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# **OP ED: ON** CHANGING THE NAME OF THE SCHOOL

#### MARCUS MICHELEN (BSE '14)

It's difficult for a school to maintain an identity over long periods of time. Students are constantly entering and leaving, as are professors and administrators (albeit at a much slower rate). When adding technology- and curriculum-related changes, institutions of higher learning are required to change in order to keep afloat. How does a school keep its own unique identity during these periods of change?

When approaching this topic, I'm reminded of Plutarch's Ship of Theseus. Plutarch presents a ship---referred to as The Ship of Theseus---in which the Athenian youth returned from Crete. The ship's thirty oars were damaged, and so the Athenians replaced them. Boards were broken, and so stronger wood was put in place. After many years, the Ship of Theseus consisted almost entirely of new material. The question: is the ship still the Ship of Theseus?

Aristotle asserts that there are four causes (or ways) to describe an object: a material cause (what the object is made of), a formal cause (how it is designed), an efficient cause (how and why it changes) and a final cause (the end-goal of an object).

The ship, it could be argued, is still the Ship of Theseus because it still has the same design and the same form; its

formal cause does not change. Similarly, the ship could still be the Ship of Theseus because it still serves the same end goal; its final cause does not change.

If we tie these arguments back to identity in institutions of higher education, we can say that a school keeps its identity if it maintains the same design and still serves the same final purpose.

Consider, now, our school. As we all know, a dramatic change is about to occur this September as we begin to charge students for the first time in over a century. Can we say that this new school is still The Cooper Union? Looking at it from strictly an Aristotelian perspective, I don't think we can.

Let's first look at our formal cause: implementation of tuition is a clear change to the school's design. At its root, the model of this school used to be that students exchange nothing more than their time and energy for an education. This exchange---the key aspect of design of this school---will be dramatically altered in September.

Now examine our final cause. In charging tuition, we change from educating for the purpose of educating to educating for the purpose of financial gain. It goes further: when discussing Bharu-

cha's salary with a friend, I mentioned that our president makes nearly twice as much as Obama. My friend responded by saying that he doesn't think Obama does the job for the money. With the sheer amount of money that Bharucha receives annually---more than 700,000 in total compensation---it is impossible to claim that Bharucha isn't financially motivated. With absurdly high salaries for higher-ups such as Bharucha, and Campbell's notoriously fat bonuses, it's clear that Cooper has been transforming into a school that serves to benefit its leaders---just like any other business. If this claim seems a bit over the top, consider that Bharucha's annual compensation is enough to pay one year of half tuition for 35 students, an entire class of architecture students. Choosing to keep a single administrator over 35 students shows that the end-goal of this school is no longer to educate students: it is to make a profit for our leaders.

Less obviously, our material cause changes as well. Colleges cycle through students every four years, but ideally the kind of student entering stays the same. It remains to be seen whether the incoming students will be at the same academic and creative level as current students, but there will be one change that will necessarily occur. We students at Cooper have a very specific relationship with our education since we are not paying for it. When paying for an education, one's relationship with their education changes, for better or for worse. At an open forum, a community member compared this to

paying for sex: clearly, paying for sex differs greatly from not paying for sex. The difference isn't merely the amount of money exchanged. The new students will have a different relationship to their education---this may not necessarily be a bad thing---than students did in the past. The implementation of tuition results in a student body that is significantly different than all bodies that came before.

This new school is no longer The Cooper Union. I propose---however dramatic it seems---that this school changes its name. Institutions of higher education are already modern-day Ships of Theseus; there's a fine balance struck between changing and maintaining an identity. We've changed so much from a material standpoint (the New Academic Building, overpriced men and women in suits) that we need to be especially careful about how we much we change before we begin to turn into something else completely. To make matters even worse, Cooper is in the process of altering its mission statement. If that doesn't indicate a severe change in identity, I don't know what does.

Admittedly, a name change is unlikely to happen, as the name "The Cooper Union" is a big selling point for donations as well as incoming applications. It makes little sense from a business perspective to change the name of the school, but it makes perfect sense from a logical and moral point of view. This is simply a different school; it deserves to be labeled as such.  $\Diamond$ 

# **MEETING** CAROLINE YU (EE '15)

CUAA EMERGENCY

On January 15, 2014, the Cooper Union Alumni Association (CUAA) held an emergency meeting to present the Huron Group report, state the annual fund report, and discuss the Board of Trustee's decision to not adopt the Working Group's financial

Richard Lincer was asked many questions regarding the decision and its consequences. What follows in this paragraph is a list of a few of the points made by alumni in response to the current donation situation at Cooper. Alumni are asked to donate but then are blamed by the administration for not donating enough and, at the moment, it feels as if there is no other way to support the school other than giving individual support, words, and talks. Forty-percent of Cooper alumni who

plans.

had received the full-tuition scholarship have given back. Donors also need a metric of percentage, dollar value, and quantity of the fund that will work towards the deficit because it is hard to fundraise without a metric. There were 54 pages from the Working Group but there was no opportunity to revise or discuss the plan before it was given to the Board of Trustees.

