

**“BLACK HISTORY MONTH WITH BSU”**

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# The Pioneer

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## COOPER UNION INAUGURATES FIRST WOMAN PRESIDENT

AFSHIN KHAN (CE '19)

On Feb. 6, 2018, Laura Sparks was officially inaugurated as the 13th president of the Cooper Union for the Advancement of Science and Art, becoming the first woman to hold the position. Although Sparks has already served as president for roughly one year since assuming the role, the inauguration was a fresh start to what Rachel Warren, chair of the Board of Trustees, called "Cooper Union's next chapter".

The inauguration featured speeches from Wendell Pritchett, provost of the University of Pennsylvania and former law professor to Sparks; John Oleske, senior enforcement counsel to the Office of the Attorney General of the State of New York; and Michael Fitts, president of Tulane University and former dean of the University of Pennsylvania Law School.

The inauguration of Laura Sparks was, in many ways, a day of fellowship. Despite a flurry of speeches from various back-



Photo by Wentao Zhang (ChE '19).

grounds, considerable similarities were evident in several speeches. For instance, Fitts' father-in-law graduated from Cooper Union in the 1930s with a degree in chem-

ical engineering, Warren's father graduated from Cooper Union in the 1950s with a degree in electrical engineering, and even Sparks' first cousin once removed was a

graduate of Cooper Union in the 1960s.

Another recurring commonality through each speech was the story of how Cooper Union changed the fates of several people. Fitts' father-in-law went from struggling immigrant to revolutionizing the treatment of infants in the early 20th century, Jean Brownhill went from humble upbringings to starting her own business, and Stephen Welby went from an inquisitive child of two immigrants to assistant secretary of defense under the Obama administration.

Behind the allure of inauguration day, however, lay the true struggle of restoring Cooper Union to full tuition. Kevin Slavin, trustee of the Cooper Union was sued by fellow Cooper alumnus, classmate, and plaintiff, Mike Essl, dean of the school of art regarding the decision to charge tuition. The lawsuit divided two

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## ENGINEERING COURSE CREDITS TO FOLLOW NY GUIDELINES

MATTHEW GRATTAN (BSE '19)

According to a new directive from Dean Stock, the weekly contact hours of courses in the School of Engineering must match the number of credits granted, effective starting fall 2018. The measure primarily affects required math, chemistry, and physics courses, many of which meet for more hours per week than credits granted. For example, Ma 113 (Calculus II) meets five hours per week, despite being a four-credit course.

The most immediate effect is the loss of lecture time, which could negatively impact the quality of the core education in the engineering school. However, the change allows for more out-of-class contact in the form of office hours and tutoring taught by upper-level students.

In addition to reducing contact hours for classes like calculus, general chemistry, and physics, the directive could fundamentally change the format of physics instruction from one large lecture taught by a single professor to several smaller sections.

For first- and second-year students, the directive could reduce time spent in class by several hours per week. Considering that the first two years in the engineering school are arguably the most demanding, extra time in the week allows students to engage in other activities or to study independently.

Fewer hours of class would ease scheduling in 41 Cooper Square, where classroom space is at a premium. Empty classrooms

also function as study spaces for students, and would thus be available throughout the day.

The directive ensures that course credit in the engineering school more closely follows the definition stipulated by New York state regulations on higher and professional education (8 CRR-NY 50.1). A "credit" or "semester hour" is earned upon completing a course which requires at least "15 hours (of 50 minutes each) of instruction and at least 30 hours of supplementary assignments."

Decreasing lecture time would effectively cut expenses in the engineering school, as professors are compensated based on contact hours and not course credits. Additionally, students and adjuncts who work as tutors or recitation instructors are paid much less than full-time professors.

Reducing expenses in the engineering school is a part of larger school-wide budget cuts that have been taking place since President Sparks took office in 2017.

The January 2017 Free Education Committee Progress Report identified \$9.1 million in expenses that could be reduced over two years without "compromising the high quality of Cooper's academic programs." The Board of Trustees directed the Sparks administration to implement the cuts, and in turn, the deans of the three schools were asked to reduce operating costs. ♦

## INVENTION FACTORY EXPANDS TO GANDHINAGAR, INDIA

OLIVIA HEUIYOUNG PARK (ME '20)

Invention Factory, an innovative summer undergraduate program started by professors Alan Wolf and Eric Lima in 2013, is expanding to Indian Institute of Technology in Gandhinagar, India in addition running at the Cooper Union and Syracuse University.

