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FREE, AS IN BEER

South by South Lawn

Gaby Clarke, Aaron Greiner, Keenan Zucker
Contributors

Only good days start with a 3:45am wake up time. Then a 4:15 Uber ride to the airport. Then an hour and a half plane ride, which happens to only be about a third full. Then an airport taxi to our destination, you know, The White House. But let's back up here. Why exactly were we at the White House? We were there for South by South Lawn. Inspired by South by Southwest (which President Obama attended this past spring), SXSL brought together innovators, creators, and organizers working with social justice and environmental issues in an all-day festival showcasing their work. So, again, why were we there?

Our involvement at SXSL was a collaboration of two labs on campus. Sara Hendren was invited to present her work with a+a at SXSL, and came to us folks in Return Design for exhibit design and fabrication help. Return Design is Tim Ferguson Sauder's lab at Olin where student designers produce commissioned work for people who help people,

including non-profits and art organizations. That's where we come in... We're Keenan, Aaron, and Gaby, juniors and student designers at Return Design.

At the White House gate, we were greeted by two of the SXSL organizers, as well as two Secret Service members, fully equipped with all of the tactical gear you can imagine. An adorable German shepard, most likely one command away from tearing out our windpipes, sniffed our equipment-filled bags. It turns out only Sara was on 'the list.' The two organizers were at the ready to tackle the situation, and quickly collected our IDs and added us to said 'list' via pink-cased smartphone—very official and secure.

After around 20 minutes, the additions to the list had been processed and we were all let through the first gate. All except Keenan, that is, since his birth year was incorrectly entered as 2016. He may have a baby face, but that is a little extreme. So as the rest of the team entered the premises, Keenan had the unique opportunity to stand alone for another 20 minutes with the unflinching Secret Service men before he

was reinstated to his rightful age and allowed on the lawn. The two organizers assured him and reminded him to "not lose faith in the government." Not yet.

Once we got in, we got right to work finalizing the booth and prepping for the press and attendees. Some kind folks from the coffee bar at the event brought us iced coffees to get us going, and soon the last of the vinyl was up, we (finally!) got a power hook-up, and we had the project prototypes arranged.

"I hit something hard when I was putting in this stake. Is there a bunker under here?" - Jeff

"I can neither confirm nor deny those allegations." - the grinning Secret Service guy

When the SXSL guests arrived, we found ourselves busily engaged in good conversation. Some attendees strolled by, while others were quick to be active in discussion with us. We were excited by how many people we somehow connected to the lab, through personal connections or otherwise.

Although we had numerous interesting conversations with many interesting

continued on next page

people over the course of the day, there were a few people who stood out. Adam Savage, with his film crew from Tested, stopped by and interviewed Sara. He was a super genuine guy, very engaged with the project, and was happy to take a photo with us afterwards. Valerie Jarrett, a senior advisor to President Obama, also stopped by with a large Secret Service member in tow. She was sweet and showed a nuanced interest in Sara's work as well. Both NowThis and Amy Poehler's Smart Girls dropped by the booth to film Sara talking about the project. The NowThis video, broadcasted live on Facebook, racked up over 100k views. Gaby got to talk to Bob Boilen, host of NPR's All Songs Considered and the Tiny Desk Concert series, which was awesome. Bob was a cool guy, and even though he was very interested in the booth, we were unable to secure an invite to the next Tiny Desk Concert...

Bummer.

In addition to talking about our booth, we were able to see some of the other happenings at SXSL. The National Park Service booth was an interactive installation: a 14 foot diameter compass with a moveable needle. When the needle points toward a national park, the compass emits a joyful ding and displays information about all NPS-maintained land in that direction.

While we did not get to hear many of the panel discussions (we were so busy at our own booth!), we did get to see Congressman John Lewis and his powerful, emotional introduction to a panel. After the booths closed at sundown, we were able to catch the performance by The Lumineers. At one point the guitarist climbed up onto the 12-foot stack of speakers and played for a while before jumping off, guitar and all. (He was OK, don't worry!)

After a long, amazing day at South by South Lawn, we had a delicious picnic dinner and listened to the POTUS talk with Leonardo DiCaprio and Dr. Katharine Hayhoe about climate change. After, we lay down on blankets on the South Lawn to watch the premier of Leo's film on climate change, Before The Flood. For those of us who had enough energy left to stay awake for the whole thing, it was an interesting film showing the destruction of climate change and calling for climate action.