The following answers by Lincer stood out as notable. Each school funds itself and donors can specify which school they donate to. MOOCs are not favorable because they degrade student experience. In order to have well-qualified people for administration positions, the Cooper Union needs to pay them. There are various events and Cooper († continued on back)

VERDICT ON WORKING **GROUP** PROPOSAL

JOSEPH T. COLONEL (EE '15)

On January 11, a campus-notice email was sent announcing that the Board of Trustees reaffirmed its decision to start charging tuition to the incoming class of 2014. The email detailed the Board's response to the "Working Group Report," a document put together by staff, alumni, students, and faculty that proposed an alternative, nontuition based financial model for the Cooper Union. The Working Group, comprised of about 18 members, was

formed as a demand made by the protestors who occupied the President's office last summer. The rejection of adopting the Working Group's plan in lieu of tuition came after scrutiny from both the Board and the Huron Group, Cooper Union's financial consultants. The Board suggested, however, that it may implement some of the cost cutting models created by the Working Group in tandem with a tuition based financial

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#### JAKE POTTER (ME '16)

EPISONE ELEVEN

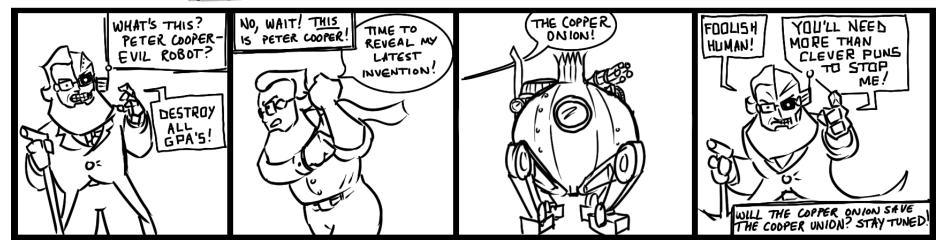




Photo Credit: Vincent Wai Him Hui (Arch '15)

## FACES OF COOPER: MELODY BAGLIONE

CAROLINE YU (EE '15)

Meet Professor Melody Baglione, Professor of Mechanical Engineering. Read about how she became interested in mechanical engineering, the projects she and her students are working on, and her fantastic advice for current Cooper students.

#### **The Cooper Pioneer:**

Where are you originally from? Can you tell me about your educational and professional background? Melody Baglione: I grew up in Detroit, Michigan. I often have to repeat that it's Detroit - Detroit, meaning inner-city Detroit, because people often think I'm from the suburbs. I'm a product of Detroit Public Schools. It was a unique environment to grow up in. It really shaped who I am. It's also the automotive capital of the world, thus I became interested in cars and the automotive industry. My brothers, my father, my uncle, and most people around me worked for or were associated with the automotive industry so I became interested in cars and technology and ultimately decided to pursue engineering.

I did my undergraduate degree at Michigan Tech in Houghton, Michigan. It's an engineering school in the Upper Peninsula of Michigan. It's further north than Toronto. My freshmen year we accumulated 328 inches of snowfall - we went snowmobiling in May. It is very different from New York City. It is very rural and used to be a copper mining town. The university is surrounded by old ghost towns and nature. It's completely different from Cooper Union and being in an urban environment. I like being either in an urban setting or the country.

consulting. I worked for one of the big consulting firms for nearly two years. I quickly realized I missed doing real engineering work. I worked on business strategy projects but I missed designing and engineering products and decided to go back to grad school. I went to the University of Michigan where I got my Master's degree and then I went to industry in an international management training program at DaimlerChrysler. I traveled back and forth between Stuttgart, Germany and Auburn Hills, Michigan. After the training program, I took a job as a power systems engineer doing calibration and control system modeling before ultimately deciding I wanted to finish my PhD. I worked part-time at Chrysler and completed my dissertation at the University of Michigan.

