

The Pioneer

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HEADLINES:

INTRODUCING YOUR NEW STUDENT TRUSTEE

NEW FACES AT COOPER

SUMMER EXPERIENCES

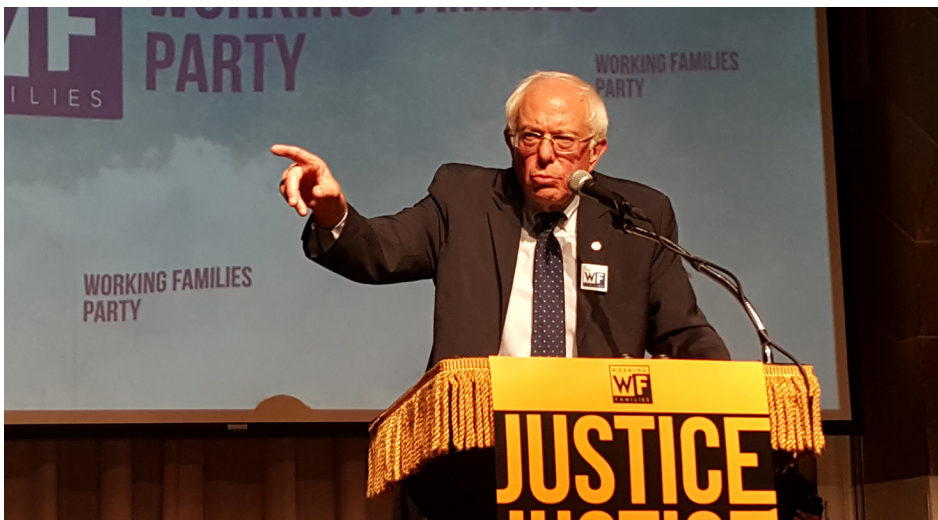
COOPER HOPS INTO BREWING

MEET THE FIRST YEARS

HALAL HAVE SOME CHICKEN OVER RICE, PLEASE

SEN. SANDERS SPEAKS AT GREAT HALL

GABRIELA GODLEWSKI (CE '19) | MICHAEL PASTERNAK (ME '17)



Senator Bernie Sanders delivering a speech in The Great Hall for the Working Families Party 18th Annual Gala on September 15. Photo by Michael Lange (ChE '19).

"Bernie Sanders is going to be at the Great Hall tonight."

One word-of-mouth tip led several Cooper students—writers for *The Pioneer* included—to join the crowd gathered in The Great Hall. Though the student body was aware of an event taking place there the night of September 15, very few were aware of who was coming. Those who found out and got in witnessed many left-leaning politicians address the members of the Working Families Party. The speakers included Senator Chuck Schumer of New York, NYC Mayor Bill de Blasio, former Ohio State Senator Nina Turner, and the event's keynote speaker, Senator Bernie Sanders of Vermont. Mayor de Blasio spoke to a supportive audience on the progress made through his Universal Pre-K program and raising the city's minimum wage. Senator Schumer expressed optimism at gaining a Democratic majority in Washington, while Nina Turner spoke fervently on socioeconomic inequalities still present in the United States. She asked the crowd: "Can I get an amen!?"

At long last, Senator Bernie Sanders was introduced to the enthusiastic crowd. "50 years ago public education may not have meant college, but things have changed! Public education should mean free public college!... Why would we punish those trying to be educated and compete in the world economy?" said Sanders, rousing

a chant from the Cooper students in the crowd. "Free Cooper. Free Cooper! FREE COOPER!"

Of course, the Cooper students knew the significance of what Sanders said in the Great Hall of Cooper Union, the very institution founded on the principle of education "as free as air and water." The Great Hall has historically hosted numerous talented speakers and political movements, including Abraham Lincoln, the NAACP, and the women's suffrage movement. Those who did not know of Peter Cooper or the history of the school listened to how a well fed, housed, and educated populace is necessary to "fully enjoy liberty." The symbolism may have been lost on them, but it was not lost on Cooper's contingent, who, after Sanders spoke, was able to meet both him and Mayor Bill DeBlasio backstage.

The event itself was led by the Working Families Party (WFP), a progressive labor-focused group which led the fight for a \$15 minimum wage and paid family leave in New York. They appeared in the public eye with their endorsements of Bernie Sanders and Bill de Blasio and their involvement with the protests against Verizon. This Gala marks WFP's most successful few years to date, with more members of their party in office than ever before. ♦

A LETTER TO FIRST YEARS

PRANAV JONEJA (ME '18)
MATTHEW GRATTAN (ChE '19)
KAVYA UDUPA (BSE '19)

To the class of 2020/2021,

Welcome to Cooper!

Yes, we all come from different walks of life, study various disciplines, and have diverse interests. But, there is one thing we do share in common: this institution. It seems that for a short while our paths have converged. It's easy to take that for granted—Cooper is a school after all—and there is a certain amount of transience regarding those who pass through its doors.