Initially funded by Edward Durbin's (EE '48) Dean's discretionary gift of \$75,000 when Wolf was acting dean of the School of Engineering, the program will run for the sixth year at Cooper this summer, with almost no changes since the first year it was initiated.

Invention Factory is a program that strives to provide an innovative space for mostly undergrads, who lack accelerated programs and opportunities as most are targeted for graduating seniors elsewhere. Invention Factory also strengthens students' communication skills, as they have to give the same pitch every week to different audiences, and have to file a provisional patent through technical writing.

"We wanted to provide a forum where students could create things," Lima, a professor of mechanical engineering at Cooper, explained. Wolf, a professor of physics, added that people "come to engineering schools thinking that they'll build things, but [...] you don't really get to do that. And when you do build, it's not something you want to do. Invention Factory allows students to make whatever they want."

Invention Factory is their solution to the problem. The program, which selects 10 pairs of students to each work on an invention, is intentionally comprised of half women and half men in order to "recognize that women might have a lack of experience and opportunity in engineering." But Wolf also believes that women can make especially powerful contributions, adding that "although we like all of our students, we really like that often times, women tend to be more conscientious, serious, and focused."

Because Invention Factory invites guest speakers, it lets its inventors engage with the outside community. During the expansion to Syracuse last year, one of the guest evaluators happened to be a Syracuse and IIT alumnus. Amazed by the student performances, he also visited Invention Factory in Cooper Union, and expressed that he wanted to bring it to IIT.

IIT, a "more selective MIT of India", will be holding an Invention Factory this summer in their Gandhinagar campus, funded by four IIT alumni. Because most classes at IIT are theory-based, there will also be a "warm-up" session beforehand to familiarize students with machines, programs, and tools. Although the number of women in engineering is even lower in India, the

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## INVENTION FACTORY IN INDIA

OLIVIA HEUIYOUNG PARK (ME '20)

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program will also push for a 50/50 split in the program, just like in the United States.

There will be 4 Invention Factories running this Summer (Cooper Union, Syracuse for NYC, Syracuse Campus, and IIT), with a total of 40 inventions. Due to the variety of campuses at IIT, the Invention Factories there have the potential to go many different ways. Wolf believes that as Invention Factory expands world-wide, it ultimately helps the Cooper Union, where

the program started. They are also considering adding an optional Entrepreneurship sessions in the following years, to help students who would like to move forward with their inventions.

"We are very impressed by the students' creativeness, diligence, thoroughness, and it's easily the best 6 weeks of our year," Professor Wolf rejoiced. "We are in line with Peter Cooper's legacy, as an inventor and the 'mechanic of New York City.'" ♦

Summer 2018 applications are now open at <http://inventionfactory.org>

## CUAA AWARDS ANNOUNCED

EVAN BUBNIAK (ME '21)

On February 6, following the inauguration of President Laura Sparks, the Cooper Union Alumni Association announced its Founder's Day Hall of Fame Awards.

Richard Sarles (CE '67) was awarded the Gano Dunn Award for his work on improving mass transit across the Northeast Corridor.

Joanna Sherman (Art '69) was given the Peter Cooper Public Service Award for her theater work in post-war, refugee and disadvantaged areas.

Michael Samuelian (Arch '95) was given the John Q. Hejduk Award, which recognizes professional

achievement in architecture, for his work on large-scale public private development projects, including Hudson Yards.

Katie Merz (Art '84) received the August Saint-Gaudens Award, which recognizes achievement in art, for her variety of art forms, large-scale public art commissions, and work teaching drawing at Cooper.

Jack Whitten (Art '64) posthumously received the same award for his distinguished work in contemporary art, for which he also received the National Medal of the Arts in 2015. ♦

## LAURA SPARKS INAUGURATION

AFSHIN KHAN (CE '19)

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long-time friends, but the inauguration brought them together.

They shared a good laugh over the past, and, although the celebration of inauguration day eclipsed these struggles, they were not forgotten, especially by John Oleske.

Oleske's speech was grounded, pragmatic, and forthright. Rather than speak about Sparks' education, leadership prowess, or financial acumen, Oleske reminded us that Sparks is, at the end of the day, a person.

He reminded us that victory is not guaranteed and that no single moment could save Cooper Union from financial turmoil, and the only thing to do everyday is get up and fight. He reminded us that the FEC plan to return Cooper to free tuition in 10 years is unlikely, but a step in the right direction.