#### TCP: What is your role at Cooper?

MB: I'm an Associate Professor in the Department of Mechanical Engineering. I teach courses related to systems and control as well as vibration. I am also interested in advanced vibration testing (modal analysis) and acoustics. In terms of my role, I see myself primarily as an undergraduate educator. I hope to make the curriculum more interesting by adding real world projects and by working together with other faculty to create meaningful lab experiences and help students develop professional skills that prepare them to take on meaningful roles in industry and academia.

projector for the End of Year Show. Mike Essl from the art school also helped to advise this project. The idea was to bring art and engineering together. When I found out about the School for the Deaf on 23rd Street, I thought what better way to use something like this than to help deaf children visualize sound. From my understanding from talking to teachers at the school, deaf people can feel vibration from sound. Often when one of our senses has a deficiency another one takes over. The concept turned into a number of projects over the past few years where we create technology to help these students visualize sound and also help all students become interested in science and engineering. The project also shows them the creative side of engineering and technology. The school gave us an entire room - in NYC that's really rare that's at our creative disposal to try things out. We received three Diversity Action Grants from ASME to help fund the project. We're really hoping that the Light Studio spurs more collaboration between all three schools as we come up with creative ways to make this room engaging, but also artistic and creative, and showcase technology. Channel 7 came to report on the Light Studio project a few years ago and NY1 ran a story a few weeks ago.

The studio has interactive fireflies designed by Nick Wong. Alumni Bridget O'Meara, a mechanical engineering student, and Hannah Clevenson, an electrical engineering student, made LED flowers which "talk with light". A deaf girl from the school was interviewed by NY1 and explained using sign language how the flowers talked to her through lights, which was really inspiring. David Tan and Dale Short created a giant interactive projector that senses and responds to sound and movement using sensors from an Xbox Connect. There's an interactive fish tank where the children chase fish around. We learned that children who require physical therapy or need help in developing fine motor skills benefit from the interactive fish tank since it encourages them to reach for the fish. There's another sound and light installation in which students play musical instruments and see the sounds they create visually on a projector. They can interact with a Radiohead song that's digitized by using their hands to turn on certain parts of the song. It's really fun. If people are interested they're welcome the things that people are doing. We just launched the new engfac website and what other people do is impressive!

I really enjoy that in the ME Department we have a very collegial and collaborative environment and we bounce ideas off each other. It's a great cast. We're all very busy and there are so many things we want to do. We have a desire to work together and we're coming up with new lab and project experiences that build on concepts from all different classes. I'm trying to integrate the systems in 41 Cooper Square into projects - the building has electrical, mechanical, and structural components – all the stuff we learn about are housed here. Other professors are working to integrate the building systems in their courses, as well.

**TCP:** What are some of your hobbies<sup>2</sup>

MB: Hobbies. Currently I don't have a lot of time for hobbies. I do enjoy swimming. I try to make time for swimming. It's a great way for me to stay in shape and reduce stress. I also have two children at home – a one and a half year old and a six year old - so spending time with them is really important.

**TCP:** What advice would you give to Cooper students? MB: First of all, I'm very opinionated and I'm always willing to give my opinion so students are always free to stop by regarding different things. For incoming students, my advice would change along with their progression at Cooper. When students first

## (§ continued from front)

sonably project how or when we can restore this aspect of The Cooper Union's legacy [the centurial precedent of awarding full tuition scholarships]"," it does suggest that "we will [...] work together to develop a contemporary mission for the [Cooper Union]." Furthermore, the Board ensures that "our admissions process will continue to be based strictly on merit." The Board states in no uncertain terms that "we must reaffirm our commitment to educating the working-class students for whom Peter Cooper founded the school in 1859."

come to Cooper Union, the

curriculum is kind of intense

and focusing on your studies

is important, but as time goes

balance and their college ex-

just studying. When you get

involved in a project - either

with a professor or with some

other organization or some-

thing that students start on

their own - there can be a lot

of learning involved in that,

too. So I encourage students

to get out and get involved at

Cooper or in the city. There's

a lot to be gained from activi-

ties outside of the classroom.

**TCP:** What hopes do you

ten years, and beyond?

have for Cooper over the next

MB: Well, obviously, we have

People are anxious about what

a lot of challenges with the

decision to charge tuition.

the future holds. But there

are many people who care a

lot about Cooper Union and

I'm sure if we put our minds

together we can continue to

make this a great place to be.

I really think that we have a

unique learning environment

close student and faculty col-

laboration and with commu-

I see us trying to understand

the needs of the students

and what skills they need

in the future and realigning

the curriculum to maintain

its academic rigor but at the

same time provide experiences

to help students become pro-

ductive members of society in

order to influence the world

in a positive way and came

facing prospective students of

the Cooper Union, mention-

ing that "we need to provide

additional aid to ensure that

any deserving student can at-

tend [the Cooper Union]," as

well as outlining the creation

of a board to clarify the mis-

sion of the Cooper Union for

the 21st century. This board

trustees to work with faculty,

students, administration, staff,

alumni and friends" and will

concern itself with the issues

"will constitute a group of

straight to Cooper.

nity projects in New York City.

and it can continue to be a

unique environment with

on, students need to find a

will affect the quality of the applicant pool. Lincer replied by stating that there is a confidence low and the information is not public because then applicants could look at it. As perience should be more than mentioned numerous times during the meeting, it is clear that alumni and the Board of Trustees are fighting two different battles. An alumni had stated, "You have the right to do it, but [that] doesn't mean it's right to do."