This year is an opportunity for renewal: we will welcome a new president, search for new deans and administrators, and persist on the path to tuition-free education. Your presence and energy will help to shape this renewal. Amidst this, however, don't forget the old.

The way Cooper is now is not the way it has always been. As a student here, you should feel an obligation to learn what has changed. Our institutional memory need not be wiped away every summer and in your time here, we hope that you join us in remembering how we forgot. Time is linear, but our stories do not have to be.

At Cooper, it is easy to immerse yourself in your practice, but do not forget to spend some time elsewhere. You will learn that the community around you can foster a deep sense of collectivism.

"Create lasting habits, bring stories to share, ask a question and listen to each other."

With love nonstop,

The Pioneer Editors

HAPPENINGS

Cooper's Sparkling New President

The first female president of The Cooper Union, Laura Sparks, has been elected unanimously by the Board of Trustees under the advisory of the Presidential Search Committee. Sparks will assume the role as Cooper Union's 13th President on January 4th, 2017 at which time Acting President Bill Mea will return to his position as Vice President of Finance and Administration. Currently, Sparks is the Executive Director of the William Penn Foundation, a Philadelphia-based philanthropic organization that aims "to help improve education for low-income children, ensure a sustainable

environment, [and] foster creative communities." In an email addressing the Cooper community, Sparks wrote, "moving Cooper Union forward, while also holding true to its founding principles, is all of our jobs."

New Safety Coordinators

Professors Alan Wolf and Ruben Savizky are now joint Campus-wide Faculty Safety Coordinators effective this academic year. The position, which has been held by Professor Wolf alone for the past 10 years, will be shared this school year as a transition period toward Professor Savizky assuming the entire role by Fall 2017. In addition to

their roles as Safety Coordinators, Wolf chairs the Physics Department and Savizky is an Associate Professor of Chemistry.

JSC Drafts New Constitution

The Joint Student Council (JSC) is voting to ratify a new constitution on September 20. The current JSC constitution has not been revised since 1997. A committee of six students from all three schools, the Constitution Committee, spent the summer rewriting the document, paying special attention to procedures and effective governance. ♦

INTRODUCING YOUR NEW STUDENT TRUSTEE

BRANDON QUINERE (CE '19)



Julian Mayfield (Art '18) was elected Student Trustee in May, 2016. He serves on the Free Education Committee of the Board. Photo by Yifei Simon Shao (ME '19).

The Pioneer had the chance to sit down and talk with newly-elected Student Trustee Julian Mayfield (Art '18) about his role and how students can become more politically involved at Cooper.

What are your feelings about being elected as our new Student Trustee?

Julian Mayfield: There's a lot of work that needs to be done and I feel pressured towards fulfilling my duties in a way that satisfies how I interpret the ethics behind this institution per the Consent Decree. There's also expectations from people who encouraged me to run for the position, though their expectations are definitely not tempering any of my decision-making. But I definitely feel a desire to get to it and do the best that I can here.

[Editor's note: The Consent Decree is an agreement worked out by New York's Attorney General and signed by both the Board of Trustees and the Committee to Save Cooper Union (the litigators in the lawsuit over previous years). The Consent Decree outlines specific measures that the Board must enforce in order "to return Cooper Union to a sustainable, full-tuition scholarship model."]

Are you excited to get started?

I really wanted to fully grasp the scope of my responsibilities to the beneficiaries of the Cooper community before I jumped in. Luckily, I had a small period of time where I basically got to shadow the Student Trustees at the time (Jessica Marshall (EE '17) and Monica Abdallah (ChE '17)) and observe their participation at the meetings. It was encouraging to be reminded that I too have the ability to be as active and forthright with my opinion. There's a gap in expertise that I want to bridge immediately and it's not something I'm going to learn

overnight, but I definitely will do the best I can and really try to protect things in this institution that might be overlooked.

Did you feel a shift in going from a student vying for Trustee as to now, acting as one?

Not necessarily. In my relationship with students, I don't think me acting as a Trustee is something a lot of students think about. With teachers and the other Trustees, there really isn't too much of a shift either. The shift was in myself and discovering a greater appreciation for impartiality in my decision-making, as well as a need to avoid the politics of it all. There are politics, but that's beside the point when it comes to something as big as keeping this whole situation afloat.

Now that you have been elected, have any students reached out to you in your new role?

Yes, and I highly encourage more too! It hasn't necessarily been people whom I've never talked to stopping me in the hallway, but people who I have previous rapport with have definitely felt comfortable coming in and trying to stay within the information flow. And I appreciate it, it's important that we don't feel alienated from the Board and can continue to stay informed.

For the new school year, what issues do you anticipate will be discussed between you and the Board?

