

YEAR ZERO

TABLE OF CONTENTS

5 NEWS 43 FACES OF COOPER

25 EVENTS **59** ALUMNI INTERVIEWS

39 EDITORIALS **70** CLOSING PAGE



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NEWS

INTERVIEW WITH DR. DAHLBERG, DEAN OF ENGINEERING

Saimon Sharif (ChE '15) & Caroline Yu (EE '15)
Originally Printed in Issue #1

This past Wednesday, the Cooper Pioneer interviewed the new Dean of Engineering, Dr. Teresa Dahlberg.

The Cooper Pioneer: Do you mind giving some background on your education and past job experiences?

Teresa Dahlberg: Sure! I received a B.S. in Electrical Engineering, and worked for IBM as a hardware and software development engineer for 10 years. I later received an M.S. and PhD in computer engineering and then moved to a faculty position. I've been a faculty member in electrical and computer engineering in a college of engineering. In the last dozen years, I've been in a computer science department in a college of computing and informatics.

TCP: What prompted you to move into an administrative role from a teaching role?

TD: I've actually been in administrative roles for a number of years. I've been at UNC Charlotte - a teaching and research university. So, in addition to teaching classes, I had to build a funded research program. In so doing, I started a wireless networking research lab and founded a research center called the Diversity in Information Technology Institute. In the latter, our focus was on enhancing computing education as well as attracting a larger and broader group of people to the discipline. I've managed lots of projects, having been a principal investigator for over \$20 million in grants. I was also associate dean of a computing and informatics college with oversight for the undergraduate programs in the college. We had about 1400 students including over 1000 undergraduates. I also founded a consortium called the STARS Computing Corps, which is now a non-profit company. We developed

a service-learning program that engages college students in building the science, technology, engineering and math (STEM) K-12 pipeline, as a way to strengthen the leadership skills of college students majoring in engineering and computing. Over eight years, 50 colleges and universities in the country have adopted our program and participated in the consortium. Since I've done a lot of teaching, curriculum development, project management and research, a dean's position seemed like the next challenge.

TCP: Why did you choose to pursue electrical and specifically computer engineering?

TD: I started out as a music therapy major. I was encouraged by my high school piano teacher to pursue music. I didn't want to do performance, so I focused on music therapy. In the 1980s this was a new field, using music and peoples' interactions with music in therapy. I was this music therapy major, but I loved and missed math. I ended up being the girl in my dorm that helped everyone with their math problems even though I didn't have any math courses. After the first year I wanted to change majors. A friend's father said, "Why don't you try engineering? It's math-based." So it was a leap of faith. I changed my major. I've taken lots of risks in my life - like coming here. I look at the options and then I go with my gut. When I entered engineering, I took the typical survey class that goes through all the different kinds of engineering majors. Electrical seemed to be the one I least understood because it was more abstract, but it seemed more mathematical. It, again, was a leap of faith. I became more interested in computer engineering a few years later when it was introduced as a new undergraduate program while I

was still an undergraduate.

TCP: Do you enjoy teaching, conducting research, or managing the most? **TD:** I've enjoyed them all at different points in my career. One of the things I love about being a professor - and I'm always telling students to think about the professoriate as a career - you can evolve your focus and change what you do over time. I like doing something when I feel like I'm at the edge of confidence. I want to feel challenged and a little bit scared: "Oh I have to learn this. I have to figure out how to do it." Once I get really good at something it gets a little bit boring. When I was in product development, it was fun for 5 years - brand new environment. I was intimidated by more experienced people. After a few years it was "I could do this" then it was "I could do this in my sleep." I loved teaching and it was all consuming in the early years. When you're teaching you're helping develop another person. I loved starting up my programs in wireless networking and in computing education research. When you're doing research, you're doing the work yourself; then you're building a team and building bridges between people to do larger projects. As a manager you're helping to facilitate other people. You're putting the vision and the team together.

TCP: What attracted you to Cooper Union?

TD: A search firm contacted me and convinced me to apply. I became intrigued during the first interview with the search committee. There was something special about The Cooper Union. It's a close and intimate atmosphere. The students are very high-achievers and are nice people. I like the focus solely on engineering, art and architecture in culturally rich New



York City. I saw unique opportunities for interdisciplinary collaborations on and off campus. I read the papers, and my colleagues were sending me links asking "Are you crazy?!" I'm very much an optimist. I just don't let problems deter me. I thought "Well, there's a challenge." It's a high risk - high reward position. They could close engineering and I'm out of a job. But if we succeed, the decisions we're making over the next year or two will set the course of the institution for the next 100 years. I feel optimistic that we can make it clear to the outside world how amazing this place is. The reward will be having been a part of the rejuvenation of this unique institution.