> The up-to-date statistics of the annual fund were then announced. The entire annual fund is \$7.98 million. Last year, the fund was \$3.5 million. The restricted part of the fund is \$6.4 million while last year it was about \$2 million.

Robert Spencer, a former assistant vice chancellor for treasury at Vanderbilt University and the director of the Huron Consulting Group, presented the group's slides. Risks were weighed since there is no direct answer to the current situation. Spencer stated that he has never seen a Board so engaged with numbers. The Board has continually asked for data. The presentation slides can be seen here: http://www.cooperuniontaskforce.com/staticdata/doc/ huron-20140115.pdf. ◊

### DATE **AUCTION** CHRIS CURRO (EE '15)

On Thursday, January 30th, the Cooper Union's chapter of the National Society of Black Engineers (NSBE) held their third annual Charity Date Auction. This year NSBE partnered with Zeta Psi to host the auction; all proceeds benefit Habitat for Humanity, a long time partner of Zeta Psi.

This year the auction raised a grand total of \$1,655. Forty students participated in the auction. The top three sales were Allison Tau (ChE '15) for \$115, Yoon Shin (Arch '14) and Emily Adamo (Art, '17) for \$75, and Josh Mayourian (ChE '14) for \$70. Led by auctioneers Brian Wong (CE '16) and Kevin Kim (CF '16), the auction was running so successfully that by the intermission many more people volunteered to be auctioned. Wong and Kim provided just the proper combination of humor and seriousness to ensure the night was a success. The crowd favorite bidder was Sohan "Brohan" Mone (CE, '16), with each bid the whole the room erupted in cheers. Contrariwise some cringed at the revelations of successive amounts of skin, though sometimes the muscles were accompanied by screams of adulation.

model.

While the Board "cannot rea-

I also spent a year abroad on the Congress-Bundestag Youth Exchange Program. I studied a semester at a German technical university and did a "Praktikum" (a sort of German apprenticeship) at BMW spending two months in the Motorsport engine plant and four months working on powertrain vibration testing. I also spent a semester at the ETH-Zurich (The Swiss Federal Institute of Technology).

After Michigan Tech, I decided to try management

**TCP:** Could you tell me about the project NY1 came to look at a few weeks ago? **MB:** The Interactive Light Studio project started a few years ago. There's a desire among Cooper Union students to do more interdisciplinary projects. As part of my vibrations class, I require students to approach real world vibration projects and try to reduce unwanted vibration or solve acoustics problems. One year, students and I decided to take a creative twist by using vibration to make an interactive LED display. Nick Wong, a particularly creative Master's student, and a few other ME students created this interactive LED sound

to come see me and come up with other ideas for the space.

TCP: Do you have a favorite professor or colleague here at Cooper?

MB: I don't have one particular but I have many for different reasons. The more I learn, the more I'm impressed by all

The rest of the campus-notice details the Board's perspective on the economic situation

(*†* continued from front) employees that are helping to bring attention to Cooper Union. Dean Dahlberg has a long track record of large gifts. The Invention Factory video on the Rapid Packing Container went viral over winter break. There are donors who give six to seven

of "sustaining merit-based admission, increasing accessibility for students from all backgrounds, and [...] adding resources to the overall tuition scholarship." According to the email, this committee "will be reaching out to the community in the coming months and will ensure that this process is inclusive and transparent." ◊

figure gifts but the school has to respect the donor's wishes to which part of the school the gift is given to.

Michael Lebron, an art alumni, asked Richard Lincer about the proprietary information of the algorithms used to show how the tuition model

Top 6 Things Heard at the Auction:

(*‡* continued on next page)

(*‡ continued from previous page*) "Favorite Position: On my knees...praying."

"One boob is bigger than the other. Bid to find out."

"I am Mark Epstein."

"What you look for in a date? Something with a hole."

"What you look for in a date? An inflamed prostate."

"I was conceived on my father's birthday."



Photo provided by Atina Grossman

# FACES OF COOPER: ATINA GROSSMANN

#### CHAE JEONG (ChE '16)

The Cooper Pioneer sat down with Atina Grossmann to discuss her educational background, raising a child in Massachusetts, and the current political climate here at Cooper.

The Cooper Union: Where are you from? **AG:** The Upper West Side.

TCP: Can you tell me about your educational and professional background? AG: Yes. I am a New York City girl. I grew up in the Upper West Side. I went to PS 87 and to Hunter High School, way back in the day when it was still an all girls' school. It was one of those specialized high schools where you had to take a test. It was actually a wonderful place to be because back in the 60's it was still even in New York -- not such a cool thing to be a smart girl. Once we got to Hunter, we all felt at home. It was a simulating and nurturing environment.