Well I'm on the Free Education Committee and there's definitely a lot more work being done there. With that comes a lot more contention and tougher decisions that will need to be made. If you've read the quarterly Board report that was released in June, you'll know that there's a lot that goes from declaring a commitment to actually perfecting these decisions and agreements. That's

definitely going to be a prime focus as soon as we get all of the methodologies set and our strategies finalized.

This is your introduction to a lot of the freshmen unfamiliar with you or your role. To those new students, how would you describe what you can do for them?

It's hard to really put that into words because the Trustee position isn't necessarily something that can have immediate or direct impact into student lives. A lot of it is management of other people who are going to be committing actions. What I can do is talk to the new students if they need to stay informed and be made aware of resources that can help them become more politically involved in the institution. It's the most we really can do at this point; to make sure that when things change, they aren't changing in a way that will negatively impact the institution. And if it does turn towards that direction, then I have no interest in being part of decisions that will destroy the

quality of current or future students' experiences here.

Do you have any advice for students both new and old who want to become more involved in Cooper affairs?

It can be anything from getting involved in Student Council or forming an affinity group and just speaking out. E-mail campaigns, making posters, talking to your professors about these issues. They have a lot of opinions and have watched this cycle for a lot longer than us and will keep seeing it after we're gone. They can offer a lot of real insight and have been some of the people who have kept me the most informed about political changes in this institution. Ultimately, make sure that every one of your friends are informed of events. Do whatever needs to be done so that you don't go down without a fight. ♦

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Email The Pioneer at
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or visit LL217

The Pioneer

WRITERS, PHOTOGRAPHERS, AND GRAPHIC DESIGNERS WANTED

NO EXPERIENCE NECESSARY!!

COME TO ISSUE #2 STAFF MEETING

TUESDAY, SEPTEMBER 20 IN LL210 12:00PM

NEW FACES AT COOPER

MATTHEW GRATTAN (ChE ‘19) | TOBY STEIN (CE ‘18)

Over the summer, several new additions have been made to the Faculty of Humanities and Social Sciences, the School of Art, and the School of Engineering.

The Faculty of Humanities and Social Sciences (HSS) has hired two new full-time members, Assistant Professor of Philosophy, Diego Malquori, and Assistant Professor of Art History, Raffaele Bedarida. The two assistant professors are the first new full-time hires in at least 10 years for the HSS faculty. Professor Malquori previously taught in Barcelona, Spain and holds two doctorates, one in astronomy and one in philosophy. Professor Bedarida, a Ph.D. in art history, has taught at The Cooper Union for the past two years as an adjunct.

The HSS faculty was “very close” to hiring a third full-time professor in economics, according to Professor Buckley. However, due to unforeseen circumstances the position remains open. “We want to make sure we have people who are right for Cooper and who will come because they are really keen on teaching undergraduates,” explained Dean Germano.

Additionally, two Postdoctoral Fellows have been hired. Nabaparna Ghosh, a Ph.D. in history from Princeton University, holds a “scholarly interest in South Asia,” according to Dean Germano. Nada Ayad has a Ph.D. in comparative literature from University of Southern California and conducts research related to Egyptian women’s writing and topics related to nationalism.

The School of Art has hired three new faculty members, Leslie Hewitt, Lucy Raven, and William Villalongo, bringing the total number of full-time Art faculty to 10. The new professors each bring their own contemporary practice to Cooper Union. Leslie Hewitt, a Cooper Union graduate, is involved in research and photography, and her work has been presented at the Museum of Modern Art, the Guggenheim Museum, and the Los Angeles County Museum of Art, according to a campus-wide email. In one project, Lucy Raven has visited studios that turn 2-D films into 3-D films and related that process to rotoscoping (tracing over of film footage). William Villalongo studied at Cooper Union and has curated an exhibit at the Yale School of Art earlier this year called “Black Pulp!”—an examination of the portrayal of blacks in American media.

Mike Essl has become the Acting Dean of the School of Art, replacing Saskia Bos, who announced in March her plans to move to Europe after more than 10 years as the dean. “For me, if there are small moments I can change that make everyone’s life a little better, then I think that’s what the job is right now,” commented Essl on the new position. Acting Dean Essl, who graduated from The Cooper Union in 1996, may only hold the position for two years as stipulated in the union contract.

Also, Alexander Tochilovsky is the new proportional-time faculty member in the School of Art. “Not only does he do an amazing job as a professor here, he contrib-

utes to committees, helps with admissions, and has done a spectacular job in the Lubalin Center,” added Acting Dean Essl. Like Essl, Hewitt, and Villalongo, Tochilovsky is also a graduate of The Cooper Union.

The School of Engineering has two new full time faculty members, one in the Civil Engineering Department and one in the Electrical Engineering Department.