Our time at SXSL was an amazing experience. We were able to not only help design and fabricate a kick-ass booth, but we were also able to have interesting conversations with inspiring people and learn from some of the most impressive innovators, creators, and organizers. You can read more about our time at tfergusonsauder.exposure.co/olin-at-the-white-house.

Hey Olin, Why So Busy?

Adela Wee

Alumnus Contributor

Something about Olin as it is today has been bugging me for the last few months. Olin has changed and is yet still changing. But this change has not gone unnoticed-- many of the faculty, staff, and administration have also noticed a difference in the Oliners they see and interact with as well. Some of the underclassmen can't even tell me what the Honor Code is or what it says

anymore, or why they signed it in the first place. So what are our values as a community? I think they've changed. Change is healthy, but if we don't know why we're changing, or are shying away from our founding values, we need to be actively aware of those things. Current students need to be aware of what they're allowed to help change and not change. Olin might be a bubble, but it is a very unique community that extends beyond just the current active community that's

on campus.

It has been argued that by making Oliners pay for their tuition, we've created an environment where it feels as though being selected at Olin was a business transaction (I get a degree if I hand you \$), rather than a gift or an opportunity. We've created an environment where students feel they have to get their money's worth. Where folks expect Olin to be what admissions told us when we were recruited and then complain when reality sets in.

Where folks are constantly running around and it's notorious that an Oliner won't be able to do anything outside of classwork after the second half of the semester. What was once a busy-ness that stemmed from seeking to satisfy curiosity in learning is now a busy-ness that seems to stem from overloaded course schedules on top of frantic social obligations on top of club commitments on top of research on top of...you get the point. Why are we so busy? What happens when you're too busy to be creative, curious, or weird?

What happens when we focus on a culture of busyness:

1. Mission Lackluster. We do not "continually discover" effective learning approaches and environments in many of our classes. Olin students are not being prepared to be "exemplary engineering innovators" but come to Olin with prior experiences in leadership, entrepreneurship, and/or engineering and build upon those skills. Arguably the environment on campus is no longer conducive to innovation or entrepreneurship as a small fraction of Oliners start companies before they graduate or even upon graduation. Over the course of 4+ years, few Oliners are exposed to more than one broad-impact project or funded experiment. Largely, the Collaboratory (a group created to spread Olin's unique culture and education initiatives) communicates what Olin is and leaves other

schools to decide what to do with that information. Since transforming engineering education is fairly hard to measure, and takes time to see any impact, it does not seem like we've had tremendous success. Unless you're a software engineer, it's a lot tougher to find a job that doesn't pigeonhole you by your degree. Which makes me wonder, as a student I was always told industry and academia wanted more Oliners, but when going through the interview process, myself and many Oliners balk in self-doubt and don't believe they're technically competent engineers, and interviewers become frustrated at our lack of knowledge of the "fundamentals." We have graduated 10+ classes of students. How long does it take to change an engineering perspective?

"So what are our community values? I think they've changed."

2. Walking Dead Phenomenon. Students are burnt out and it's October. Students were burnt out when it was September. What is causing this exhaustion? Why does it feel less exciting after first semester?

3. Conflict Aversion. Olin is static because stakeholders (eg. students, faculty, staff, administrators, alumni) refuse to effectively confront one another to initi-

ate improvements.

4. Stagnation of the Olin Classroom. Hallmarks of the Olin classroom environment were close collaboration with faculty members and students nurturing their intellectual curiosity. Teams that would communicate effectively and work together to become better. Projects that people cared about. Willingness to "seize the day." A drive towards intrinsic motivation as opposed to extrinsic motivation. (Although these qualities may not have been present in every class at Olin, they were definitely part of the vision for an Olin classroom.)

5. Massive Distrust. People don't believe that teams will be good. People don't expect huge turnout at student events. People are asserting personal property more. R2s, PAs, OSL, and the Honor Board are all seen as ineffective, nefarious, or both. People believe that "the administration" and "the students" are categorically opposed.

6. Dearth of Honor. Although the system has undergone continual improvements since Olin's founding, the overall knowledge of the Honor Board/Honor Code system is poor. If people don't get trained or take the initiative to become informed, there is really nothing about the culture now which really upholds the "honor code." Why do students sign the Honor Code, but other members of the community (eg. faculty) not?