I ultimately ended up going to City College where I got my undergraduate degree after a brief detour to the University of Chicago, which I left, partially because I had to leave because I was a big student activist. I came to City at a time of enormous political turmoil and excitement, during the struggle around open admissions. It was a period from 69-72 where we felt that our educational life was completely entwined with our activism. I had some of the most amazing professors and that's where I decided to become a history major because it seemed to make the most sense in terms of trying to understand what we were doing. The women's movement was just beginning, the Vietnam War protests were in full swing, and we were trying to make open admissions work at City. After I graduated from City in 1972, I actually stayed on for another year as some of sort of assistant teacher in a new program which was

designed to combine history and literature and bring together students who wanted to think about making open admissions work. It was a very stimulating and exciting time to go to school and I realized, "Oh! This could be a good life! I can be an activist and I can be a scholar" –which is what I wanted to do my whole life. In that sense, I never really left New York.

TCP: When did you first learn about Cooper? AG: I think I always knew about Cooper or at least from the 60s on, when I was in high school, because Cooper Union, at least as a place, with the Foundation Building, the Great Hall, and all its historical significance, was so much part of the landscape, especially of the Lower East Side. And, of course, in the 60s, we would all go downtown and hang out at St. Mark's Place and on the Lower East Side so the Foundation Building was the structure that stood benevolently over all the chaos of the time and neighborhood. I was definitely aware of Cooper in high school. I never thought of it as a school that I would apply to or go to because I was definitely not good at math and science -- those were definitely not my strong points -- and I wasn't much of an artist. I was more interested in history and literature so it wasn't on my radar in terms of where I would go to school. However, it was very much a part of the cultural and political landscape of the East Village.

site of historic events for the women's movement, where Susan B. Anthony spoke and worked and, very importantly, the legendary and galvanizing speech by Clara Lemlich in 1909, who stood up while Samuel Gompers from the American Federation of Labor was speaking, and called on women to strike against the conditions in the garment industry sweatshops. Of course, two years later, there was the Triangle Shirtwaist sweatshop fire, which actually happened right around the corner, where a NYU building now stands. That was one of those moments when I felt that this building and this area was so much part of history and part of my identity as a historian, New Yorker, and feminist. Even though it was never a place I imagined going to as a student or even teaching at, it was very much a part of the fabric of New York City.

TCP: When did you start working here and how did you come to teach here? AG: I first came in the fall of 1996. It was kind of a roundabout trajectory because I went to graduate school at Rutgers. I was always a public school person. I am very loyal alum of City College. When I went to City, it was free. I don't think I ever paid for my education in my life. When I went to Rutgers, which is a state university, I was a TA and my education was covered by fellowships and my TA-ing. As I was finishing my dissertation at Rutgers in modern German history and women's history, I got a job at Mt. Holyoke College –a tenure track position at Mt. Holyoke College -- and I knew I didn't want to want to go to western Massachusetts. I was a big city person and I didn't really want to go. But, it was the 80's and there were very few jobs in history and I really wanted to do a post-doc but my advisors said, "You're crazy. You can't turn down a tenure track job." I buckled and went to teach at Mt. Holyoke. It was beautiful, and it was calm -some of the students had horses. I really, really wanted to go back to the city though. I had had my first child and my husband was working in New York. It was hard to be, basically, a single mother. There was still a lot of snow during New England winters and every morning I had to dig out my car; in New York, I can just get on the subway. I really needed to get out of there.

outside and put him down. Then I would clear off the snow and get the car started. Nothing could stop me from this routine because I had to get him to daycare and I had to get to class. But he was screaming and screaming and I was ignoring him because I had to do what I had to do. I finally got the snow off my car and I go to pick him up and he's screaming his head off. I then realized I had forgotten to put his boots on. So, I thought, "Uh oh." It was not a good situation. I decided I needed to leave and live as a family with my husband in New York.

