesday. It was led by Dr. Joshua D. Lee of the New York University School of Medicine. see **OPIOID**, A8

## Research suggests bleak future for insects worldwide

**EMMA FLICKINGER**  
*Assistant SciTech Editor*

Bees and butterflies are experiencing widespread population decline, creating public concern in recent years. Data collected in Germany suggest that it’s not just bees and butterflies at risk: insect populations overall have plummeted by more than 75 percent since 1989. Scientists have known about the population decline for several years. However, they didn’t know how many species were declining, and they didn’t expect it to be happening so fast. The insect population data comes from a group in Germany called the Krefeld Entomological Society. The Krefeld Society, whose members are mostly amateur entomologists, has been collecting data on insect populations since the 1980s in 63 different nature preserves. The members travel to a given spot every few years to set up an insect trap: essentially, a fabric tent suspended above a jar of alcohol. The insects fly into the tent and can’t fly out. While they’re trapped in the tent, the rising vapor from the alcohol below gradually inebriates them, and they drop into



Paola Mathus/ Art Editor

the jar. The Krefeld Society can then catalog the number, type, and weight of the collected insects. The fact that they collect any species that flies into the trap is what makes this study so important. It’s rare to find numbers on the population trends of most insects. While researchers have kept fairly consistent tabs on iconic insects like monarch butterflies and honey bees, “we have a pretty good track record of ignoring most noncharismatic species,” says Joe Nocera, an ecologist at the University of New Brunswick. Because the Krefeld Society isn’t focused on any one kind of insect, they can look at the big picture. Based on this study, the big picture for insects looks

grim. While the Krefeld Society is still working on cataloging the species in their collection, and don’t yet know all the details, they do know the biomass of each catch (the combined weight of all the insects). They found that since 1989, insect biomass has gone down by over 75 percent. This number — far larger than expected — has left the scientific community reeling. “If we lose insects we’re doomed,” says Dave Goulson, professor of biology at the University of Sussex in the U.K. “I know this sounds overly dramatic, but we absolutely are. Life on Earth would be utterly changed. We wouldn’t be able to grow our crops. Dung would build up in the

fields. Life on Earth would essentially cease. So, we absolutely have to take this really seriously.” It’s hard to figure out what can be done to solve the problem of insect disappearance without knowing what’s making the insects disappear in the first place. In the Krefeld study, the Krefeld Society members worked with scientists at German universities to analyze their data, examining several factors like the changes in weather and local plant life. No simple correlations have been revealed, suggesting that multiple complex factors are causing the population decline. One factor is likely the way that land is being

used. All the data in the Krefeld study was collected from protected nature areas, but the surrounding land can play a factor in how well the nature preserve can support insect species. (Insects, which travel frequently, don’t pay attention to the boundary between the preserve and private land.) When fields are fertilized to make better grazing land, wildflowers (which insects need) are replaced by grasses. When towns and urban areas replace fields, the lights confuse nocturnal insects and disrupt their mating. “We’ve lost huge amounts of habitat, which has certainly contributed to all these declines,” Goulson says. “If we turn all the

seminatural habitats to wheat and cornfields, then there will be virtually no life in those fields.” In agricultural areas, the use of pesticides has also contributed to the decline of insects. Decades ago, when pesticides like DDT were exposed as poisonous, they were replaced by safer alternatives: safer for humans, but with lethal effects for insects. Neonicotinoid pesticides, introduced in the 1980s when the Krefeld Society began their study, are considered safer for humans than many alternatives because they are applied to seeds before planting rather than to growing crops. see **INSECT**, A8

## New imaging technique helps disgnose sick corals

**NAVIYA SINGLA**  
*SciTech Editor*

On Nov. 6, Jamie M. Caldwell, a disease ecologist at Stanford University, and her colleagues published a paper titled “Intra-colony disease progression induces fragmentation of coral fluorescent pigments” in *Scientific Reports*. The paper describes a relatively new technique called live-imaging laser scanning confocal microscopy and its applications in better understanding the health of corals. Coral fluorescence — the ability of corals to glow in shades of red, blue or green under some light wavelengths, is a common yet poorly understood phenomenon. Corals contain fluorescent proteins that possibly allow it to perform photosynthesis better by using light that would otherwise be unusable. This phenomenon helps absorb the sun’s ultraviolet rays and reflect it back to the symbiotic organisms so the they can photosynthesize under insufficient sunlight. Some scientists also suggest that this fluorescent helps protect the coral ecosystem from the harsh rays of the sun. The researchers along with Caldwell, say that coral



Courtesy of NPS Photo - Larry Basch via Wikimedia Commons

The *Montipora capitata* is a reef coral that is found in parts of the tropical Pacific Ocean and displays red and cyan fluorescence. the difference between fluorescent pigment distribution in healthy and diseased living samples of *Montipora capitata* coral — commonly known as rice coral or pore coral. it is a type of reef coral typically found in Hawaii. The diseased sample in this case was artificially created, by infecting it with the *Montipora* white syndrome

— bacterial infection that causes tissue loss. While comparing, the scientists found that the two coral samples looked similar on a macroscopic level. However, after observing closely, they found that the sick sample had lost fluorescence and the distribution of the fluorescent pigments was a lot more scattered and disorganized. In fact, according to an article on Science News, the healthy coral had 1.2 times more florescence area as compared to the diseased coral. Drew Harwell, a disease ecologist at Cornell University says in an article in *Science News* that research in this field, “is transormative in our struggle to visualize the dance between pathogen attack and host response in the initial attack.” This type of coral is very dependent on the organisms called zooxanthellae that live inside it. The temperature of the sea chases out these organisms, leaving the coral colorless and susceptible to disease. Corals die very quickly after that. As habitat destruction and global warming wipes out reef corals at an alarming rate, research like this is a step forward in organizing better conservation efforts.



# Suboxone, Vivitrol treat opiod addiction equally well

from **OPIOD**, A7

This was the largest study so far to directly compare the effectiveness of Vivitrol with that of Suboxone.

The study was conducted with 570 adults, most addicted to heroin, and found that 52 percent of those who were under Vivitrol relapsed throughout the span of the 24-week study.

This is a number only

slightly lower than the 56 percent of patients that relapsed under Suboxone in the same study.

While discovering the potential of Vivitrol to become a more widespread form of treatment for opiod addicts in the nation, the study also revealed a fatal flaw of Vivitrol.

This not only makes the results of the study much more difficult to interpret but also speaks to the limitations of Vivitrol itself as a

treatment substance.

A large number of participants were not even able to start treatment with Vivitrol because a detox period (complete abstinence from drug use) of three days to one week is required for its consumption as opposed to the other medications, where the patient can make the transition seamlessly.

According to Stat News, patients failed to start on Vivitrol at four times the

rate that they did Suboxone because of this difficult barrier to beginning treatment.

“It’s going to take a few days or a week or more to get them on naltrexone in the first place,” said Dr. Lee. “And that detox hurdle does not exist for buprenorphine or Suboxone.”

However, the research still does encourage medical professionals and treatment providers to offer

both medications, as relapse rates are significantly higher if patients don’t get onto and continue a medication.

The bottom line is that both forms of medication should be widely available and readily offered to patients suffering from opiod addiction.

However, medication isn’t effective on its own. Other research shows that counseling and familial support significantly

improve the effectiveness of the treatment provided.

Now that the effectiveness and safety precautions of both Suboxone and Vivitrol have been studied in depth and published, we have taken a step forward to treat this huge public health issue. Perhaps it was because of the lack of such evidence and research in the past that led to severe under-treatment of the opiod epidemic.

# Write for SciTech

## scitech@thetartan.org

photo by ciat

# Insect population declining

see **INSECT**, A7

However, they have disastrous effects on insects. When bees are exposed to these insecticides, they become less able to navigate and communicate with other bees. In wasps, neonicotinoid exposure cuts mating rates in half.

Neonicotinoids have already been revealed as a major culprit in the declining population of bees and other pollinators. Because neonicotinoids dissolve in water so easily, rainwater can carry them far away from farm fields.

In meadows adjacent to agricultural areas, flowers produce pollen and nectar that contains more neonicotinoids than the crops the insecticides were intended for, Goulson and his colleagues showed in 2015. Despite the fact that they are demonstrably harmful, neonicotinoids are the most commonly used insecticides today.

The decline of insects is a problem that needs to be taken very, very seriously.

Almost our entire agricultural system depends on insects to pollinate plants so that they can produce fruits, vegetables, and seeds. If we have no insects, we will not be able to grow food.

We aren’t the only ones who will suffer if insects go. Researchers have already connected insects’ decreasing numbers to the population declines of starlings in North



ies in England and the U.S., seem to tell a similar story.

In light of this data, the Krefeld Society has immediate plans to make sure their data collection is as thorough and accurate as possible. They plan to install a “biodiversity weather station” that can consistently monitor the presence of species in a nature preserve, with seven automated components.