7. Mis-remembering

the Founding Precepts. The founding precepts say things like “even a new institution can, with the passage of time, become resistant to change. If this were to happen at the College it would be a tragic loss” and “The Foundation does not seek to establish a generic undergraduate engineering college.” It’s clear to me that even though we claim to follow each of these precepts, the strength with which they were written has been lost. Sure, we’re still a “student-centered” institution, but ask yourself, does a culture of busy-ness show a care for the students that we were intended to have?

Let’s ask ourselves as a community why we’re so busy. Why are we burning the wick at both ends, or burning ourselves out? To what end? I’ve seen a lot of people unwilling to engage with the community at large, resulting in folks leaving the community, being less creative, less productive, and less happy at large. A less engaged community is inherently against Olin’s nature. A less engaged community means that Olin is interested in incremental improvement and has stopped challenging the status quo and showing the world just how engineering can be different. Although Olin is no longer in risk of ceasing to exist, it is at risk of danger in losing some of the creativity and passion and intensity personality it is so known for. Students have said this is because they don’t know who to go talk to if they do have a concern they want

to address. We’re morphing into a corporation of sorts, and downsizing our R&D department, and fundamentally, the student who enjoys production is very different from the one that enjoys innovation and experimentation.

Over the years there have been several pushes to bring the community together, solicit feedback, and refine community values and interests. One example is Build Day, where we brought the Olin community together on three separate occasions to focus on 1-day initiatives to connect at the end of a semester. Build Day started out with a strong committee headed by 2013ers, and then fizzled out to being run by 1 person in 2015. Some other activities include lunches with staff, office hours with CORE/Honor Board/R2s/PAs/OSL, interesting conversations, and co-curriculars and passionate pursuits. There are still continuing ongoing experiments such as alumni seminars, breaking the bubble (B2-- an effort to help Oliners transition out of the bubble), alumni as design reviewers, and new classes, like Quantitative Engineering Analysis (QEA) which were made to reflect the desire of many Oliners to be better at the “hard engineering” side in addition to the “soft skills” many are known for. Some of you attend 4N Fridays, where Oliners open their rooms up to folks to provide a venue to hang out in without the context of a party or a team meeting. These are

all efforts that do show folks care about the community and about the school. But these efforts won’t go anywhere without active participation by those on and off campus.

I challenge you all to become engaged in the Olin community. Give feedback, whether it’s positive or negative, because folks won’t know if things are going well or not without it. Drop in and introduce yourself to a staff member, seek out administrators, befriend faculty. Don’t just talk about tasks or problems-- and if you see issues, approach it with the “can do” attitude Oliners are known for. Talk about Olin (the good and the bad), the meta things about life, and talk to more than just other Oliners. Talk to the folks who make up the community (aka. the bubble). Do something to make Olin better than when you left it, and know that sometimes that takes a lot of time and commitment, but it will be worth it, because what is the alternative?

And special thanks to: Victoria Preston, Mitch Cieminski, James Nee, and Isaac Vandor for helping me edit and express my thoughts in a coherent manner. Also special thanks to many other alumni who I’m lucky enough to call my friends (and have helped to edit previous opinions), like Abe Feldman, Alex Kessler, Victoria Coleman and many others. Glad to know that I’m not the only one who’s seeing what I’m seeing.

A H S T h o u g h t s

Ellie Funkhouser

Contributor

Registration fast approaches! Some thoughts on AHS from someone who took a lot of failed attempts to find an AHS concentration that fit:

The approach to humanities that sees it as a supplement or fortifier to STEM education is effective for some people and ineffective for others. I got little out of a Drawing I class by framing it as a way to up my MechE skills. Then I tried to take an education class from the perspective of an engineer looking to teach engineering. I'm sure that it works well for many people to have their entire curriculum working toward one unified goal or idea, but with all the talk of cross-disciplinary integration here, it took a while to realize that I could keep my peas and carrots on opposite sides of the plate. So, if by chance you were looking for permission: contain multi-

tudes, if you want.

Something that worked well for me was to sit down with an hour or two free and go through the entire Wellesley course catalogue, marking off classes with names that interested me. Once I'd

"It took a while to realize that I could keep my peas and carrots on opposite sides of the plate."

gotten through the whole list, I reviewed all of the class descriptions and wrote down groupings that emerged as concentration possibilities. I came up with two that I was really excited about and ran them by my advisor. I ended up with a concentration in history, specifically nationalism and partition - something I never, ever would have guessed that I would like.