TCP: What has surprised you the most since coming to Cooper?
TD: The closeness of faculty-student collaborations. When I talk to faculty, even the faculty that are frustrated, when they start talking about their students, they become passionate. The students are wicked smart but, again, very nice people. The students really seem to enjoy the intellectual environment.

TCP: What are your main goals as the new Dean of Engineering?

TD: Since arriving I've continued to discover hidden gems. The Cooper Union has much more to offer than is visible to the outside world. I'm very much in learning and listening mode but a key goal is to identify and promote

special attributes of The Cooper Union, especially to incoming students as well as to companies and graduate and professional schools. I also want to work with faculty and students to not only maintain, but to enhance our academic excellence, for example by insuring that our curriculum is responsive to the New York City job market and to the global need for engineering to address important societal problems.

TCP: How do you like living in NYC? Is this your first time living here?
TD: Yes it's my first time living here.
I love it. It's very different for me. I've always lived in suburban neighborhoods. I left my big house in Charlotte. I left my car. I'm very close to the college. I'm on foot – living in an apartment – and I love it! It's a completely different lifestyle.
There are so many things going on in the city. I think it'll be a long time before it wears off.

TCP: What are some of your hobbies? **TD:** I work a lot, and I spent a lot of time with my daughter, Kristen, who's 15, our dog Clyde, and my husband Brian. I have a 22 year old son, Nathan, but he's on his own in graduate school. I like to run, lift weights, listen to music, and read. These are my stress relieving activities.

TCP: Where do you think Cooper Union's engineering school stands in terms of academic competitiveness with other engineering schools?

TD: I think that the engineering school's curriculum is highly competitive. In particular, it's very rigorous. It seems to be highly project oriented, which I think is great. There are a lot of opportunities for unique experiential learning – like Invention Factory, internships, research experiences - lots of competitions. There are rich experiences for the students. If we look at the national and regional landscape for engineering what is needed for the 21st engineer, I think we can use some tweaks. New York City has set this aggressive goal to be the East Coast Silicon Valley, and there are a lot of startups and technology. Even though we're small and there are lots of big players in the city, I think we have an opportunity to create a niche and a unique contribution. When we look back ten years from now, when NYC reaches it's goal, Cooper Union should be remembered as a player in that.

TCP: What advice do you have for Cooper students or faculty?
TD: The advice I have for Cooper Union students is to stay optimistic. This is a great place to be. It's going to continue to be a great place. I think students come here knowing they have to do well in class, and I'm told students take a lot of course credits. That's terrific. You should also have fun – I have to remind myself of that too. We tend to be all Type A people. Work all the time. Set the goal. Reach the goal. It also matters to do fun things. Look at your

educational experience as not only what happens inside the classroom, but also what happens outside of the classroom. I mean out of the classroom in a number of ways. First, competitions and research experiences, going to lectures and seminars. Those you should do. But also, it's great that we're here in this city with art and architecture. So go to lectures and performances and art exhibits and things that stretch your comfort zone because that's what's unique about being

at this institution. My advice for faculty is to stay positive, and work with me to transform The Cooper Union.

INTERVIEW WITH STEPHEN P. BAKER, DEAN OF STUDENT AFFAIRS

Matthew Lee (ME '15)
Originally Printed in Issue #1

This past Tuesday, the Cooper Pioneer sat down with Dean Baker to discuss his new role as Dean of Student affairs.

The Cooper Pioneer: How many years have you been at Cooper?

Dean Baker: This is the start of my 48th academic year.

TCP: Please describe how you were informed of your new position as Dean of Student Affairs?

DB: During the process after Dean Lemiesz, the administration talked to about assuming the responsibilities. It was very recent.

TCP: Were you previously aware you may be chosen? Have you ever asked for the position?

DB: No.