Oleske then went on to apologize for his unconventional speech, "because it's not our role to tell you that your president is great and she's going to do a good job,

it's our job to supervise and see how she does", capping the sentence off with "...but so far so good."

Sparks was inaugurated shortly thereafter and delivered a speech on her ambitions and hopes for Cooper Union. Of these, Sparks mentioned her goals of continuing Cooper Union's academic excellence, increasing outreach, and continuing the diversity that Cooper has to offer. She stated how Cooper Union has always been a place for movements and a place for leaders' voices to be found.

She officially announced that Cooper has received \$8 million through a challenge grant by the estate of a 1945 Cooper graduate, and another \$2 million from the IDC Foundation.

The inauguration closed with a performance arranged and conducted by Amy Engelhardt and the official wreath-laying ceremony at the Cooper Triangle. ♦

The full inauguration can be viewed on the official Cooper Union YouTube channel: [youtube.com/thecooperunion](http://youtube.com/thecooperunion).

## THE GREAT HALL GETS A LITTLE TRUTH

EVAN BUBNIAK (ME '21)

Last Monday, on the eve of the inauguration of President Laura Sparks, Cooper students, along with invitees from the Aspen Institute and Public Theater, filled up the Great Hall for an evening of truth.

If you've been to a Great Hall event, you've doubtlessly heard the familiar riff about Cooper being the cradle of powerful, righteous movements, from abolition to women's suffrage, giving a platform to transformative Americans from Abraham Lincoln to Barack Obama. In celebration of Laura Sparks' official inauguration, and its theme "truth," a series of performances, followed by a talk from Michael Sandel, a prominent guest speaker and professor of political philosophy at Harvard University, took place in the Great Hall.

The evening's works were parceled out between satire, as in humorous readings of Mark Twain's "A Presidential Candidate" and Harry Frankfurt's "On Bullshit". "When an honest man speaks, he says only what he believes to be truth. For the bullshitter, however, all those bets are off—he is neither on the side of truth nor lies... he is a greater enemy of the truth than lies."

Sandel's lecture, or rather conversation with the audience, was the highlight of the evening. "Truth is in trouble, and so is democracy," he began. "People have the feel-

ing that there is a troubling connection between the two... we are losing hold of the distinction between what is true and what is not. We have a president with a difficult relationship to truth, and growing skepticism about science and the evidence it offers... We worry that in a culture of lies and alternative facts we may even, if we are not careful, be opening the way to tyranny. It weighs like a dark cloud above our politics today.

But then he shifted the tone, asking the audience a seemingly simple question: Is truth all it's cracked up to be?—and then challenging the audience with several classic scenarios, such as an axe murderer looking for your friend hiding in your house, or the case of a technical truth meant to deceive, such as Bill Clinton's infamous claim that he did not have "sexual relations" with Monica Lewinsky as President.

Sandel wrapped up the evening with an examination of society's willingness to believe lies that make them feel better—whether it is platitudes, like "the good guys always win," or the fighting spirit encouraged in "The Battle Hymn of the Republic", which a performer of the Public Theater had just sang to the audience. "Truth is more than fact checking," Sandel closed. "And politics is about rhetoric, the power to persuade people." ♦

## UPCOMING EVENTS

—On February 12, beginning at 9PM in Room 506, the Engineering Student Council will be discussing the announced directive from Dean Stock to reduce contact hours for courses whose contact hours exceed the number of credit hours offered.

—On February 13 during club hours (12-2PM), the Joint Student Council will meet in the Great Hall.

—On February 13, from 3-5 PM, there will be an Free Education Committee Report info session in the Great Hall.

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or visit LL217.



John Oleske (above) represented the Office of the Attorney General in the lawsuit against charging tuition. Photos by Wentao Zhang (ChE '19).



# INAUGURATION SPARKS CONVERSATION, BUT NOT NEARLY ENOUGH

GABRIELA GODLEWSKI (CE '19)

*The opinions in this article are those of the author alone and do not represent the views of The Pioneer as a whole.*

Laura Sparks' official inauguration arguably brings Cooper Union into a new era in its history. After a lot of arduous work and input from both students and faculty, we finally found someone who fits the role of a leader at The Cooper Union. The inauguration was also not only about the president, but about our academic and cultural community—a stark contrast from the last lavish High Line inaugural extravaganza. However, the event also indicated a disappointing trend happening within the student body. Students have generally been very welcoming of Laura Sparks as the new president of Cooper, but how many of us actually attended the inauguration? Despite classes being canceled for this event, a small fraction of the total student body was present. The low student turnout in a very important event of our history is indicative of the increasing complacency of our student body.