It includes a pollen collector, a ‘sky scanner’ to spot birds, bats, and flying insects, and a sound recorder to listen for frog, bird, and insect calls. They are also planning to continue their traditional insect collections at more frequent intervals.

Though the exact magnitude of insect population decline is uncertain, scientists are certain that it’s happening.

While there are strategies that might slow it —such as putting restrictions on pesticide use — “they all require buy-in from significant numbers of people,” Goulson says. “One or two environmentalists like me banging on isn’t going to do anything. We need the majority of people on Earth to change their ways, and that’s a pretty difficult thing to achieve.”

America. Birds, reptiles, amphibians — any species that depends on insects for food will start to die out, and anything that eats those animals will take losses. The biodiversity of the entire world is at stake.

The fact that we’ve apparently lost 75 percent of insect biomass in less than 30 years makes that future seem a lot closer than anyone would have guessed.

But how accurate is the 75 percent figure? It’s hard to say. This study took place in a single country, and the measurements weren’t as regular as the members would have liked.


Because comprehensive data on insect populations is so rare, there aren’t many datasets from other parts of the world to compare it to.

However, the studies on bees and butterflies, as well as smaller-scale stud-

### BE A PART OF

# #givingCMUday

Tuesday, November 28, 2017



## Triple Your Impact

**PRESIDENTIAL STUDENT MATCH**  
Student gifts of \$5 or more will be **matched 2:1**.

### Kick-Off

**PLAID PALOOZA:  
MIDNIGHT KICK-OFF**  
Rangos 3, CUC  
**Tuesday, November 28**  
**Midnight - 1 a.m.**

### Celebrate

**JOIN THE GIVING TUESDAY  
CAMPUS CELEBRATION**  
Wean Commons, CUC  
**Tuesday, November 28**  
**11 a.m. – 2 p.m.**

### Give

**STUDENT ORGANIZATION  
CHALLENGES**  
Give to any student organization throughout the day. **The four with the most donors will earn an extra \$500.**

### Promote

**STUDENT DONORS**  
If you have made a gift to CMU this year, pick up your T-shirt in Hunt Library or Wean Commons, CUC  
**Monday, November 27**  
**11 a.m. – 2 p.m. or 5 – 7 p.m.**

Participate in social media challenges throughout the day  
[giving.cmu.edu/givingcmuday](http://giving.cmu.edu/givingcmuday).

## Carnegie Mellon University

Sponsored by Annual Giving 412-268-2021 or [annual-giving@andrew.cmu.edu](mailto:annual-giving@andrew.cmu.edu)

AG-17-069\_Day-of-Giving\_Ad\_5-146x10-063in\_03.indd 1

11/16/17 3:46 PM





SPORTS BRIEFS

Women’s Soccer

The eighth-ranked Carnegie Mellon women’s soccer team dominated play against third-ranked Hardin-Simmons University on Saturday, Nov. 18 in the sectional semifinal of the 2017 NCAA Division III Women’s Soccer Championship but were unable to finish any of its 17 shots, as the Cowgirls narrowly defeated the Tartans, 1–0.

The Tartans controlled possession and stymied the potent offensive attack of the Cowgirls, which has scored 108 goals this year, but only one mattered — a corner kick toward the net that was just over the arms of first-year Carolyn Botz in the 77th minute. A Cowgirl was at the front post and prevented Botz from getting to the service that curved across the line.

The Tartans peppered the Cowgirls defense and the goalkeeper all game long and continued to press forward even after the Cowgirls went ahead. In the 87th minute, senior Alex Moy fired a shot off the crossbar, and the goalkeeper saved a shot by senior Tori Iatarola 25 seconds later.

Iatarola and senior Haili Adams each put two shots on goal while senior Sienna

Stritter fired off three shots, one of which was just high of the goal in the 12th minute.

The Tartans conclude the season with a 15–3–2 record in the program’s sixth straight trip to the NCAA tournament and fourth appearance in the final 16.

Football

The Carnegie Mellon football team competed in the 2017 Eastern College Athletic Conference (ECAC) Asa S. Bushnell Bowl and fell to the Mules of Muhlenberg College, 32–6. The game was held on the campus of the University of Delaware in Newark, DE.

Following an interception by Carnegie Mellon senior linebacker Sean Graff, the Tartans put together an 11-play, 59-yard drive that resulted in a 29-yard field goal by senior Tyler Kohman. Kohman’s kick gave the Cardinal and Gray a 3-0 lead with 3:29 to play in the first quarter.

Muhlenberg took a 7-3 lead with 2:43 left in the half after a 49-yard catch and run. The Mules intercepted junior quarterback Cline on the Tartans’ first play of the ensuing possession and took over on the Carnegie Mellon 15-yard line. The Tartans defense held the Mules to

a field goal, as the 24-yard boot by made the score 10–3 with 1:21 on the clock.

With seven minutes to play in the third quarter, Muhlenberg extended its lead to 17–3 with a 2-yard run. A 28-yard field goal by Kohman with 1:44 to play in the third put the score at 17–6.

The Mules responded and pushed their lead to 23–6 on the next possession. A nine-play, 79-yard drive was capped off with a 5-yard touchdown run at the 12:35 mark of the fourth quarter. A safety by the Mules and another touchdown run, this time a 2-yard run, left the score at 32–6 with 6:49 to play.

Cline became the school’s single-season passing leader after throwing for 178 yards. The signal caller finished the season with 2,336 yards and passed Andrew Hearon’s mark of 2,201 yards set in 2015.

Junior wide receiver Karl-Mark Kumm had a career-high seven receptions for career-best 80 yards while senior wide receiver John Prather finished with 38 yards and four catches.

Senior running back Sam Bengier led the Tartans rushing attack with 70 yards and ends the season with 1,053 yards, becoming the first

back in program history to rush for 1,000 yards in three straight seasons.

Benger and Prather both finish their careers as the program’s all-time leader at their respective positions. Bengier rushed for 5,376 yards and 59 touchdowns while Prather recorded 3,077 receiving yards and 25 touchdowns.

Defensively, junior cornerback Ethan Anderson led the Tartans with ten tackles, six solo. Graff ended with nine while seniors Stanley Bikulege, Kyle Brittain, and Drew Fitzmorris each finished with seven.

The Tartans finish their season with a record of 7–4 while the Mules end the year with a record of 8–3.

Women’s Cross Country

The Carnegie Mellon women’s cross country team finished 24th in the 2017 NCAA Division III Women’s Cross Country Championships hosted by Principia College in Elsah, IL, on Saturday, Nov. 18. The Tartans were running in the championship race for the fourth time in program history and first time since 1998.

The Tartans finished ahead of University Athletic Association (UAA) counterpart Emory University and ahead of Mideast Regional opponents Elizabethtown College, Haverford College, and Dickinson College.

Senior Aparna Alavilli led the Tartans, finishing 49th overall with a time of 21:46.90. This was her second year in a row competing in the championships, and she placed 60 spots better than her previous record.

Sophomore Abigail Levine crossed second for the team in 22:15.60, finishing 108th. Sophomore Emmalyn Lindsey crossed the finish line next for the Tartans and 119th overall with a time of 22:22.80. Fourth for Carnegie Mellon was sophomore Kate Reilly in 23:17.80.

Following Reilly were first-year Parvathi Meyyappan with a time of 23:35.80 and senior Rhiannon Farney in 23:45.90. Finishing strong for the Tartans was junior Allison Scibisz with a time of 24:23.80.

The memorable season comes to a close with the Tartans also earning fourth-place finishes at the UAA Championship and Mideast Regional, both their best since the 2012 season.

Men’s Cross Country

The Carnegie Mellon men’s cross country team placed 21st at the NCAA

Division III Cross Country Championships on Saturday, Nov. 18. The meet was hosted by Principia College in Elsah, IL, with North Central College earning the championship title.

Junior Aadi Mhatre was the first Tartan to cross the finish line when he finished the 8k course 83rd overall in 25:24.98. Junior Jared Moore wasn’t far behind as he finished 95th in 25:28.16.

Sophomore Liam Walsh ran the course in 25:46.30 while senior Andrew Harter finished three seconds later and fourth for the Tartans.

Senior Jordan Safer was the fifth Tartan to cross the finish line when he finished 185th overall in 25:56.30.

Also competing in the championship meet were sophomores Evan Yukevich and Josh Kalapos. Yukevich finished in 26:20.92 and Kalapos in 26:46.14.

Women’s Basketball

The Carnegie Mellon women’s basketball team picked up its second 20-plus win of the season on Saturday, Nov. 18 when the Tartans topped Allegheny College, 76–47, in the Allegheny Greg Richards Memorial Classic. The Tartans are now 2–0 for the season while the Gators move to 1–1.

The Tartans were led by sophomore Katharine Higgins who had 20 points and seven rebounds. Joining Higgins in double-digit points was sophomore Makayla Filiere with 15 points and sophomore Laurel Pereira with 14.