The newest Civil Engineering professor is no stranger to Cooper Union and the rigor that its professors provide. Dr. Neal Simon Kwong knows that it is no easy task to teach at Cooper Union, but he is ready for the challenge, having graduated after being taught by the same faculty a few years ago. Upon graduating in 2009, Professor Kwong departed New York, taking his talents to the west coast to begin his masters and Ph.D. at the University of California at Berkeley. Dr. Kwong brings a wealth of seismology knowledge to Cooper where he will be able to expand on his passion for understanding how structures perform when subjected to seismographic loads. Dr. Kwong will also be returning one of his hobbies: handball. He was an avid member of the handball team while at Cooper and Berkeley, but do not be afraid to challenge him to a match after class.

Neveen Shlayan comes to Cooper ready for a challenge as the newest addition to the Department of Electrical Engineering. Dr. Shlayan taught previously at SUNY Maritime College. In addition to her Ph.D. concentrating in cyber physical systems from

the University of Nevada, she also holds a bachelor’s degree in electrical engineering and two master’s degrees, one in electrical engineering and the other in mathematics. Her master’s in mathematics focused on neutron density distributions. Before entering academia, Professor Shlayan worked at Philips Research concentrating on large-scale lighting control for transportation systems. In addition to what she brings to the classroom, Dr. Shlayan is also a published author and a developer of a patent while at Phillips Research. This semester Dr. Shlayan is teaching two classes for electrical engineering students, Electronics 2 and Circuit Analysis.

New staff can be found elsewhere at Cooper Union as well. Kit Nicholls has been appointed to the Director of the Cooper Union Writing Center after working with Cooper for the past decade. Nicholls has a Ph.D. in English from NYU but began his undergraduate education as an engineering student. Grace Kendall has been hired as the new Title IX Coordinator and Director of Student Diversity and Inclusion after working for 10 years at the Pratt Institute. Previously, Mitchell Lipton, Vice President of Enrollment Services and Dean of Admissions, held the position of Title IX Coordinator. ♦

ORIENTATION RECAP

MICHAEL PASTERNAK (ME ‘17)

“Welcome to Cooper, you’ll love it here!” That was the routine line students used to greet the first year students on move in day. Their reactions were very mixed, some wanted to figure out if they were being sold something, some responded with a cheerful greeting, and others were too nervous to really show any reaction at all.

Since that first day of move in, there have been dozens of events to introduce the newest Cooper students into the community. That might not seem like a big deal to the older students of the school, but it’s worth pointing out that freshmen orientation was almost entirely student-run. Many of the active clubs participated, in the hopes of finding like-minded first years to join them in their hobbies and passions. Such an

orientation is only possible because of the welcoming nature of the Cooper community and the size of the school.

“Students felt more welcome knowing the flaws rather than being given a whitewashed view of the school.”

The events were generally well received. A particular winner was the dinner cruise as it was an excellent way for students to bond both with each other and with the city—a definite possibility for a repeat event in the future. Intervarsity Christian Fellowship (IV) and fraternity Zeta Psi collaboratively

organized volunteers for move-in.

Additionally, this year included a much longer sexual assault and consent workshop than in the past—a full day of orientation as opposed to an hour.

Other events included the Engineering Student Council (ESC) information session and the annual Block Party. The Block Party brought in longtime friends and alumni of Cooper alongside current students from all three schools. A plethora of materials concerning Cooper’s history and the recent Free Cooper Union protests were distributed at the party.

The ESC information session gave first years an idea of the problems that Cooper

faces day to day. In fact, there was a focus on giving a realistic picture of Cooper as a school which has been through a lot but is doing its best to move forward. Students felt more welcome knowing the flaws rather than being given a whitewashed view of the school.

The variety of events was neither overwhelming nor sparse. The first years felt welcomed to the school in a way that made them prepared for the coming academic year. In general, majority of the first years felt the upperclassmen were open and helpful concerning both orientation events and the beginning of classes. They all felt it was a natural lead-in, even students who lived off campus. ♦



Photos by Office of Residence Life.



SUMMER EXPERIENCES

ROBERT GODKIN (ChE '18)

Summer 2016 was hot and grimy—especially in New York City—but the Cooper community was busy as always. Many students took part in internships at a range of companies over the summer. We spoke with students, all of whom participated in very unique and different programs, and they were happy to talk about what they did.

Sara Wong (ChE '17)

“I interned at Campbell’s Soup in Camden, NJ for 12 weeks and was working under the Soup Team in Research & Development (R&D). My main project involved analyzing starches used in soups, and I worked to optimize conditions for the starches to make the processes more efficient.

In R&D, there is a part called Process R&D, and I worked with process engineers on a daily basis. I also interacted with product developers and culinary professionals, as well as my fellow interns! I was the only intern in Soup R&D though. I also worked alongside Science & Technology and Pilot Plant Operations divisions, both of which were very informative.

The work was really interesting and I liked that I was able to work in different environments: the lab, kitchen, and pilot plant, for example. The research I was doing was valued and would have an impact on the development of products! So exciting! It’s hard to compare it to what I do at Cooper. I was learning a lot of fundamentals and knowledge at Cooper, and I’d learn about the applications, but the internship was different. Working in industry gives you another experience, and I was seeing first-hand how my work could be applied in the real-world.