Because history was boring in high school, and I "just wasn't a history person". Turns out history is very different at the collegiate level, which lets professors get specific enough to do their subjects justice. And there were so many other options to explore - anthropology, psychology, American studies, political science, religion, classics...

Investing time in finding the right AHS concentration was arduous but worth it. I could babble endlessly about how much the history classes I've taken have enriched my life. There's an amazing breadth and depth of opportunity in the arts, humanities and social sciences available to you, if you're interested in finding AHS that does more for you than check off a requirement or further your engineering education.

PS. Fran Malino, My Favorite Professor Ever, is offering a seminar next spring on the history of anti-Semitism. So. Just a casual plug.

"I m p o s t e r S y n d r o m e"

Jeremy Ryan

Contributor



Horoscopes by Drunk Editors

Scorpio (Oct. 23 – Nov. 21): The day before Thanksgiving, you will come down with a nasty bout of Amphibian Quail Sickness. The only known cure is putting a lime inside of a coconut and drinking it all up. Hope you beat this.

Sagittarius (Nov. 22 – Dec. 21): Is the paint in your bathroom peeling more often than usual? It's probably from all those showers your roommate insists on taking at 5 AM while singing arias. At least you'll know who to blame when Facilities doesn't pass you for inspection.

Capricorn (Dec. 22 – Jan. 19): Two mice were stuck in a bucket of cream. The first mouse quickly gave up and drowned. But the second mouse swam frantically, kicking his legs faster and faster until he churned the whole bucket in the butter. Moral of the story: the first mouse didn't have to worry about the cat waiting outside of the bucket.

Aquarius (Jan. 20 – Feb. 18): Did you know that pies were originally just jars to keep food in? Obviously the "jar" was made out of the medieval pie dough equivalent, but they somehow

managed to prevent rot/bacteria from harming the filling over short periods of time. To honor those courageous inventors, you should eat lots of pie around the middle of the month.

Pisces (Feb. 19 – March 20): Every time someone mentions a turkey this month, pretend like you've never heard of the creature, and make that person imitate a turkey call. It'll be funny, I promise.

Aries (March 21 – April 19): You know what would be really bad this mini holiday season? If you slept through your alarm on your travel day. And then when you had scrambled to successfully book another travel reservation, the station got snowed in. And your fellow travelers started looking at you like a Donner Party member. But that's totally not gonna happen...

Taurus (April 20 – May 20): Riddle me this, ModSim-ers and ModSim Alumni: If there are 330 million Americans and each person eats 1/4 of a turkey and there are 100 million turkeys turned into Butterballs each November and turkeys reproduce at a rate of .89

per year, how long will it take before we resort to eating tofurkeys?

Gemini (May 21 – June 20): Oh. You're gonna get stuck doing ALL of the project work over break because the rest of your team has had plans to fly home for WEEKS, and it just wouldn't be fair to make them cancel on their families when you have time to do the work "anyway"?

Cancer (June 21 – July 22): Tell Taurus that we've actually been eating tofurkey for years. Those vegan scientists are getting good.

Leo (July 23 – Aug. 22): Don't go to sleep on the 10th until after 11:59 PM. You'll miss out on the coolest thing of the semester if you do.

Virgo (Aug. 23 – Sept. 22): Have you ever tried to see how many fall leaves you can crumble up and stuff into your neighbor's boots? No? Wow, you're missing out.

Libra (Sept. 23 – Oct. 22): Bring Leo some warm milk on the 10th. They been working really hard, and could definitely use a good night's sleep. Maybe tell them a bed time story.

SERV Activity Update

Kelly Brennan

Contributor

The Daily Table: Service Activity Leadership by Emily Yeh

Volunteer at the Daily Table in Dorchester! Daily Table is a nonprofit organization that makes affordable and healthy food available to people with low incomes. A group from Olin volunteers there every Saturday from 11am to 1pm - visit <http://tinyurl.com/DailyTable> to sign-up! If you have any questions, please contact Emily Yeh.

Blood Drive: Ariana Olson
Olin had a successful Fall Blood Drive this October. We received 29 presenting donors, and a total of 30 units of blood donated (including 2 Double Red donations). The drive was facilitated with the help of 6 Olin student volunteers. Thank you to all of the donors and volunteers for their time. Because the Red Cross has been in urgent need of blood, every unit donated has a huge impact. Look out for news about the Spring Blood Drive, which will be held in April.