The Tartans put together a defensive effort that caused 19 turnovers and held the Gators to 25.0 percent shooting from the field. Higgins had three of the team’s ten steals and the Tartans scored 21 points off of 19 turnovers.

Higgins, who shot 42.9 percent from the floor, opened the game with one of her two three-pointers for the game. The Gators then went on a 14–0 run before Filiere hit a jumper off an assist by junior Jenn Mayberger with half the period still to play. The Tartans then finished the final five minutes with an 11–6 run that they extended to 18–6 through the first 4:48 of the second period.

While the Gators shot 64.3 percent in the first period, they went cold in the second, hitting just one of 13 from the floor and scoring just five points. The Tartans hit seven field goals and shot 41.2 percent from the floor to lead 35–25 at the break.

The Tartans would score the first four points of the

second half to pull within six points but the Tartans answered with a 15–0 run that began with a layup by sophomore Laura Ochsner. The run put the Tartans up 50–29 with 4:34 to go in the third period.

The Tartans continued to add to their lead, which topped out at 32 when first-year Kylie Huffman drained the team’s eighth three-pointer of the game with 1:46 to play in the game.

Mayberger collected six assists and seven rebounds in the game while playing 37 minutes, as Ochsner scored seven points and grabbed nine rebounds to lead the team.

The Tartans will continue their season on the road Tuesday, Nov. 21 at Bethany College at 4:00 p.m.

Women’s Swimming & Diving

First-year Maddie Mianzo won the 3-meter event at the Carnegie Mellon Diving Invitational on Friday and Saturday, Nov. 17-18 against Allegheny College and Rowan University.

Mianzo’s score of 391.45 was the best of the day on the 3-meter with Allegheny’s Brionna Litwin scoring next highest with 386.65 points. Carnegie Mellon first-year Lillie Widmayer was third on the 3-meter with 375.35 points while sophomore Megan Roche scored 371.40 points and placed fourth.


Litwin edged out Mianzo on the 1-meter with 404.90 points to Mianzo’s 388.55 points. Roche placed fourth with 363.15 points and Widmayer was fifth with 353.90 points.

Men’s Swimming & Diving

Carnegie Mellon junior Gabe Bamforth solidified his position to compete at the NCAA Division III Regional meet in March with his performance at the CMU Diving Invitational against Allegheny College and Rowan University on Friday and Saturday, Nov. 17-18.

Bamforth won both the 1-meter and 3-meter events and set pool records with his scores of 473.55 and 496.85 after 11 dives. Senior DeShawn Green placed third on the 1-meter board with a career-best 405.75 points and fourth on the 3-meter board with 362.30 points.

Junior Evan Hill placed fifth on the 3-meter board with a career-best 323.20 points and sixth on the 1-meter board with 293.00 points.



**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. In addition, one or two positions may be available as Co-Directors of Residential Life. 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. Co-Directors of Residential Life (a.k.a. Head Counselors) are responsible for overseeing the TA/Counselors and fostering a safe, collaborative living and learning environment for the PGSS students.

TA/Counselor applicants should have finished their sophomore year by the start of the summer program. Consideration will also be given to extraordinarily qualified first-year applicants. 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. Applicants for Co-Director of Residential Life should have graduated from college or university by the start of the summer program. Further information is available at the PGSS web site: <http://sciences.pa-gov-schools.org/>.

**Stipend for five-and-one-half week period:**  
**\$2,500 for new TA/Counselors, \$2,750 for returning TA/Counselors**  
**\$3,000 for Co-Director of Residential Life**  
**Housing is included (in the PGSS dorm) as well as a food allowance.**  
**Duties begin Wednesday, June 27, 2018, end Sunday, August 5, 2018.**  
Applications are available from the PGSS Office in DH A301 or may be downloaded (pdf format) from the PGSS web site: <http://sciences.pa-gov-schools.org/>  
Contact the PGSS Program Office at (412) 268-6669 or e-mail [pgss@cmu.edu](mailto:pgss@cmu.edu)  
**Application Deadline: March 31, 2018**  
(Applications may be accepted after the deadline until all positions are filled.)



# Sports

## Women’s basketball takes season opener in blowout

IAN TANAYA  
Sports Editor

The women’s basketball team opened the season with a 75–47 victory against Fredonia State University of New York at the Allegheny College Greg Richards Memorial Classic on Friday. Leading the Tartans was sophomore guard Laurel Pereira with a career-best 20 points. Sophomore forward Katharine Higgins and sophomore guard Makayla Filiere also scored in the double digits with 15 points apiece while first-year forward Kylie Huffman put in 11 points in her first outing in a Tartan uniform. Higgins also pulled down ten rebounds for her first double-double of the

season, tying her career best in the category. Filiere grabbed a career-best seven boards and Pereira tied her career-best with five rebounds. The Tartans led 23–10 after the first quarter behind nine points from Pereira. The sophomore guard put in seven straight during the quarter for the Tartans, who held the Blue Devils to no points for the first three minutes of the game. Higgins hit the last basket of the quarter for the Tartans and opened the second with another bucket on her way to 10 first-half points. The Tartans extended their 13-point first-quarter lead to a 19-point lead by the break, leading 40–21 at halftime.

Filiere owned the third quarter for the Tartans, converting two buckets and a free throw for five of the team’s 12 points. The Tartans then hit nine shots and four free throws in the fourth quarter to finish the game with the 23-point win. Huffman scored nine points in the final period with sophomore forward Laura Oschner putting in four points. The Tartans assisted on 12 of their 30 baskets and shot 40.5 percent from the floor while holding the Blue Devils to 28.1 percent shooting from the field. After a 76–47 victory over Allegheny College on Saturday, the Tartans will next face Bethany College on Tuesday, Nov. 21.



Sophomore guard Laurel Pereira earned a career-best 20 points in the home opener against Fredonia.

## Ultimate Frisbee cultivates community, competition

KATE LISTON  
Staffwriter

“The spirit of the game, I don’t know if I’ve emphasized it enough,” said Masters Material Science student and co-captain of the Women’s Ultimate Frisbee team Marissa Schwartz regarding what draws her to Ultimate Frisbee. Ultimate Frisbee isn’t your ‘typical’ sport: as a mixture between basketball, football, and soccer, it involves athleticism, yes, but forces team members to form close bonds with each other in order to properly regulate the team. This ideology makes the team willing to welcome anyone who can adapt the proper spirit. “For people who have never even run in their life, we welcome them into the sport. For people who have been playing for many years, we welcome them, as well,” said Schwartz. “It’s really a hard balance sometimes between skill levels, but the community and the friendships that you build when you’re playing Frisbee is something that has been a huge aspect of the team.” Ultimate Frisbee plays all year long, but their primary season is in the spring. In the fall they only play three tournaments, which count towards their record but don’t factor into whether they go to regionals, and in the winter they play pickup games with high-school to middle-aged teams. Their spring tournaments decide whether they will go to the sectional, regional, or national competitions. The men’s and women’s teams are, for the most part, very similar other than their season goals. The men’s team is a bit more competitive and strictly adhere to the practice schedule more

than the women’s. They have enough members to split into an A team and a B team, which allows the A team to be more competitive while the B works on their skills. The women’s team, on the other hand, focuses more on the spirit of the game. Once Schwartz took on the position of being co-captain during sophomore year of her undergraduate degree here, she decided the team should be less focused on competition to make them more welcoming to new players; she encourages this through team dinners, outings to landmarks such as Niagara Falls after tournaments, and events such as pumpkin carving. She wanted every player to feel as though practice was a nice break in their day. “[It was a] ‘let’s really try to win games and win tournaments and show that Carnegie Mellon isn’t just a nerd school’ kind of thing, and I think that approach wasn’t conducive to building a team in general. A lot of our efforts are to focus less on winning and being competitive and more on the fun, positive aspects of

playing a sport.” The importance of bonding between team members stems from the fact that there are no referees in Ultimate Frisbee. This makes communication and “the spirit of the game” crucial for success. When there is a foul, the players are expected to call it themselves, and the two teams on the field discuss who is penalized and what the penalty will be. “Teams should honor the rules. To gain an advantage they shouldn’t disagree even though they are incorrect in disagreeing,” said Schwartz. Schwartz says getting involved with the team is as easy as emailing one of the four captains: Justin Abel, Foster Boales, Shani Rosenthal, or herself. After that, one only needs to attend as many practices as possible, buy a pair of cleats, and have fun with the other members. Ultimate Frisbee may not be a sport that is particularly prominent in popular culture, but the club team here at Carnegie Mellon knows its value and has found it to be a crucial part of their college experience.



Ultimate Frisbee is available for both men and women to take part.

## Men’s basketball loses to La Roche in home opener



The men’s basketball team sets up a shot during the losing effort to La Roche in their home opener.