I was incredibly lucky at that point because I got a job at Columbia. Columbia, though, at that point did not hire tenure track and I knew that. But, I was so desperate to get out of western MA and to get back to New York that I didn't care. So, I went to Columbia, which was wonderful. I had some wonderful students and worked with some amazing graduate students, some of whom are now very well known in their fields and among my colleagues. I was there for about 10 years but I knew that at some point it was going to end. I decided that I'd better leave them before they left me. In those days, the Ivies never tenured from the inside -even if you won a Nobel Prize, they wouldn't tenure you...not that I did. I had finished writing my first book and I was happily doing research and teaching. At that time, I was working on modern German history, gender history, population policy, racial hygiene and sexuality. I knew two things. I knew that I wanted to stay in NY, despite opportunities at other universities. At this point I had another child and I was heavily involved in the community of the public school community that my children went to on the Upper Westside. I was very happily working on of Parent-Teacher leadership team and I didn't want to give that up. In my whole life, I was happiest when I was doing scholarship and something that felt like activism. I also knew that I loved being a historian, an

also to continue my scholarly and professional life, as a historian of gender and sexuality, modern Germany, and the Holocaust, to research, publish, lecture, and be part of an international community of scholars. I think that practicing scholars who research and publish are also more interesting (if sometimes overly busy!) teachers. Sure enough, I applied for the job and I got it. It was really wonderful. The one thing, though, that I missed from Columbia was working with graduate students. But, being here in New York, I get to work with graduate students from NYU and I also work with graduate students in Berlin. I don't feel deprived. I have to say, however, at the time that I came, I didn't think that humanities and social sciences were not central to the curriculum in the way that I'm worried now that they aren't as central as they should be because the people I knew who taught at Cooper were such scholars and intellectuals. It seemed like HSS was taken very seriously. When I came, we used to sit around in our book-lined conference room at 51 Astor Place and have meetings and talk and argue for hours about what the IDs on the HSS3 final should be. There was really a sense of intellectual excitement that I'm not sure we have been able to sustain right now. I hope we get back

That's how I came, and I taught the course that Andy Rabinbach had developed. I taught that for one year and then I had gotten a fellowship at the Institute for Advanced Study at Princeton that year. I was already thinking about my next book and working more on the Holocaust and Jewish studies. I left for Princeton for a year and came back to a completely changed curriculum, with the introduction of HSS1-4. I've been teaching here ever since, always trying to think of ways to make history seem important and exciting to the students. In some ways, I feel like it's a little harder now. I don't know why but I think it may be because the students are more overburdened. For

there.

history course and teach it in such a way that students can see that it is not a burden or something that is forced on them but something that is necessary and interesting for their future lives as professionals and citizens. I think the question of what electives I teach is harder because many students used to sign up when I taught courses about the Holocaust or 20th Century Europe but now there seems to be less of an interest. I'm trying to figure out what that's about. So there's that: my role as a teacher.

I think there's a role here for somebody who is really a research scholar in one of the non-major fields, who writes, publishes, and lectures around the world and is both really rooted in NY and in Cooper and also has an international presence. I think that's really important, also for students, so we're not just locked into Cooper. Obviously, now, (it must be my activist background) I am very concerned about what's going on at Cooper and the future of the school. Both about the decisions being made and about the way decisions are being made. I think faculty have a delicate role to play. We're not the students and I don't think faculty should act on the behalf of students or tell students how they should think. We offer students tools to think about what's going on and to make their own decisions. But I think that we, especially as full-time faculty, have a huge stake in the future of the institution and I'm worried about that future . It's an amazing place.

Also, I would love to be part of a relationship that creates a synergy among the three schools and HSS. Otherwise, you can just be at SVA for example. Cooper has this extraordinary interdisciplinary potential.

**TCP:** As a closing remark, do you have any advice for the Cooper community or the students specifically? **AG:** I think that Cooper has a remarkable history and that we should be very careful with how we both preserve and move forward with it. I really do hope that we can maintain a full-tuition scholarship policy. I'm completely aware of the financial challenges. I think that there are ways we can do it. I think, also, that for students it's an extraordinary opportunity to be in the city, to learn from the professors and students of the other schools, to take seriously the opportunities that humanities and social sciences can provide. It's the students that are going to have to speak up (if that's important) and say, "Yes, we are committed to our fields but we need time to partake in everything that Cooper has to offer." And we'll be right behind you!

One very conscious memory I have of Cooper is (I think in the early 80s, back in the day when we still celebrated International Woman's Day on March 8th) a march that took us all around the Lower East Side. I was probably in graduate school at the time and I was the historian of the march. I remember bringing my bullhorn and pointing out Cooper Union as the I always tell this anecdote because it's the day I realized I really needed to do this. Once again, it had snowed and junior faculty didn't have garages. I had to dig my old Toyota –which was a good car –out of the snow and bring my year and a half old son to daycare. I had this whole organizational strategy. I would get him all dressed up in a snowsuit, bring him intellectual, and a scholar and I wanted to continue being a professor.

I had a very good friend named Andy (Anson) Rabinbach, who was my predecessor at Cooper. He taught history here and he developed what was then the "Making of Modern Society"course. He had gotten a job at Princeton. It was another way I knew about Cooper because we had always joked that if he ever left, wouldn't this be a great job because it was such an interesting place, it was in New York, as a full-tuition scholarship institution it fit with my ideals of social activism, and it was full of interesting students. I had the opportunity

me it's been a way to integrate my life: to live in the city, which is my home, to see my kids through school, and to work on my own research.