My favorite part of my internship was the people. Everyone was super friendly, helpful, and approachable! Whenever I had a question, whether it was something small or not, they were all supportive and willing to help. I wish I could have stayed longer at my internship and learned more—there is nothing negative to say!

I learned a lot over this internship, but I think my biggest takeaway was seeing what working in industry was like. This was my first industry experience. Previously, I’ve had summer research experiences at universities, but working in corporate R&D gave me a new perspective. I have a better idea of what I want to do after college, and I could see myself working in an R&D position and doing process engineering.”



Justin Merkin (ChE '18)



“This summer I worked two different internships. The first was at Cantor Fitzgerald’s electronic brokerage subsidiary, BGC Partners, where I was a Financial Technology Analyst. I worked mainly with Microsoft SQL to build and normalize a database. The database tracked the inventory of all the applications used and sold by the company, in order to compile a risk assessment of each application. My second internship was at a private equity firm called Kuzari Group. The work I did there was more what you’d think of as a general finance internship. I worked hand in hand with the partners on different financial models and projections for the various active deals during the time I was there.

Seeing as Cantor is a much bigger, corporate company, I interacted with all types of people throughout the day, from the support groups who sat near me, to the CIO who hired me. It depended on the day. At Kuzari, I got a different experience since it is a very small company. I interacted with every member of the company on a daily basis. As exciting and interesting as the work was, the difficulty of it does not even compare to that of Cooper. It just goes to show that Cooper’s rigorous workload really does prepare us for anything.

My favorite aspect overall was definitely how much I learned. The combination of these two internships was invaluable to me in terms of my desired path into the financial services field. The worst thing were the hours: I worked from about 7:30am to 6pm.”

Ross Kaplan (EE '18)

“I worked at Rubenstein Technology Group doing full stack development. I worked for a few weeks on support, which meant changing and adding new functionality for clients. They ranged from a few minute tasks to a few day-long tasks. Later on in the summer, I worked exclusively on a new project that should be released in the coming months. I’m still working there for a few more weeks to help finish it up.

Surprisingly, I worked with mostly Cooper graduates. A lot of their developers are from Cooper. They were incredible and so easy to work with, extremely helpful, and very knowledgeable. It was not difficult for me to quickly catch up to the work they were doing.

The work was stimulating and interesting. It’s hard to compare to the work I do at Cooper because most coding projects at Cooper have a pretty defined starting and ending point. Build a function that takes in *this* and returns *that*. In comparison, I was given a lot of freedom in how things were implemented—which can actually make things more difficult. That generally involved finding the best places to get the data you needed from in order to make something that’s maintainable.

My favorite part of my experience was doing active development at the end of the summer. I was able to put together all the small things I learned over the course of the summer into what I worked on. I was also able to voice my opinion about larger design considerations that helped to shape the backend of the site. So for example, in building geo-location functionality, I implemented something that I had used before with success, and it worked immediately.

My least favorite part of the experience was that client requests could be potentially really foolish. One of our clients would ask every week without fail to change pieces of their site into *iframes*, under the impression that it would help with their search engine optimization. Even though they weren’t difficult requests, it would make the codebase of their site get larger and significantly more complicated each time. The result was that every change you made would make each future change even harder. Even if the client request is bad for their site, we still have to implement it.

The biggest takeaway for me was the experience I gained in a professional setting. I was technically an intern, but they took my suggestions and ideas as seriously as any of the developers. It really helped me shape my experience into one where I both learned a lot of things technically as well as professionally.”

MEET THE FIRST YEARS: ANDREY AKHMETOV (EE '20)

DANIEL GALPERIN (ChE '18)

Tell me about yourself.

I’m Andrey, born in Moscow and raised in Niskayuna in upstate New York.

You’ve had your first almost-full week of classes. What is your first impression of Cooper?

Honestly, it has been a very natural transition for me from high school to Cooper. A lot of my high school education was project based regardless of whether I was in or out of class and I spent a lot of time in labs working on my own projects. I feel that it’s the same way here but with much harder material. Obviously, the equipment is also much better than what I had in school.

What was your first impression socially?

Perfect fit for me. It’s a small school and it’s very easy to approach people. Many other schools I visited were depressing, sad and mechanical.

Glad to hear it. How was your summer?

I worked on a lot of personal programming,

personal CPU design, and I was a student-IT worker in my high school. I designed a CPU using an FPGA (field-programmable gate array). An FPGA is a chip that is used for prototyping circuitry, which a user can program after purchase, hence the name. A lot of my work this summer was writing code for the FPGA and then testing to see if it does what I want. Unfortunately, it ended up being an unmarketable design, though it proved powerful as an academic learning tool.