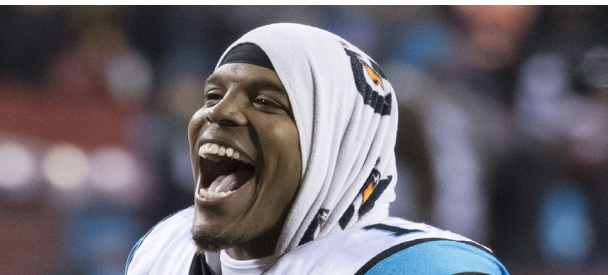
IAN TANAYA  
Sports Editor

The men’s basketball team opened the season at home against La Roche College on Friday night, falling 71–64. Three Tartans turned in 11-point performances as senior guard Ryan Maha, junior forward and guard Seth Henry, and sophomore guard Colin McNeil led the team, which shot 43.9 percent from the floor. The Tartans held the Redhawks to a 36.4 percent effort from the floor but were out-rebounded 53–31. Maha dished out five assists, tying his career high. First-year guard Zach Watson made his first shot

of the game, a three-pointer, to put the Tartans up 9–6 before a three-pointer by the Redhawks tied the game with 12:49 to play in the first half. The Tartans then scored nine straight points over a two-minute span to take an 18–9 lead. First-year forward Daniel Weiss hit a three-pointer at the end of the run. The Redhawks went on an 11–1 run to take the lead at 20–19 with seven minutes to play in the half. The lead changed hands four times before the half ended with the Redhawks leading 28–26. Henry hit the opening bucket of the second half to tie the game for the sixth time before McNeil

converted a layup to give the Tartans back the lead, 30–28. The teams traded buckets until the Redhawks took the lead for good on a three-pointer with 10:04 to play in the game. That three-pointer broke up the 12th tie of the contest and sparked a 9–2 run that put the visitors ahead 53–46. The Tartans pulled to within one point after a layup by sophomore forward Trent Suddeth and a layup by McNeil with 2:33 to play but the Redhawks scored on a jumper in the paint and the Redhawks hit 6-of-8 from the line to keep the lead and win by seven. The Tartans will next face Bethany College on Tuesday, Nov. 21 at 6 p.m.

## Fantasy football: playoff picture coming into focus



Carolina Panthers quarterback Cam Newton led all quarterbacks.

MARIKA YANG  
Assistant Sports Editor

This week, I’m back to recap week ten of The Tartan’s fantasy football league. I’m filling in for staffwriter Josh Andah, who scored the least number of points in the league for the week. Save for Andah’s team, all five of the other competitors reached above 100 points. Here are the highlights from the week: **Third-String Team over Yes We Cam 114.5–101** Despite winning this week, my team Third-String Team’s record of 5–5 trails behind Editor-in-Chief India Price’s team Yes We Cam’s record, which now sits at 7–3. Price earned a whopping 35.7 points from Carolina Panthers quarterback Cam Newton, by far his best week this season. Despite Minnesota Vikings wide receiver Stefon Diggs’s 17.8 points off of 4 catches, 78 yards, and a touchdown, and a solid 15.2 points from Miami Dolphins wide receiver Jarvis Landry (5 catches, 42 yards, and a touchdown), Price’s team was derailed by earning only 0.3 points from Atlanta Falcons running back Devonta Freeman before he left his game due to a concussion. My running back, the Chicago Bears’ Tarik Cohen, also let me down with only

2.1 points, but I managed to get the win this week due to great performances from Cincinnati Bengals wide receiver A.J. Green (22.5 points) and New York Giants tight end Evan Engram (15.1 points). The Los Angeles Rams defense also showed up, adding 16 points. **Drop it like it’s Crock over Team Andah 161.9–56.2** Publisher Jade Crockem predicted correctly in her recap last week that she would get the win over Andah. New Orleans Saints running back Mark Ingram had his best week of the season with 131 yards on 21 carries and three touchdowns, totaling 31.1 points for Crockem. Wide receivers Adam Thielen of the Vikings and Larry Fitzgerald of the Arizona Cardinals also performed well for Crockem, with 30.6 points and 21.3 points, respectively. Crockem didn’t need so many players from her lineup to perform as well as they did because two players in Andah’s lineup were on their bye weeks, one is on injured reserve, and another served a suspension during the week. Of the remaining five players, three contributed fewer than ten points apiece. In past weeks, Andah’s completely hands-off approach (read: auto-drafting and never adjusting his lineup) has

worked to his advantage, but this week it failed him. **Easy Breesy over Justin Tucker Must (not) Die 131.5–127.3** In the closest matchup of the week, Sports Editor Ian Tanaya topped contributing editor Lula Beresford to stand at the top of the standings next to Price’s team. Tanaya’s team had a great week across the board, but the performances from two of his running backs helped him pull past Beresford. Saints running back Alvin Kamara earned 24.8 points from 106 yards off 12 carries and a touchdown. Tennessee Titans running back DeMarco Murray returned to form, scoring two touchdowns and adding 29.2 points for Tanaya’s team. Beresford’s team, for the most part, also had a great week, with New England Patriots quarterback Tom Brady scoring 22.6 points, Saints wide receiver Michael Thomas with 20.7 points, Panthers running back Christian McCafferty adding 20 points, and the Ram’s Greg Zuerlein kicking his way to 17 points. The Denver Broncos defense was the only member of her lineup that had a significantly bad week, with negative three points. Next week, we have the top two teams Yes We Cam and Easy Breesy facing off. Despite Team Andah’s poor showing this past week, I predict it will rebound against Justin Tucker Must (not) Die; the last time the teams played each other they tied. The final matchup is my team versus Drop it like it’s Crock, which stands in my way to getting above .500 for the first time.



A photograph of three women in traditional Scottish kilts and sporrans, performing a dance. The woman in the foreground is wearing a yellow kilt and a green and purple vest, and is holding a white sporrang with yellow tassels. She is singing or shouting with her mouth open. The woman in the middle is wearing a pink kilt and a blue and white vest, and is also holding a white sporrang with yellow tassels. The woman in the background is wearing a red kilt and a white vest, and is also holding a white sporrang with yellow tassels. They are all smiling and looking towards the camera. The background is a simple, light-colored wall with a decorative archway.

# pillbox

The Tartan's Art & Culture Magazine

11.20.17 • B4 Light Up Night • B6 Compōs-it Opera • B10 BIB XI



# table of contents

4



Light Up Night

5



No Different from Your Other

6



Compōs-it Opera

3

Advice for Awkward People: On saying no

3

Bar Buddies: The Church Brew Works

8

Isabel Allende

10

Bhangra in the Burgh

11

Puzzles: Your weekly mental warm up

12

Comics: Clothes, autocorrect, and finals

14

Horoscopes: The signs as Overheard quotes

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



# Advice for Awkward People

Ruth Scherr | Copy Manager

## On saying no

**Hey Ruth!**

**Last week you wrote about ways to talk to your family about your major, which is great, but what about, like, everything else?**

**What I mean is — I find holidays with family exhausting. Don't get me wrong, I love seeing everyone and celebrating, and the excuse to do nothing all day is amazing, but in reality, I don't actually end up doing "nothing." My aunts and uncles are always asking me to watch my younger cousins and I just cannot be responsible for six different kids, even if I am related to all of them.**

**I'm also finding more and more as I grow up, that being at the level of holiday cheerfulness and engagement that's expected of me is getting more difficult. I don't know if I could be around anyone for eight hours straight and be up for a conversation about my/their life at any point. I don't think I'm a Grinch or anything, but sometimes I just want to take a break.**

**Quit the Useless, Intrusive, Endless Talking. People Like Silence.**

Dear QUIET PLS ,  
The good news is that you're definitely not a Grinch. Well, you might be, but not because of

this. Trust me when I say it's a nearly universal experience to get sick of your relatives during holiday visits. Just look at every holiday comedy ever made. I do recognize that knowing that everyone else is suffering with you is less useful as a practical solution, though I find it emotionally helpful, so let's talk about how to tell people "no." Because that is, ultimately, what you're going to have to do.

It can be extremely difficult to say no in this kind of situation. We're more or less trained to automatically love our family because they're blood, and as any such indication of disagreement or declining what they've asked of you can be read as impolite or rude. And when you're already trying to mediate between these people who you do love, but can definitely get on each other's nerves, one little "no" can feel like the breaking point. Maybe it's not your responsibility to make sure everything goes well when people are visiting, but it's just much easier to deal with all of it than have everyone explode, right?

Is it, though? You sound as if acquiescing to everyone's requests is already beating you and your level of enjoyment down. But it's only every so often, and dealing with the fallout would be so much worse, maybe. I honestly don't know

— you're the only one who can judge yourself and your family situation. But part of growing up is learning how to set boundaries and actually enforce them, so I'm generally in support of saying "no" even when you're not sure how it will go. And honestly? If your relatives are the type of people to explode the moment you don't agree to everything they ask, I think you should start learning how to say "no" real soon.