TCP: A lot of us at Cooper have many things to manage. What do you specifically do to stay sane while running both the athletics program as Dean of Athletics, and acting as Dean of Student Affairs? Any time management tips? **DB:** The most important ingredient is the dedication and the relationship with the students, the second thing is the commitment to the school, and the third thing is that as a Cooper Union person you don't rely so much on sleep. I think the passion that all of us have, the initiatives that we all want to take. the creative juices we all have all blends together. There's 24 hours in a day, and some people know how to manage their

time better than other. At Cooper Union you have the time to not only focus but you have the time to be creative, and that's unlike any other school in the word and I think that's the blend of it. There's always time to do things.

TCP: With your added responsibilities do you feel you have less time for anything else in the day?

DB: I make time. I'm thinking about the students, I'm thinking about the school. If I commute 5 hours a day, I'm thinking about who I'm going to see; the person I feel sorry for is the first person I see because I might be thinking about something else for 2 hours while driving in. I plan my day, but I also have to be flexible. It adds another dimension to the students and myself sharing something that's going to make this place better.

TCP: How do you like the role so far? **DB:** I'm enjoying every minute of it because I think there's a level of energy - everyone is wishing me well and encouraging me - and there's an energy of the incoming students that is just remarkable.

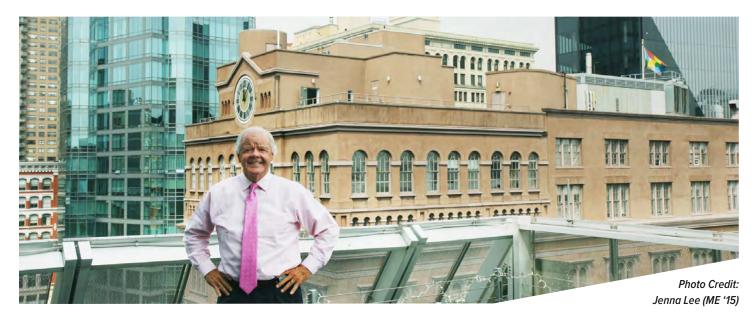
TCP: Any interesting stories? **DB:** Look at what happened at Cape Cod. You look at everything we introduce: are we professors? coaches? administrators? friends? What goes on up there, the dynamic of what goes on up there [...] I think everybody felt they were more committed to what they were doing and more committed to helping me and

helping us. I saw something I hadn't seen since I was a little kid up in Cape Cod: One squirrel is up in a tree. The squirrel is out at the end of the tree. Now their food is free - they're not going to the supermarket, but they have to get it seasonal. So one of them instead of taking individual acorns, this squirrel got creative and started shaking the branch. And then the nuts would fall down to the ground. So that to me is a Cooper Union story, in the sense that the Cooper Union person realizes where he/she is: they have to be efficient, then they have to take those nuts and bury them and prepare for exams or the future. The other squirrels going around picking up nuts from the ground. The Cooper Union squirrel is taking care of business.

TCP: The email we all received stated you "will take on the leadership responsibility for Student Services in the interim." Do you know if the administration is actively searching for a permanent dean?

DB: I think that the position is gonna be now called Student Affairs. I think what they are pursuing is having me fill that administrative position. The first thing we did was to elevate Chris Chamberlin to the Associate Dean position. And I don't think there's too many people walking around with 3 Dean titles and I don't want to be greedy.

TCP: They built you this office in 3C [in the dorms]. How was that move? **DB:** The move was to save money in



30 Cooper: they are condensing six floors to four. So we were selected to come over here. Financial Aid is being put in with Admissions, which most schools do. So that's going to free up some floors. So they asked us - Career Services, Athletics - to come over here in the dorms to have one office. They're going next door with the residential offices, and they put me over here in 3C. But originally [former] Dean Lemiesz selected this place for me, she selected this spot. This move was taking place before she left. Now we have to figure out the office space, figure out how public it's going to be, how private it's going to be, so students will have access and [so that] it's not geographically ugly over at 30 Cooper Square. We're going to be amongst the students. I was originally in the Foundation Building. When they renovated in '72 I went to the Engineering Building. From the engineering I went to the Hewitt Building for about 20 years. From the Hewitt Building I went to 30 Cooper Square. So this is the 5th place we've been to.

TCP: What is next for the future of Cooper?

 $\boldsymbol{DB}\!\!:$ It's going to be a transition that has

never be experience before at Cooper Union. I am extremely optimistic in the school's ability and the student's ability to improve the product, to raise the interest, and also to keep the level of intensity, creativity, and excellence that we always have. I think that we want to encourage the excellence of the students and continue to maintain the integrity of the institution.