TCP: What would you say your role is here at Cooper? AG: That's a really interesting question. I feel like it keeps changing. The position for which I was hired was pretty straightforward. It was to teach history, to be the lead lecturer in the Making of Modern Society course, to supervise the adjuncts and to teach electives especially in my two specialties, European history and gender/women studies. I still think that what I would like my primary role to be is to teach that general



Photo provided by Ms. Szprengiel (ChE '07)

### **ALUMNI INTERVIEW:** JULIA SZPRENGIEL SAIMON SHARIF (ChE '15)

Alumni can give the greatest advice because they too have been through the ups and downs of Cooper. The Cooper Pioneer interviewed alumni from the art, architecture, and engineering schools to inspire current students and show how different alumni experienced Cooper.

We interviewed Julia Szprengiel (ChE '07) to see what she's up to now.

#### The Cooper Pioneer: What club/group did you enjoy the most during your time at Cooper? Julia Szprengiel:

During my senior year at Cooper, I finally joined the women's tennis team. I had played in High School, and missed tennis quite a bit, but never thought I had enough time to add a sport into my already crazy Cooper schedule. As soon as I started playing with the team, all I could think of was why hadn't I done this for all 4 years? My classmates had always impressed me with not just their intellectual abilities, but also their wide range of talents outside of the classroom, and their ability to continue to pursue these interests despite

our heavy class schedules. Students really make it happen at Cooper. Sports, talent shows, musical performances, cultural events, clubs - everything is student run, and without the amenities and money of large universities. I encourage current students to explore all of their interests while at Cooper. Even if you don't think you can do it, you probably can. Cooper students somehow always find a way.

TCP: What is your favorite memory about Cooper? **JS:** I vividly remember the moment I found out that I was accepted to Cooper Union. I came home from high school, and there was a message from the admissions office on the answering machine (remember those?). Despite getting a phone call from the school directly, I still didn't believe that I was getting in. Maybe they're just really personal like that, I thought. Then I heard it -- "congratulations, you've been admitted into the class of 2007!" The next part is foggy - but I'm pretty sure I screamed repeatedly, and then yelled expletives several times, while running around

#### the house.

I had applied early decision because I knew Cooper was where I wanted to be. No doubt. I was stoked to be going to a place where I'd be surrounded by oddball supernerds like myself. During the building tour on admittedstudents-day I even overheard hallway debates about science (debates! about science!!); the geek inside me was bursting. Initially I feared that a school with such a high reputation might be filled with people who were competitive and cut-throat. Thankfully, I was wrong. I guess we all know that we can't survive it alone, and so over the four years, we bear the academic scars together. This "Cooper collaboration" among students is something special, and my favorite memory.

#### **TCP:** Do you still speak to your classmates?

**JS:** I'm lucky enough to be one of the lasting "Cooper couples" from my class. My significant other (Javier Delgado '07) and I currently live in Westchester together...so yes, I speak to him daily. We met during sophomore year when we realized that neither of us had a clue as to what was going on in our thermodynamics class, and ended up bonding over projects and homework assignments associated with it. I know, very romantic. It is great to share the Cooper bond, since only Cooper alumni can understand the idiosyncrasies of the experience.

I also have a couple of other closer friends from school with whom I keep in touch weekly.

TCP: What was your first job out of Cooper? **JS:** After graduating from Cooper, I first completed my Master's Degree in ChE at Columbia University prior to taking a job offer from Novartis Pharmaceuticals, which is where I still work today. I was accepted into a 2-year development program



MARCUS MICHELEN (BSE '14)

at the Novartis manufacturing/packaging site in Suffern, NY (~30min north of NYC). The program is designed to educate and expose the candidate to different areas of the business to provide a well-rounded foundation for a future management position. The best part is that the second year of the program is spent at different Novartis site abroad. My abroad placement was in Basel, Switzer-

land. I had an amazing year from a professional, personal, and cultural perspective. This was an incredible and rare opportunity, and I fully credit Cooper's strong academic program and reputation for giving me the edge.

#### TCP: Can you describe your current job(s)?

JS: Currently, I am back at Novartis' Suffern, NY manufacturing site, working in Operational Excellence in the Quality department. I lead and manage continuous improvement projects within Quality using Six Sigma/statistical tools.

TCP: What advice would you give to current Cooper students, specifically engineering students? **JS:** Though it might be difficult for the ambitious, over-achieving students at Cooper, try not to obsess over your grades. Yes, they are important to an extent, but don't stress if you get B's and C's more than A's. I assure you that no matter what, when you come out of Cooper and back into the "real world," you will be leaps and bounds above your coworkers in work ethic, knowledge, etc. without even trying. The work you consider to be the expectation will appear to be "above and beyond" to your colleagues and managers, and you will then see how Cooper's rigor has shaped you.