If the hard, blunt "no" is still intimidating, I'd recommend building in a way to give a "soft no" if needed. Basically, find something that will give you a way out of babysitting or conversation without explicitly turning someone down. Go help in the kitchen, or have work you need to do (don't we all), or even just go for a walk. I'm sure it gets just as stuffy at your house as it does at mine, and going out by yourself or with a family member whose company you know you enjoy is a good way to get a break and clear your head. You can't be full of holiday cheer if you're full of frustration, so take care of yourself.

Have a wonderful time of the year,  
Ruth

Need advice?  
Send queries to <https://goo.gle/xk23wd>

# Bar Buddies: The Church Brew Works

Sinead Foley | Pillbox Editor

## A literal altar to beer

I love churches. The history, the architecture, the stained glass, the ambiance. What can I say, I'm a bit obsessed. So when I found out there was a microbrewery in a former Catholic Church, it was only a matter of time before I ended up grabbing a drink at The Church Brew Works.

**The location:** Situated between Polish Hill and Lawrenceville, Church Brew Works is a bit of a hike from campus. The 54 from Craig St. and Winthrop St. is your best bet, or a combination of the 61B and 87 or 71 and 86. Once you're finally there, there's plenty to do. The church is on Liberty Ave., so the restaurants and bars of Penn Ave. are a short walk away.

**The drinks:** I don't like beer, so a microbrewery was a bit of a weird move for me. But it paid off big time. We tried two of their seasonal draft beers: Count Dankula and Oats McOats. Count Dankula is a bright red color that earns its name. Oats McOats is a beer for beer haters like me.

It has a smooth, hoppy taste that means business but isn't too bitter. They also have a couple more seasonal offerings, including a spiced Christmas Ale and a Jack Skellington Imp Pumpkin Stout if you're not ready to let go of the Halloween spirit and jump on the Christmas bandwagon just yet.

The bar also has food offerings and a restaurant section on one side of the aisle if you're feeling a bit more upscale. However, the food prices are steep, more in a parent's budget than a college student's.

**The vibe:** The vibe very much depends on how you feel about having a bar in a church because it most definitely is a church. The Church Brew Works team isn't shy about the somewhat sacrilegious nature of their endeavor. Core draft brews include Celestial Gold and Pious Monk Dunkel, and the first thing you see when you walk in are massive steel and copper tanks for beer brewing on the high altar.

However, there is no denying that the space is gorgeous, and it was abandoned for three years and in disrepair before the Church Brew Works owners restored it in 1996. Now, the beautiful architecture is being maintained and the history of the parish is being remembered, so something good came of the conversion.

The Church Brew Works is hardly a rowdy nightclub full of hedonistic sin (luckily there are plenty of other places for that in Pittsburgh). The crowd is older, and the vibe is quiet and relaxed. It's the kind of place where you grab a quality beer with a friend or two.

**Lit or Nah:** I am going to go with Nah. It doesn't have the energy to be a place to start or end a night out, and it's too far and too gimmicky to be a comfortable, neighborhood bar for a weeknight drink with a friend. It's worth a visit at least once for the good beer and the experience, but I'd say once is enough unless you're a beer fanatic.



# LIGHT UP NIGHT

Michelle Madlansacay | Staffwriter  
photos by Cindy Deng | Staff Photographer

It's never too early to get into the holiday spirit. The city of Pittsburgh makes that clear every year when it hosts Comcast Light Up Night. During Light Up Night, all of downtown is decorated with beautiful lights and Christmas trees, Market Square is transformed into a little holiday-themed village, and live musical performances take place down by the bridges.

It's a wonderful event to attend with friends and family that will definitely help set the mood for the holidays. If you're planning on attending Light Up Night in the coming years, I have a few tips on how to make the most of your experience, since this was my second time going:

## **Check the schedule of events ahead of time**

Starting at 11:30 a.m., different holiday-themed events take place all over downtown Pittsburgh. You'll usually find the tree-lighting ceremonies occur in the morning, while all the live musical performances and fireworks happen at night. Downtown can get really crowded on this day, making it a bit difficult to navigate through the city. It'll make things a lot easier for you if you know all the event locations and how much time it takes to get from one place to the next.

## **Dress warm for the weather**

Nobody really knows what to expect when it comes to Pittsburgh weather. However, in my Light Up Night experiences, it has been pretty cold both years. Wearing a big jacket, scarf, hat (they usually give out Santa hats, but they won't keep you very warm), and comfortable shoes is ideal.

## **Book a reservation for a restaurant downtown way in advance, or eat before going**

Almost every restaurant my friends and I passed by was packed. We made reservations to Sienna Mercato about a week before Light Up Night, so we were able to eat there. But even when we were making the reservations, we saw that many other restaurants were already booked, so be sure to reserve spots about two to three weeks in advance. Generally, I find most food places downtown to be pricier, so eating at home or somewhere else beforehand isn't a bad idea either.

## **Find some time for ice skating**

Every year around this time, PPG Place opens their ice skating rink to the public, where people can skate around a giant Christmas tree. It doesn't cost

too much, and it's a great opportunity for you and your friends to have fun and possibly try something new. If you decide to go skating, I do warn you to wear long socks because deep ankle blisters are definitely not fun to have.

## **Embrace spontaneity**

Not knowing what to expect during Light Up Night can result in a very fulfilling experience. Although planning your trip ahead of time can make things more convenient for you as you explore the city, the spontaneity can add a lot of excitement.

For example, my friends and I knew that singer Andy Grammer was performing this year, we just didn't know where and at what time. As we were walking downtown, we began to hear him singing his song "Honey, I'm Good." My friends and I followed the sound of his voice and ran to the area where he was performing. We even got great spots to take pictures of him on stage. Generally, when it comes to Light Up Night in Pittsburgh, there's really no harm in not knowing what's going on and where things are all happening. The downtown area isn't too big, so it's not too hard to locate certain events. Just being in the center of all the Pittsburgh holiday excitement makes a very worthwhile experience.





# No Different from Your Other

## Hidden gems in the Ellis Gallery

Fleshy pomegranate carcasses and a shrine to a breast-shaped void are the centerpieces of undergraduate artist Darya Kharabi's solo show *No Different from Your Other* at Carnegie Mellon's Ellis Gallery. Playing with the sacred, damned, and macabre, Kharabi's work explores the dark history of women and medicine. Matter-of-fact recordings of dehumanizing and horrifying past treatments for breast cancer are paired with drawings and paintings that line the walls of the gallery.

*No Different from Your Other* is a beautiful show that marries research and various mediums to create a complex yet clear story about women in history. Without being didactic, the show brought to light these tragic and horrifying pieces of medical history. Kharabi writes about historic practices of mastectomies before the science was where it is today — the insertion of hooks and the severing of nerves allude to the tendency of medicine to ignore women's voices as patients. Using a color palette of fleshy pinks, burgundy reds, and sickly greens, these surrealist pieces combine imagery and text from medical journals with heavily stylized figurative drawing that build a chronology of instances in the history of treating, or not treating, breast cancer.

The show is also successful in its contradictions. On the one hand, this show is a space to hold the pain of women throughout history. Yet on the other, despite this fact, the show leans into the dehumanizing nature of medical practices. There are no identifiable women subjects of this story, the drawings of women, although beautiful and intricate, either allude to physiological diagrams or display an abstracted and distorted woman. The absence of an overt female subject emphasizes the invisibility of women in medical literature, but these figures keep the viewer grounded in the perspective of a female narrator.

The narrative Kharabi presents is clearly from a clinical perspective but is also contextualized by heavy religious references. The pomegranates and grapefruits reference the fall of Eve but also the human body; the entire show is set up like a holy space. The relationship of science, medicine, and religion is complex, and we see the lasting effects of that even today in our system for women's healthcare. The confusion of untangling the relationship between these institutions with body politics and self-perception is central to Kharabi's work. In some of the pieces, the role of religiosity enshrines misogyny and negligence in the medical fields. In

others, however, it turns the unnamed woman into martyrs and provides the basis for the pieces that allude to the reclamation of the female body.