E-Disco: Jeremy Garcia, Daniel Daughtery, Kim Winter, Micaela Chiang

Lauren Pudvan

We have had our new member meeting and have been assisting in various events for the Women's Open House and Family Weekend at Olin. We also assisted in teaching a group of low income students at Dassault Systems.

Big Brother Big Sister Col-

lege Campus Program:

Big Brothers Big Sisters finalized all new Matches this month, and Bigs and Littles are now meeting regularly on Saturday afternoons. There are not as many Oliners in the program this year, but because of new Babson Bigs, there are more Matches overall. In coming months, the program plans to have more structured activities in conjunction with Babson and Olin clubs and organizations.

The Food Recovery Network:

Needs leadership from students who can commit during the Spring semester. FRN is on pause until a new leadership team can form. Contact Mackenzie Frackleton if you're interested!

*The Food Project: Aaron Greiner, Gaby Clarke

The Food Project engages youth and works on food justice issues through running 70 acres of farm in the Greater Boston area and the North Shore. They work on advocacy, youth development, and much more. Their farms, which are largely run by youth and volunteers, produce food that is sold at affordable prices at places like farmers markets. They have volunteer opportunities at all farms throughout the week.

*Gique: Ashley Funk

Gique is a Boston-based non-profit 501(c)(3) organization which exists to inspire and educate youth in STEAM. Through after-school programs and educational workshops, Gique builds a

community full of the next great thinkers, leaders, & makers. Workshops through the afterschool program occur Wednesday evenings at the Boys and Girls Club of Dorchester, and additional workshops take place throughout the semester.

*Charles River Center: Emma Price

The Charles River Center strives "to empower and support people with developmental disabilities by offering high-quality, individualized opportunities that foster independence and community inclusion." They have after school, job placement, weekend, and after work programs and events (like 5Ks and Special Olympics) that can all benefit from additional volunteers! If you are looking for a fun and very rewarding volunteer service, I highly suggest it!

*Newton Food Pantry: Logan Sweet

Located in the basement of Newton City Hall, the Newton Food Pantry focuses on healthy, fresh food. By working with community gardens and local farms, they provide produce in addition to non-perishables. There are volunteer opportunities on Wednesdays in the morning, afternoon, and evening.

*Students are volunteering for these organizations as part of Sara Hendren' and Deb Chachra's Critical Designer, Activist Engineer Course

Olin Electric Motor Sports

Luke Morris

Contributor

Olin's formula team is gearing up for another competition season in the Formula SAE Collegiate Design Series. This year we will attend Formula SAE Electric in Lincoln, Nebraska from June 21-24 (currently wait listed) and/or Formula North in Toronto from June 1-4 (accepted!). Students and professors can rejoice as we will not be at competition in the middle of finals week this spring!

You may have noticed we changed our name. With the team's transition over the last year from research to competitive racing, it seemed

a fitting time to rebrand. REVO (Research of Electric Vehicles at Olin) has been replaced with **Olin Electric Motorsports**. On campus you can just call us **Formula**. Now when you wear your REVO branded gear you can feel like one of the cool kids, here before we started racing.

Mk. 2: The Technical Breakdown

With the many, many lessons learned in designing and building Mk. 1, we have chosen a system architecture for this year that should reduce our high voltage complexity and cut system weight dramatically. **Here are the specs:**

- 107 horsepower

- 425 lbs dry weight, 600 lbs gross vehicle weight (GVW)
 - Enstroj 100 kW Emrax 228 outrunner motor
 - B A M O C A R - D3-400-400 motor controller
 - Chain drive Torsen differential transmission
 - Chain drive steering
 - Multilink rear suspension
 - 20+ custom designed PCBs
 - High-speed CAN bus
 - Continued robust firmware development
 - Live vehicle dynamics sensing and feedback
- And more exciting projects in the works!

Don't forget to donate to the SERV auction!

SERV Auction donations are due Wednesday, Nov. 2! Donations can be just about anything, from baked goods to a call on someone's birthday to personal advice.

Having trouble coming up with ideas? Go to
tinyurl.com/SERV-auction-ideas

To donate, go to
tinyurl.com/SERV-auction2016

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