Also, enjoy Cooper life outside of academics. Participate in sports, hobbies, music, clubs, etc., even if you feel like you don't have the time. Believe

it or not, once you begin a regular job, you will think, "now I really have no time" compared to college. When I started working, I thought that I would finally have time to indulge all the hobbies I put aside while focusing on school. Not true – life gets in the way

at that point and the responsibilities pile on. Plus, you start to naturally go to bed by 11pm, and get excited when you finish chores on Friday night so you don't have to do them on the weekend....sad, but true. So, take advantage!

### ANNUAL SKI TRIP AND SPORTS UPDATE YARA ELBOROLOSY (CE '14)

At 3 in the morning on Sunday, January 12th, a hundred people gathered in the lobby of 41 Cooper Square. It was time for Dean Baker's Annual Ski Trip, which has been going for 38 years. Cooper students and their friends are invited to go to Mont Sutton in Canada for five days, the week before the second semester begins. In Canada, the chalets are rented for groups ranging from four to ten people to live together. Every year, the trip has been an enjoyable one, where the bonds between old friends are strengthened and new friendships are created. What made this year special, in Dean Baker's words, were the energy and participation of this year's group. About 25 beginners attended Dean Baker's ski school, where Dean Baker teaches anyone who is willing to learn how to ski. His patience, expertise in the topic, and the beginners' determination are what made this year's ski school very successful; everyone was able to ski down at least a beginner slope by the end of the week. Every night, there was an event going on and it was at these events that the group dynamic shone. Tuesday night was a dinner, dodge ball game, and party at the lodge at the base of the mountain. Throughout the party, students were joining together to play games in groups and as the night progressed, the groups unified into almost one huge group, getting everyone involved in the fun. Wednesday night was dedicated to Montreal. At the end of the night every year, the majority of the students could be found at the same

night was another dinner at the lodge and a party at a nice hotel.For Dean Baker, the ski trip is the largest gathering of some of the most intelligent people, none of whom are in academic trouble. For those who couldn't get enough of skiing in Canada, Dean Baker also hosts the Alumni Ski Trip during the President's day weekend, where the undergraduate students are also encouraged to attend.

Of course, there were sports involved in the ski trip, not counting the doge ball game. The men and women's basketball team played Lenoxville, a division 1 school, at Bishop Campus. The volleyball team played John Abbot, which is another top school in athletics. These games were about gaining experience in playing internationally with some of the best teams in Canada. Back in the United States, Cooper Union's basketball teams are nearing the end of their season. The women's team had its senior night on January 25th, celebrating the seven seniors who will be graduating this May. The men's team had a game against King's college, which due to their hard work resulted in a great game. The men have an art school tournament coming up in two weeks with Mass Art, RISD, and the New School. The men's volleyball and women's basketball team just had their games this past weekend so stay tuned for those scores. The South Carolina trip is the start of the men's tennis team's season during spring break. Both men's and women's basketball teams are also invited to train for the upcoming seasons. ◊

KenKen is a Japanese paper puzzle by Tetsuya Miyamoto much like Sudoku, only it involves both math and logic. It roughly trans-

of the bus pick up. Thursday lates to "cleverness-cleverness."

Instructions: Like Sudoku, each row and column must contain the numbers from 1 to 6. The number in the upper-left corner of the bolded shape made up of squares is the number you need to get by using the operation next to the number. For example, the "20x" rectangle in the bottom left corner can be filled in with a 5,4 or a 4,5. The unique solution to the last issue's puzzle is reproduced below. This puzzle contains only one solution, which will be released in the next issue.

450×	2-		4÷
4÷			
	18×	10×	
40×			15×
		4	

1	6	5	2	3	4
5	4	6	3	2	1
2	3	4	1	5	6
4	1	2	5	6	3
3	2	1	6	4	5
6	5	3	4	1	2

Men's Basketball Team

	Cooper Union	King's College
Score	77	53

### CRYPTOQUOTE

MARCUS MICHELEN (BSE '14)

A Cryptoquote is an encoded quote. It is encoded such that each and every occurrence of a letter is substituted with a different letter of the alphabet. Using clues such as frequency of occurrence and placement, the original quote can be found. For instance, the word xbdikcxxbz could be deciphered to reveal the word LONGFELLOW.

#### "OR'Z WFNJ, OR'Z WFNJ, OR'Z WFNJ. OR'Z WFNJ!" - JWH WJYOZWB

Last issue's solution:

local bar near the location

"Age is something that doesn't matter, unless you are a cheese." - Luis Bunuel