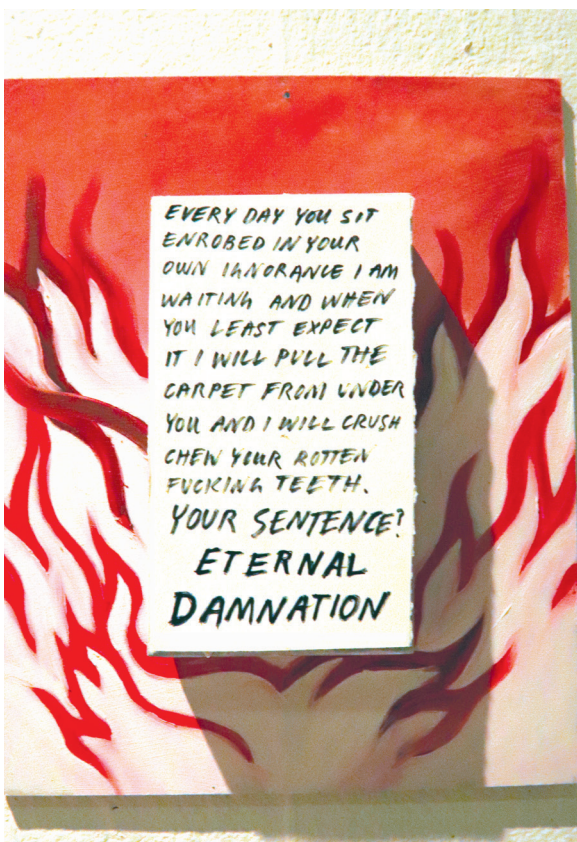
A black form shaped like a bullet or a breast appears as a monolith in several of the pieces. It works as a void that represents perhaps the breast or its removal, as well as the removal of the agency of women around their own bodies in these cultural and medical spaces. It is the centerpiece of the show. A wreath of twigs turns the absence of women from medical knowledge into a holy tragedy. The void of the monolith and the holy space of the entire show allows for a space to grieve for the women who suffered for the sake of science. This show's source of power is the pairing of sadness with rage. Most present in the final piece that contains a poem sentencing an unknown other "enrobed in [their] own ignorance" to hell, these works are also a direct expression of anger.

This past year, news outlets from *Teen Vogue* to the *New York Times* have become hyper-aware of women's anger, claiming that we as a society have never seen women become so publicly angry as they are right now. In the past month alone, with the slew of sexual harassment charges and attacks on women's health care, has been a trying time for women. We've also seen the ways women have learned how to channel and express anger in a culture that teaches women that they aren't allowed to hold this emotion. In *No Different from Your Other*, we see the exploration of a specific piece of scientific history built into our cultural understanding of women and their bodies with pieces that work frustration and pain in academic and artistic language. Given this broader social context, the work of artists like Kharabi are important and brave.

It is, therefore, also important that we listen to the women speaking out about injustice in their lives and our world. Often, the changes we see in the world come from youth culture and college campuses. And so, although the Ellis Gallery may feel separate from the professionalism of formal galleries, it is vital that we take participate and consume the expression of young artists on college campuses. The most important takeaway from these articles is that our student artists are preserving the values and questions our students are holding about our society, and will ultimately determine what direction progress is pushed towards. Keep an eye out for the work of Kharabi and the artists working in these spaces — their voices are a force to be reckoned with.



Playing with the sacred, the damned, and the macabre, Darya Kharabi's work explores the dark history of women and medicine.





# Compōs-it Opera

Students Premiere Original Operas

Mercedes Hesselroth | Junior Staffwriter  
photos courtesy of Susan Brown



*Compōs-it Opera*, a collaborative showcase of original student work, premiered two new operas last Friday in the Cohon Center Studio Theatre.

The evening of performances began with *Bowl of Small Hands*, an expressionist exploration of a tormented young woman seeking refuge. Senior BHA student in music technology and technical writing Joshua Brown wrote and composed the opera as part of his capstone, a cumulative project that BXA students complete during their senior year.

Jacqueline Tardanico (CFA '18) exhibited raw emotion in the role of Cherry, a woman who realizes "the boundaries between what is real and what is not... are becoming porous." Visually compelling set design by sophomore drama major Katherine Sharpless, paired with Brown's mesmerizing orchestrations, placed the audience directly in Cherry's mind, while stage direction by sophomore drama major Rachel Pospisil effectively used movement to show the control exercised by Cherry's inner demons.





The next performance was *Suburban Mompera*, a contemporary take on the classical Faustian narrative. This was the first composition by senior music major Russel H. Holbert, who wrote the score that underlies Brown's libretto.

The audience was fully engaged with *Suburban Mompera* from the start, when housewives Pam, Shelby, and Mindy reveal their longing for a life beyond mommy blogs and PTA meetings. The opera successfully blended comedy and emotion, weaving hilarious one-liners with fully-realized backstories and excellent characterization.

Holbert created the opera as part of his requirements for Fifth Year Scholars, a university-sponsored fellowship that funds an additional year of study for students who wish to launch impactful projects on campus. Holbert hoped *Compōs-it Opera* would provide the Carnegie Mellon community with music "by the students, for the students" and expose the audience to contemporary opera.

Overall, the team behind *Compōs-it Opera* admirably took risks and forged partnerships from all corners of the university. "If there's something I know how to do, it's start something I don't know how to do," said Brown.

"Throughout the process, there was a lot of magic and luck." Holbert and Brown clearly have a strong collaborative relationship and *Compōs-it Opera* promises continued growth and achievement in any future work they may embark on.







# Isabel Allende

Juliana Schnerr | Staffwriter  
Lisa Qian | Staff Artist



Few authors have had as global an impact as Isabel Allende, a writer with over 20 works published in 30 languages. Not only do Allende's works reach a global audience, but they also appeal to universal human experiences and emotions. A distinguished writer and speaker, she made a perfect addition to Pittsburgh Arts and Lectures' *Ten Evenings*, a series of author lectures meant to "create community through the literary arts." As in her writing, Allende shared valuable and heartfelt lessons during her talk at Carnegie Music Hall. These lessons covered how to be a better writer, American citizen, and person overall. Through dialogue, Allende honestly divulged her thoughts on political controversies, the refugee experience, the necessity of grief, and the joy of falling in love no matter one's age. Intelligent, charming, and bitingly funny, Allende is the elegant mentor we've all been looking for.

While Allende spoke on many subjects, this particular visit to Pittsburgh was in support of her new novel, *In the Midst of Winter*. The novel follows a group of three individuals who, through a chance encounter, are brought out of their personal traumas and into the light. After undergoing a divorce and a series of tragedies herself, including the deaths of various friends, her agent, and her beloved dog, Allende found herself feeling as though "nothing good was ever going to happen." In the midst of that sorrowful period, she discovered a quote by Albert Camus that reads, "in the midst of winter, I found there was, within me, an invincible summer." And thus, Allende began to write in hopes that she and her characters would make it through the long, cold winter to their invincible summers.

The characters are clearly informed by Allende's own experiences, in particular, the story of Evelyn Ortega, a Guatemalan immigrant fleeing a violent past. Allende is deeply familiar with the political turmoil of Latin America and its impact on daily life. She herself fled Chile following the coup in 1973

and has a deep understanding of life as an immigrant. She is also involved in the work of the Isabel Allende Foundation, an organization that strives to end violence towards and exploitation of women and girls. Many women who receive aid from the foundation have shared their stories with Allende, and one such story became the inspiration for Evelyn's journey.

As for the other two characters, Lucia and Richard, their story depicts the experience of falling in love at an older age. A romance between older characters is rare in popular literature, but the idea of finding love and expressing one's sexuality later in life is very important to Allende. New love has recently made its way into Allende's life, in the form of an email correspondence with a man who reached out to the author after hearing her on a radio show. On their first date, (which happened after five months of emailing each other every day) Allende didn't hold back in asking, "What are your intentions? I'm 74 years old, I don't have time to waste!"

It was with this same frankness and intensity that Allende approached audience questions submitted later in the night. Questions ranged from, "How do you stay so beautiful?" (to which Allende laughingly replied, "money") to more serious questions such as, "How can we solve the refugee crises going on all over the world?" While Allende openly admitted she did not have a final answer for such a complex problem, she offered what insight she could. She urged audience members to look at each statistic related to immigration and refugees not as a number but as a person with a name and a story. Allende believes we need to make an effort to understand the reasons people have for leaving and recognize both how difficult it is to leave one's home and how perilous that journey to a new place can be. "It's not about building a wall," said Allende. "It's about supporting efforts to improve conditions in countries of origin. It's about understanding that no one wants to leave their home and that we are all people."

Allende then went on to share her writing wisdom. The question, "Does everyone have a story?" led to some interesting truths about both fiction and real life. While the author admitted that some people are in fact, boring, it's all about the way you tell that person's story. On the other end of the spectrum, Allende admitted that sometimes you have to water down reality instead of building it up. According to Allende, "the first duty of a fiction writer is to trap the reader," but sometimes reality is too horrific to keep a reader invested and the truth must be diluted into something more manageable.

Allende is no stranger to hard times and hard truths. She has experienced two divorces, the loss of her daughter, years of displacement and many other trials. Through her work, she has encountered individuals with truly heart-breaking stories and unimaginable losses, and as a writer, she carries those stories with her always. Allende speaks with the kind of confidence and omniscience that can only come from knowing the pain and making it through to the other side. When the audience addressed Allende's life experiences, she was not afraid to acknowledge them. In fact, she announced that each negative and painful event in our lives must be acknowledged and they must be lived in order for times of joy to be so powerful. Our sorrows and pains are just a part of the narrative, but they're not who the characters are. That attitude is what tied the entire night together.