While the low student turnout was disappointing, it was also unsurprising. Many students at The Cooper Union do not get involved with the politics within the school at all, even if the events pertain directly to them. During student body elections, it is very difficult to get many students to vote. There is generally low turnout from the

***We need to continue to be aware of and be involved in the decisions the administration makes to our school.***

student body for any kind of community gathering from panels with faculty and the administration to student council meetings.

There is no longer a need for current students to be as angry as the former students who protested the introduction of tuition. However, there is a need for student awareness and involvement for issues that unfold during our time at Cooper as they often pertain di-

rectly to us and our experience as students. Although there is no longer a need to occupy the president's office to protest the invasion of student rights, we need to continue to be aware of and be involved in the decisions the administration makes to our school.

Under President Sparks' direction, positive change finally began to take place at Cooper. The Great Hall has been getting more events featuring prolific speakers from various fields, revitalizing a major source of political, educational, and cultural significance. The most recent hires in faculty and administration have included more diverse candidates that not only better reflect the student body but have assisted in making Cooper a more pleasant institution. More counselors have been made available for students who need to talk, emphasizing the importance of mental health. Most notably, this is the first year that the school is no longer running on a yearly deficit.

***Things are definitely better, but not perfect.***

While many aspects of The Cooper Union are improving, it is imperative that we as students continue to watch our administration carefully, ask questions as often as possible, and make sure the student voice is represented and heard. Improvement in Cooper, especially in the administration, is what we have needed for a long time. The improvements made can lead to the student body getting comfortable, at which point they may stop asking questions and become less and less aware of what is going on within the school. I believe in President Laura Sparks and what she can do for us, but I also believe that complacency among the student body, at its worst, could lead us back to where we were in 2013. Things are definitely better, but not perfect.

While Laura Sparks' inauguration finally puts our worries of finding a suitable president at ease, the event does not mean that everything is golden and our path back to free will be a smooth one. In the past few weeks alone, new topics have entered con-

versation, namely the new Free Education Committee report and the decision to make the amount of credits offered in a class is proportional to the hours of the class. The FEC report is particularly important as it describes the current plan for returning Cooper to a free tuition model, but some proposals have been controversial, such as the decreasing of scholarships for graduate students from 66% to 25% until 100% undergraduate tuition is achieved. Even more recently, the administration decided to lessen hours for certain classes, making their credit value equal the number of hours allotted for each course. While some argue that such budget cuts are necessary and that lessening hours is fairer for students, others argue that this compromises the quality of education, which should be kept priority for the sake of upholding Cooper's academic reputation.

There are other issues that require attention outside of the tuition conversation. For example, the lack of diversity in race and gender in the school of engineering is a problem that needs to be corrected. The Diversity Task Force was set up to work toward a solution to level the playing field for all races, genders, and ethnicities at Cooper in accordance with Peter Cooper's original purpose for the school, and the task force encourages students to get involved. There is also the forever daunting issue of working towards the union of the art, architecture, and engineering schools through fostering student interaction within and outside a classroom setting.

These are the conversations we as students should be having with each other and with the administration. Conversation is how we find out what's going on and learn more about how these decisions impact different aspects of our Cooper community. Conversation gives rise to ideas, allowing them to grow and develop, until someone who can act on the idea hears them. Our input is especially valuable now when the administration is toeing the line between sacrificing valuable aspects of Cooper and returning us to free. The issues currently on the table as well as issues that will inevitably surface in the future can only be properly

addressed if we as students take the time to learn about these issues and facilitate conversation with members of the administration as well as amongst ourselves. We as students are our own greatest resource and can facilitate change, no matter how minor, if we at least are willing to take the time to talk and listen.