Sounds like you have a good amount of computer engineering knowledge. Where did you pick all of this up?

Mostly self-study inspired by an electronics teacher in sophomore year who didn’t know what an FPGA was and asked me to figure it out. I actually learned about it, planned a lesson on it and the teacher still uses my lesson in class.

What was the hardest project, assignment or activity you had in high school?

I was really into competitive robotics. I was a founding member of the robotics club in

my school and the lead programmer for all four years. For three of those four years I was also the only programmer. Interestingly, the guy that invented the Roomba vacuum started funding our robotics program after the team was established. The hardest part was keeping hardware in line with software deadlines. It’s best described as playing Whac-a-Mole with bugs and workarounds. Actually, from all of those projects I started to develop a small optical navigation sensor for autonomous robots and I’m working on commercializing it now. The demand in robotics exists, and according to competitive robotics rules, they have to buy from companies, so I am working on becoming a one-person LLC.

What is your biggest regret from high school?

Ah, where do I start...probably not being broad enough in my academic interests? I



Meet Andrey Akhmetov (EE '20). Photo by Wentao Zhang (ChE '19).

focused too much on electrical engineering and robotics, and I only dabbled in mechanical engineering related work. I also regret not taking German earlier.

Okay, what do you look forward to most at Cooper?

I’m definitely excited for the academic side of Cooper. I’m looking forward to gaining real world knowledge. I’m also really interested in Formula SAE and the 3D Printing and Rapid Prototyping club. I’m also currently applying to work in Micro-lab on the 6th floor. ♦

COOPER HOPS INTO BREWING

MONICA ABDALLAH (ChE '17)



Students Jessica Marshall (EE '17) and Emily Adamo (Art '17) mix mash during the first bew session of the semester. Photo by Monica Abdallah (ChE '17).

Liquid courage. Barley pop. Suds. Brewski. A cold one.

I'm talking about beer.

It's a multi-billion dollar per year industry in the U.S. alone; the drink itself dates back thousands of years. Today, it is the world's most popular alcoholic beverage.

Most students at Cooper aren't 21 yet, so they most definitely don't know what beer tastes like or have any appreciation for this ancient drink. Nonetheless, Professor Sam Keene designed a new course on the subject of the science and art of brew. "Students have been asking me for years to either advise a brewing club, or offer a brewing class," he says.

Professor Keene explains how electric brewing, a fairly new technology, could make brewing at Cooper safer and more feasible than ever. "The electric brewing method makes brewing indoors safe since no gas fired burners are involved, and allows for very precise control of temperatures via PID controllers." Combining this method with a non-technical approach to brewing, Profes-

sor Keene proposed a new brewing elective that would involve students from all three schools. Dean Stock and Acting President Mea welcomed the initiative with support and excitement, allowing Cooper Brew to finally materialize after many past attempts. Professor Keene also credits the long overdue triumph to their receptiveness to ideas originating from students and faculty.

The brew class raised all necessary funds with the help of the Development Office and generous donations from excited alumni, many of whom have never donated before. "I am really hoping this program can help draw back some people who have grown disillusioned with Cooper recently," says Keene. The class will not cost Cooper Union any money, and all of the beer produced will be donated back to the school for use at events. These are just a few small cost saving measures that show Professor Keene's dedication to the community's intention of honoring Peter Cooper's vision. "I think it is important that everything we do at Cooper keeps in mind the goal of returning to free."

What is so special about this brewing course is that it is designed to be an interdisciplinary experience. "What I hope we all get out of it is an appreciation for how engineering, art and architecture students can collaborate and produce something really great," Professor Keene shares. "This kind of collaboration was something I had always hoped could happen when I came to Cooper. It is something that was nearly impossible in the past few years, and I'm thrilled this is happening now."

With students from the three schools present, Professor Keene hopes to really delve into the questions that craft breweries answer every day. *What pH level should we mash at? What temperature should we ferment at? How does that affect the overall final qualities of the beer, like how it looks, smells and tastes?* He also hopes to find a way to use Cooper Brew as a method of advancing the mission of the school. "It seems obvious that we should have artists and architects in the same room with scientists and engineers." ♦

MEET THE FIRST YEARS: JUAN JOSÉ GARCÍA (Art '20)

MONICA CHEN (ME '18)

Why did you choose to come to Cooper?

I was somewhat convinced I wasn't going to get into Cooper and I was looking at fashion design colleges like Central Saint Martins and Parsons Paris. Ironically though, those fell through because I couldn't afford them whereas Cooper offered me an amazing scholarship. It was just one of those things that make you think "oh, it must be a sign."

How did you hear of Cooper Union?

My first contact at Cooper was actually one of my best friends, Valerie Franco. We were really close friends in high school and Cooper was her dream school. I remember when she was doing her home test, I was thinking, "I am not applying there—it's too much." Then senior year came around and as my art started to evolve, I decided that it would be a nice challenge to try the home test.