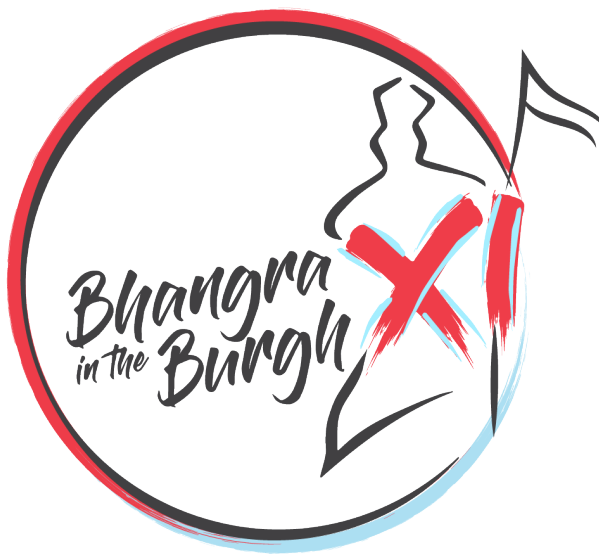
The final question of the night asked, "With all that's going on in the world, what gives you hope?"

Allende's response: "Everything. Everything gives me hope."

And there lies the power of Isabel Allende and her stories, to push through the pain to find the joy, to acknowledge loss to find new love, and to wait out the winter until the dawn of that invincible summer.







**Apeksha Atal** | Pillbox Editor  
photos courtesy **Tina Vaz**  
logo courtesy **Bhangra in the Burgh**

Over the past few years, I've worked operations for *Bhangra in the Burgh* twice and only seen the show in segments, between flapping doors and late-arriving spectators. This year, however, I was determined to grab a seat and really take in the whole experience, and boy was it worth it.

*Bhangra in the Burgh* is a completely student-run Bhangra competition hosted by students at Carnegie Mellon University. Under the guidance of juniors

Nandini Radhakrishnan and Isha Laad, who co-directed this year's show, a team of more than 20 executive board members and even more operations volunteers took the year to create a truly incredible program. This year's program benefited the Children's Hospital of Pittsburgh Foundation, specifically their inspiring Creative and Expressive Arts Therapy program.

Every year, eight teams arrive to compete for first, second, and third place. This year, the eleventh iteration of the event, teams hailed from Canada, the West Coast, the Tri-State Area, Detroit, North Carolina, and, of course, Pittsburgh. The line-up this year featured many past champions, such as last year's reigning champs Anakh E Gabroo, from the Tri-State Area. The full line up was as follows: Anakh E Gabroo (Tri-State Area), Cal Bhangra (UC Berkeley), First Class Bhangra (Pittsburgh, PA), Furteelay (Detroit, MI), Nachdi Jawani Ankhiley (Ontario, Canada), Nachde Shokeen Gabroo (Bay Area, CA), UNC Bhangra (UNC Chapel Hill), and Royal Academy - Royal Queens (Canada).

Teams were judged on their formations, vadiya (attire), mix (music and lights), synchronization, and creativity. As a result, every performance was intricately crafted and packed with energy. Of the eight teams that performed five were all male and two were all female. Each brought an interesting twist to the table. While some groups pretended to leave the stage, only to come back with an even more exciting finale, others climbed on each other's shoulders and

brought other dance forms into their Bhangra performances. The costumes were bursting with color and shimmer, and no dancer graced the stage without the signature Bhangra smile that we've come to know and love.

Despite a few technical difficulties throughout the evening, the show was held together well by the emcees, seniors Piyush Puri and Rohan Shah. Both Puri and Shah kept the audience chuckling with an ongoing gag about the miraculous Vicks Vaporub and numerous impromptu dance battles. Constant allusions to the "bio-data"-hungry aspect of Indian-American match-making culture gave both the students and parents in the audience a good laugh.

Other entertainment of the evening included Carnegie Mellon's own all-female south Asian a cappella group, Saans, and Infra Dance Company. The University of Pittsburgh's classical dance troupe, Pitt Nrityamala, also took the stage, as did the nine to thirteen years olds of the Nandanik Dance Academy. The show was, of course, sealed off with a power-packed performance by CMU Bhangra while the judges decided the winner.

While all the teams danced valiantly, there could be only three winners. Here was the final decision:

#### Winners:

1. Nachde Shokeen Gabroo (Bay Area, CA)
2. First Class Bhangra (Pittsburgh, PA)
3. Anakh E Gabroo (Tri-State Area)



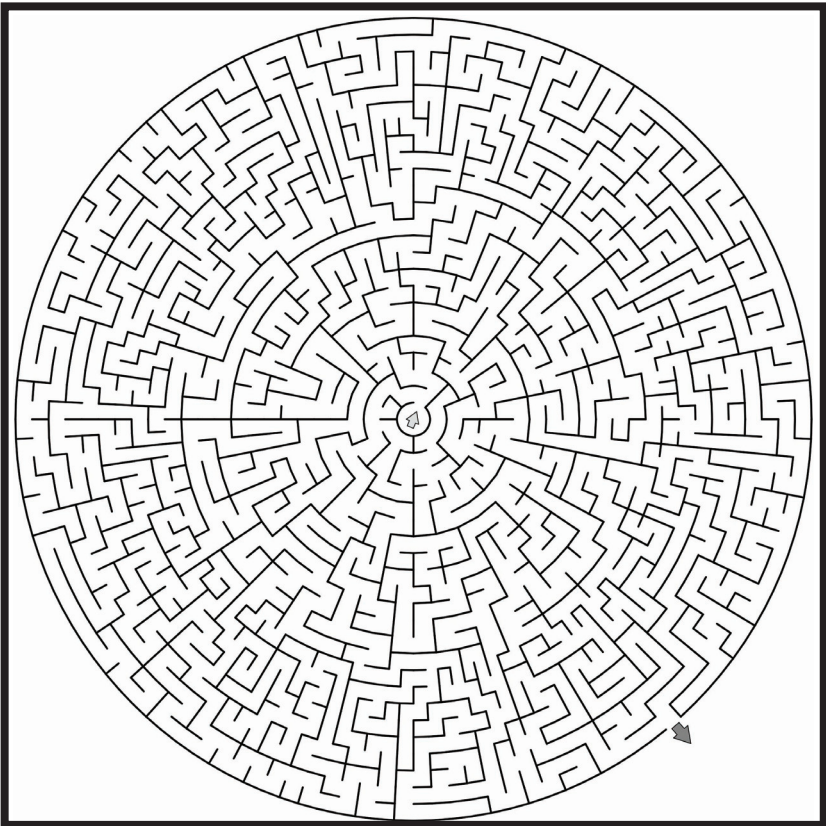


sudoku

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

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

maze



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

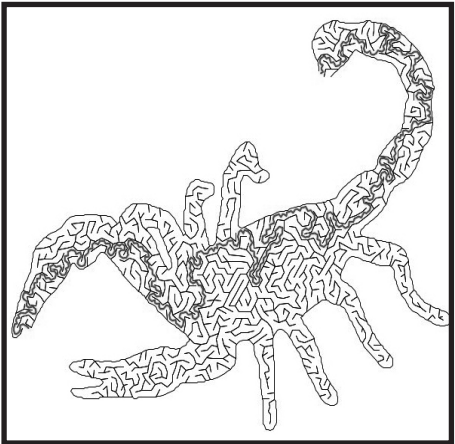
Solutions from Nov. 13

1	2	3	4	5	6	7	8	9	10	11	12	13
S	E	R	T	A	S		P	O	I	C	A	P
E	L	M	O	R	E		O	B	S		A	M
T	I	N	S	E	L		L	E	A		N	A
						20	S	A	L	T	L	A
						21					K	E
						22					C	I
						23						
						24	P	S			O	H
						25					L	A
						26						
						27						
						28	A	S	T	O		
						29						
						30	S	R	I		T	E
						31						
						32						
						33	M	A	V			
						34						
						35						
						36						
						37						
						38	A	L	I		A	L
						39						
						40						
						41	S	T	A		N	E
						42						
						43						
						44	R	O	N	D	U	R
						45						
						46						
						47						
						48	R	A	M		O	O
						49						
						50						
						51	A	H	E	D	F	R
						52						
						53						
						54	P	R	E	P	A	R
						55						
						56						
						57	E	R	N	E		
						58						
						59						
						60						
						61						
						62						
						63						
						64						
						65						
						66						
						67						
						68						
						69						
						70						
						71						
						72						
						73						
						74						
						75						
						76						
						77						
						78						
						79						
						80						
						81						
						82						
						83						
						84						
						85						
						86						
						87						
						88						
						89						
						90						
						91						
						92						
						93						
						94						
						95						
						96						
						97						
						98						
						99						
						100						

crossword

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

sudoku



maze



## Clothes

by John McNamee



piecomic.com

Autocorrect  
by xkcd



xkcd@gmail.com

xkcd.com



# Finals Season

by Sarah Andersen



[www.gocomics.com/sarahs-scribbles](http://www.gocomics.com/sarahs-scribbles)



horoscopes: The signs as Overheard quotes: part two

crossword

Aries

march 21 – april 19

“Remember, if you don’t like it, I don’t care.”