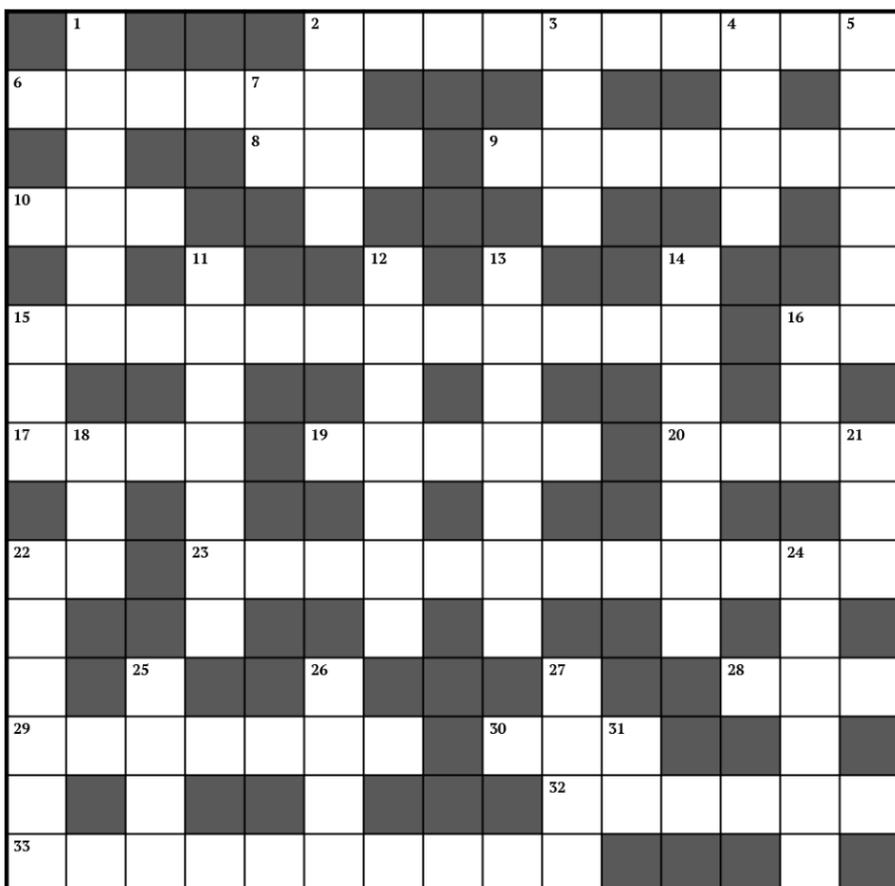
Considering the fact that Cooper has less than a thousand students total, hearing an individual student voice should not be very hard. Anyone with questions, comments, ideas, or anything at all to say has many resources as so many people are willing to listen. All three schools have their respective student councils as well as a Joint Student Council which allow anyone to sit in on meetings and participate in discussion. As Cooper students with busy schedules, setting aside time for these extra commitments may not be possible, but talking to members or regular attendees is much easier and can still lead to problems or ideas being addressed.

Cooper Union, in the end, is for us. The school is unlike any other, not only offering us well-respected degrees in the fields of our choice, but also offers us a chance to engage in a dynamic community going through a lot of political and social change. In keeping our heads down and exclusively focusing on work, the opportunity to become well-rounded artists, architects, and engineers engaging in conversation and community is lost on us. We are fortunate to have gone to this school during a time when the president willingly opens her doors to the students and engages with us about what we care about in this school. So long as the school is working towards free, students cannot afford to find comfort in apathy and instead must work towards finding the elusive and important truth in our community. ♦

***Cooper Union, in the end, is for us.***

## CROSSWORD

MICHAEL COLELLA (ME '19) | BRIAN FROST (EE '19) | GEORGE HO (BSE '19)



**ACROSS:**

- 2. Played by James Dean
- 6. Truth speaker
- 8. Tertiary Krispy elf
- 9. Super Mario Sunshine plaza
- 10. a.k.a. Obamacare
- 15. Feb. 6, 2018, 10 a.m.-12 p.m.
- 16. Third person singular of 22 across
- 17. First king of Denmark
- 19. Zodiac sign
- 20. Russian mountain range
- 22. Infinitive of 16 across
- 23. "Trix are for kids" trademark holder
- 28. Electrical and computer engineering
- 29. New Testament king of locust army
- 30. Global chess ranking scheme
- 32. Borders Dead Sea
- 33. "Nelly, I am \_\_\_"

**DOWN:**

- 1. Heavy rocket
- 2. Coagulated liquid, esp. blood
- 3. "Where's the \_\_\_?"
- 4. Seven units per turn if held in Risk
- 5. Plumbers' shelled adversary
- 7. Not quite an album
- 11. Junk, rubbish
- 12. Padawan
- 13. Name of SpaceX dummy
- 14. Opposite of glucagon
- 16. Opponent of Black and Tans
- 18. You smelt this to make ingots
- 21. Lower East Side
- 22. Complete normed linear space
- 24. Sake cocktail additive
- 25. "\_\_\_ gaijin!"
- 26. e.g. Khan Academy
- 27. Python else if
- 31. ECE 357