Where are you from?

I am Colombian but I came to the US when I was 12. I've lived in Orlando, New Jersey, and Miami. When I was 16, I convinced my mother to move north because she was having difficulty finding a job as she didn't know English. I, however, stayed in Miami and attended Design and Architecture Senior High School (DASH). I was confident that despite the fact that my mother moved away, my high school could help me achieve my goals in terms of college.

What did you think of the turmoil that happened at Cooper before you arrived?

I like that the politics makes you think about your own school and why these issues matter, especially when so many people can't afford to go to college. It also starts a conversation about college and higher education in general, so it actually made me very happy to see that the students at Cooper are taking the initiative to think about what is going on and engaging in an

active conversation.

What interests or inspires you in your art?

It varies. About a year ago I was painting portraits of myself with makeup on as a means of exploring gender identity and sexual orientation. About 6 months ago, I started delving into my experience living alone as a teenager and the associated feelings of isolation and displacement. Right before coming to Cooper, I was exploring ideas of human processes; to me, that is what art is about. It's somewhat of a mirror reflecting how we interact as humans. Recently, I've been interested in the more abstract concept of exploring such processes and trying to map out these interactions.

"I'm not willing to let go of being able to make art for the sake of art."

So how does it feel to call New York City your home?

It's funny, Colombia is a well-developed country but as a kid, there's still that small third-world feeling of "America is America." I always dreamed of being able to live in a city like New York but it's still difficult to accept the fact that I am living here. It's weird because when significant things happen in your life, it's hard to accept that your dreams are taking form. I love it though, it's my city; I'm not a naïve person and yet I feel safe.

What was your impression of Cooper Union when you first arrived?

I had an idea of what the people were like because of my friend but I had never been to the school until move-in day. I couldn't make Admitted Students Day as I was preparing for my high school fashion show. Cooper is a very lively little hub and at first,



Meet Juan José García (Art '20). Photo by Wentao Zhang (ChE '19).

I was overwhelmed just by being here (but in a good way).

Tell me more about your fashion show in high school.

DASH (NOT the Kardashian store) is a tiny school of 500 people in the middle of the design district in Miami. In sophomore year, students need to choose from five paths: fashion design, graphic design, industrial design, film and television, and architecture. I chose fashion design which came with a very rigorous workload. Our "senior thesis" was a project in which we had to design our own clothing and patterns and cut and sew our own fabric. My collection was a combination of my interpretation of modernity and my Colombian roots. It was a great experience and an amazing production and it's unbelievable that the show is entirely student-run.

So has this fashion show experience inspired you to continue pursuing fashion design during or after Cooper?

Everyone at DASH was going to fashion design schools and I applied and got in, but I felt that none of the schools were a perfect fit for me as they were either in a place where I didn't think I'd flourish or were not in the urban setting I was looking for. When Cooper came about, I was very excited but it was conflicting because Cooper doesn't offer fashion design—it's just art. Then I sat down and really thought about it; people [from DASH] have done things that no one else has done before at DASH and I hadn't seen anyone approach fashion design from an art background. I had my practice with fashion design so I know what the technical skills are but I wanted to explore this more artistic and experimental side, and see how that plays out. I'm not willing to let go of being able to make art for the sake of art. I can create my own path in a way that I haven't seen people from my school do by going to art school and then figuring my way around and still do whatever I want to do. In order to create the kind of fashion design I wanted to make, I knew I had to be intense about my art. ♦

HALAL HAVE SOME CHICKEN OVER RICE, PLEASE

TOBY STEIN (CE '18)

I warn you, what you are about to read will change the way you conduct your daily lives. It will push you out of your comfort zone and into new territory. It will challenge your beliefs and push you to question those you hold close to your heart. It will open your eyes to a world that you did not know existed. I am of course talking about the world of halal food.

Here I was, arriving to the big city, confident that I was cultured, and that I brought a good understanding of cuisine to university with me. Here I was, in the same shoes that some of you are, relying on the staples of Frankie's, Ray's, and Chipotle. No one had yet opened my eyes to the world of halal. Now, by definition, and according to a Wikipedia page, halal just means "any object or action which is permissible to use or engage in, according to Islamic law." Yet, I assert that its most common reference is to some of the most underrated and unappreciated food in the East Village. If you have never had halal food before, this article will convince you to step out of your comfort zone and give halal a shot. If you are an avid halal consumer, this article will bolster your love for the food and give you a better understanding of the area's best and tastiest halal trucks.

The beauty of halal trucks lies in minimalism, and the beauty of minimalism lies in simplicity. It seems these days, the more you pay for food, the less you get. I've never understood that framework of mind and let me just say that halal bucks that trend. Few know that Abraham Lincoln used to use his top hat to store important documents (actually true, look it up), yet most know that for a halal truck the most important document is a piece of paper with 'ol Abe's face emblazoned on the front.