Taurus

april 20 – may 20

“My arm exercise is lifting food to my mouth.”

Gemini

may 21 – june 20

“Willl you be my DineX daddy?”

Cancer

june 21 – july 22

“If you can’t pass a simple Turing Test then I’m sorry, you’re not the girl for me.”

Leo

july 23 – aug. 22

Person One: “I can’t stand you!”  
Person Two: “So sit.”

Virgo

aug. 23 – sept. 22

“Hot chocolate! Warm your cold, cold hearts!”

Libra

sept. 23 – oct. 22

“You don’t need brakes to go fast.”

Scorpio

oct. 23 – nov. 21

“Why are those boys wearing Schatz T-shirts?”

Sagittarius

nov. 22 – dec. 21

“Am I user-friendly yet?”

Capricorn

dec. 22 – jan. 19

“I watch Netflix on two-times speed to waste less time.”

Aquarius

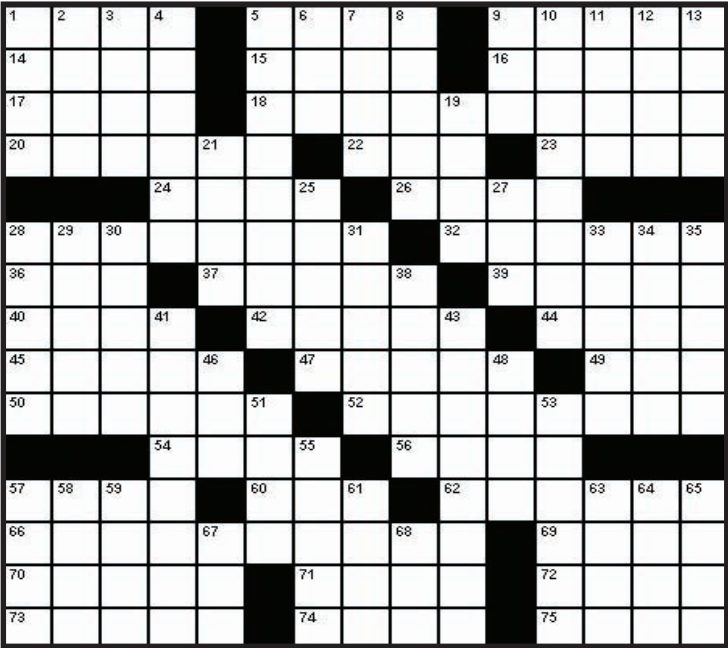
jan. 20 – feb. 18

“Why do you think these bricks are covered in mesh?  
It’s so unpleasant.”

Pisces

feb. 19 – march 20

“No one told me what the plan was, they just handed me a knife and a chicken!”



Crossword courtesy of *FreeDailyCrosswords.com*

across

- 1. “Born Free” lion
- 5. An earth sci.
- 9. Singer Bonnie
- 14. Lounge
- 15. Unattractive
- 16. Minute Maid Park player
- 17. Rebuff
- 18. Offensive action
- 20. More spine-tingling
- 22. Penlight battery
- 23. Division preposition
- 24. Agrees tacitly
- 26. Former Fords
- 28. Raging
- 32. Monetary unit of Thailand
- 36. Polished off
- 37. French composer Erik
- 39. Contradict
- 40. Tobacco plug
- 42. Not once
- 44. Art \_\_\_\_
- 45. The Hilton, e.g.
- 47. Grain stores
- 49. Wee bit
- 50. Institution for mentally ill
- 52. Pulp summer refreshment
- 54. Sign of injury
- 56. Wife of a rajah
- 57. Eastern nanny
- 60. Get it?
- 62. Kathmandu resident
- 66. Very fine pasta
- 69. Ladies of Sp.
- 70. \_\_\_\_ once
- 71. Type of market
- 72. Skin disorder
- 73. Rock
- 74. Actor Penn
- 75. Gratuity

down

- 1. Ultimatum word
- 2. Solitary
- 3. Insult
- 4. Deficient in pigmentation
- 5. Protector
- 6. Silly Putty holder
- 7. Gymnast Korbust
- 8. Rotating
- 9. \_\_\_\_ Tafari (Haile Selassie)
- 10. Aided
- 11. Pack \_\_\_\_ (quit)
- 12. Horse’s gait
- 13. Up \_\_\_\_ good
- 19. Chow
- 21. Ages and ages
- 25. Satisfies
- 27. Apply lightly
- 28. Russian retreat
- 29. Community spirit
- 30. Full of substance
- 31. Polite
- 33. Prince Valiant’s wife
- 34. Battery type
- 35. Crystal-lined rock
- 38. Conger catcher
- 41. Native of Wales
- 43. Inhabitant of Bucharest
- 46. Director Jean-\_\_\_\_ Godard
- 48. Unit of loudness
- 51. Not fem.
- 53. Tries to bite
- 55. Sailing hazards
- 57. Gardner and others
- 58. Dissolve
- 59. He sang about Alice
- 61. Vogue rival
- 63. Sacramento’s \_\_\_\_ Arena
- 64. Slender
- 65. Words of understanding
- 67. Mineral suffix
- 68. Meadow



# calendar

## this week

**Whodunit? Week**  
Nov. 17 - Nov. 23  
Row House Cinema  
Tickets: [rowhousecinema.com](http://rowhousecinema.com)

Row House Cinema is asking the age old question this week: “Whodunit?” Catch classic films *Who Framed Roger Rabbit* and *Clue*, along with newer hits such as *The Girl with the Dragon Tattoo* and the original version of the newly released *Murder on the Orient Express*. Tickets sell fast, so be sure to pick yours up soon.

**Ai WeiWei: Human Flow**  
Nov. 19 - Nov. 26  
Melwood Screening Room  
More Info: [cinema.pfpca.org](http://cinema.pfpca.org)

Ai WeiWei brings you a message of the refugee crisis through *Human Flow*, including stories from 23 countries and a handful of the 65 million people currently swept up in the refugee crisis. The film runs for 2 hours and 20 minutes and poses questions of respect in contemporary society. Prepare to be moved and inspired to do more and speak up.

**Motown**  
Nov. 21 - Nov. 26  
Benedum Center  
Tickets: [trustarts.org](http://trustarts.org)

*Motown* is a show on the true story of Berry Gordy, the record producer who gave us the likes of Michael Jackson and Diana Ross. Featuring the hit songs “My Girl,” “Ain’t No Mountain High Enough,” and “I Want You Back,” *Motown* will keep you dancing in your seat and singing along.

## ongoing

**Birds and Botany:  
Works by Ashley Cecil**  
Nov. 17, 2017 - Jan. 7, 2018  
Phipps Conservatory and Botanical Gardens  
More Info: [phipps.conservatory.org](http://phipps.conservatory.org)

Current artist-in-residence at the Carnegie Museum of Natural History Ashley Cecil’s work is on display at Phipps Conservatory, and will be until Jan. 7 2018. Her work represents research regarding conservation problems faced both in Pittsburgh and around the world. Learn more about the research at [www.birdsafepgh.org](http://www.birdsafepgh.org).

## friday

11.24.17

**Holiday Lights Opening Night**  
5 - 9 p.m.  
Kennywood Park  
Tickets: [kennywood.com](http://kennywood.com)

With Pittsburgh all lit up, the holiday spirit is spreading all the way to Kennywood, whose winter lights will be up and ready to impress this Friday evening. Kennywood’s Christmas display boasts over six million lights and a variety of winter-themed entertainment for everyone to enjoy.

## classified

**1655 Shady Avenue, First Floor  
Apartment: 3 BR, 2 Full Bath, LR/DR,  
Office, & Enclosed Porch.**

Lovely, bright apartment steps from the Squirrel Hill shopping district, & an easy bus or bike ride to CMU. Monthly rent is \$1750, with about \$100 for utilities. Laundry and parking available. Call Larry Newman @ 412-421-3720 or [lsnsss@verizon.net](mailto:lsnsss@verizon.net) for a tour!



# *C# Harvest Concert*



Instead of the usual lectures, Friday night found Doherty Hall full of song. One of Carnegie Mellon's a cappella groups, C#, hosted their annual Harvest Concert, featuring the C# singers as well as performances by C#'s sister choral group Db and Carnegie Mellon's Christian a cappella group Joyful Noise. It also provided a platform for soloist performances from group members and unaffiliated singers, bringing people together from across campus.

*Editor's Note: Julianne Sanscartier, a member of Db, is Comics Editor for The Tartan.*

Lisa Qian | Staff Photographer