Ordering a lamb over rice, a chicken over rice, or the I-know-what-I'm-doing-here special combo over rice, is like ordering a bed of warmth and love. You walk up to the truck; he greets you jovially and asks you how you are and what you would like. You order. You watch as he lines the bottom of the Styrofoam box with the standard bed of rice. You salivate as the rice greases the sides with butter and warms the container that will soon hold enough food to feed a small family. Anticipation builds. The surroundings go quiet: you are alone in the world with the halal truck. The chef deposits its lettuce and tomatoes into one side of the

box; if you are lucky and go in the winter, sometimes the tomatoes are frozen. The shrill sound of metal on metal cuts through the afternoon air as the chef fries the meat to perfection on the griddle. Using both blades, the chef heaps the meat from the griddle onto the bed of rice. Anticipation builds. Behind him, the thin and tall plastic bottles of sauce glisten with condensation. He looks at you to lead him further: do you want fancy white sauce or hot sauce? They are classics in the world of halal. You get both, asking for extra hot sauce. He springs into action, layering first white, then hot across the top of the steaming meat.

He deftly seals the box, places it in a plastic bag with a fork and napkin, and passes you the steaming bag through the window. You almost drop the bag as it is unexpectedly heavy. Only then do you recognize how much food you are about to consume, and you feel as though you are undercutting him by only paying five dollars. You smile and turn to walk away. Yet again, anticipation builds. You sit down and instantly isolate yourself from the rest of the world. There is an unspoken agreement between humans: you don't talk when someone is eating halal. You let them focus, you let them enjoy.

Time blurs; you do not know what happening. Your hunger disappears and you feel your stomach expand. You lose control of your limbs. Your brain tells your arms to stop putting food in your mouth. Your arms do not listen. Your body slows, beginning to protest the amount of food entering it. Your arms do not listen. Time blurs again. You look down and it is gone. Not a speck of rice is left in the box, all the sauce has been licked from the crevices and you cannot stand to think about yourself. You walk to the bathroom to wash your hands and catch a glimpse of yourself in the mirror. You look like a stranger. You hate yourself for what you have just done. You wash your hands and splash some water onto your face. You look up once again at the mirror, but you don't see yourself.

You shoot up out of your bed, confused, disoriented and hungry. Was that really a dream you wonder? You have not gotten your fix in days. You need it. You jump out of bed, throw clothes on and run to your closest truck. You babble out an order that barely resembles English. This is your drug; this is what *withdrahalal* looks like. ♦



Created using Google Maps.

If you are not satiated by just regular yellow rice, try the truck on **Astor Place and Broadway**. Rice selection includes veggie, brown or yellow, tripling the possible food combinations. While you're there, ask for barbeque sauce instead of hot sauce and put an American twist on the cuisine. Added bonus: the head chef at this truck is the nicest gentleman in the world and will start asking about your classes and how your life is if you go there enough.

Formerly a popular hot dog truck, **The Halal Guys storefront on 14th in-between 2nd and 1st Avenues** is worth the trip. The "Halal Classic," or simply "The Platter," is the champion of the location. The absolute monster is the chicken & beef over rice served with their famous red sauce. Topping the Scoville rating for heat at 130,000, lets just say, it's pretty damn hot sauce. Added bonus: don't miss out on their falafel, an underrated, cheap gem.

Looking for better bang for your buck? The truck on the corner of **14th and Third Avenue** runs lunch specials, including a pita and a drink for five dollars. It is the perfect middle-of-the-day meal or a quick stop so that you don't shop at Trader Joe's hungry.

Looking to assimilate with NYU culture and eat trashy halal? My personal least favourite truck is on the corner of **14th and University Place**. Small portions, watery white sauce, and hot sauce that makes Tabasco sauce taste like the hottest thing you've ever eaten.

Taking your significant other on a date and want dinner with a view? Take them to **Avenue D and 3rd St** for a solid halal shoppportunity before walking to East River Park and watching the night fall. Not the best service, but the halal here is solid. Added bonus: try the green sauce—a different flavor to spice up your entrée. ♦



Jeremiah Pratt (EE '19) gets his face painted by Emily Adamo (Art '17) at the Peter Cooper Block Party on September 3. The Block Party is an annual Astor Place neighborhood celebration hosted by the Cooper Union Alumni Association. This year, the event was organized by alumna Victoria Sobel (Art '13) and former student Casey Gollan in collaboration with several other young alumni and current students. Booths were put together by student organizations including Cooper Motorsports and Queer & Allies. The afternoon's soundscape featured performances by Emma Faith Hill (Art '17) and L Curran (EE '16) and DJ Cuteboys. Photo by Sophia Bennett Holmes (Art '16).



Fall Festival, hosted by the Office of Student Affairs, is an annual club fair in which all clubs and student organizations of Cooper Union recruit new members from all classes. Photo by Winter Leng (ChE '18).