I think I'm known for saving money and raising money. That's one of my major functions. Also we raise awareness and raise integrity of the things we get associated with. With the changes that are going to affect incoming students, it's incumbent for us to maintain that integrity. I just found out we are the Number One rated school for Regional Colleges (North) in US News. That's definitely because of my new promotion!

INTERVIEW WITH CHRISTOPHER CHAMBERLIN, ASSOCIATE DEAN OF STUDENT AFFAIRS

Chae Jeong (ChE '16)
Originally Printed in Issue #2

The Cooper Pioneer interviewed Mr. Christopher Chamberlin regarding his responsibilities as the Director of Residence Life and the Associate Dean of Student Affairs, his new position.

The Cooper Pioneer: How did you hear of the Cooper Union and what brought you here?

Mr. Christopher Chamberlin: I used to work as the Director of Operational Services for a public college in New Jersey and I wanted a change. A friend of mine had previously worked at Cooper as the Director of Residence Life and he highly recommended working here and when the position opened up here, I applied. I was and remain incredibly impressed with the Cooper Union's ideals.

TCP: How many years have you been at Cooper Union? **CC:** 3

TCP: Can you explain your role as Director of Residence Life? **CC:** As the Director of Residence Life. I'm responsible for the overall operation of the student residence at 29 3rd Ave. My responsibilities include ensuring that we maximize our occupancy to provide the most housing opportunities to our students as well as overall program direction. As a team with the other professional staffs in the office, David Robbins and Marilyn Whitesides, the Residence Life works to ensure that the student residence is something more than just a "dorm". We try to engage the students through programs and social events to get them to know each other, to network personally and professionally, and finally to grow as young adults. Since we generally only provide housing to first year students, we also try to prepare the students for the realities of living on their own in New York City.



TCP: What was your most memorable moment as Director of Residence Life? CC: For the most, the memorable moment is always move-in day each year. The day that students move into the residence hall for the first time is always such an exciting time and truly marks, for most students, their official entry into our community and into adulthood.

TCP: Can you explain your role as Associate Dean of Student Affairs? **CC:** As the Associate Dean of Student Affairs, I work very closely with Dean Baker in providing leadership for the department. I still oversee Residence Life, but I also manage the student health records, immunization requirements, medical leaves of absence, ADA disability accommodation requests, student counseling referrals, interface with the student government, code of conduct and student judiciary. I also work with the Center for Career Development and all the other areas within Student Affairs.

TCP: How do you feel about your new responsibilities as Associate Dean of Student Affairs?

CC: I'm really excited about this opportunity. I think that we have a strong team in place to make some really positive impacts throughout the campus. I'm really honored that Dean Baker asked me to serve in this capacity and I'm very grateful for all of the support that I've received from him and from the campus community in general.

TCP: What were some thoughts you had as you received this new position?
CC: I'm excited to be a part of this exciting time here at Cooper. Dean Baker has a wealth of experience and knowledge about Cooper Union that is unparalleled and really positions us to have a significant positive impact on the lives of our students. I have a strong background in both operations and student affairs and I'm excited to have an opportunity to work in a unique position that allows me to blend them both together.

TCP: What are some visions you have as you assume this new position?
CC: The offices within Student Affairs already produce great work and are staffed by extremely talented professionals. As I assume this new role, I hope to work with our staff to evaluate our current programs to higher levels. Even though we already do great things, we can always improve and raise our bar even higher. I look forward to forging a stronger partnerships with our colleagues around the campus, including Alumni and Development and all of the academic schools and programs.

TCP: How do you think that experiences from your role as Director of Residence Life will influence your role as Associate Dean of Student Affairs?

CC: My time as the Director of Residence Life really laid the framework for me to be successful in this new position. I have been able to interact with all of the key players as the Director of Residence Life and now as the Associate Dean of Student Affairs. I'm able to capitalize on those established relationships and really forge collegial bonds and work on behalf of the students.

TCP: Do you have any advice for students?

CC: I would tell the students to make the most of their time at Cooper and to build strong bonds with each other and their faculty. The Office of Student Affairs has a wealth of resources and I encourage students to take full advantage of all of the services that we have to offer them. Our job is to equip our students with the necessary tools to be successful both personally and professionally, and I encourage students to hold us to our charge.

CONCRETE CONFESSIONAL

Matthew Lee (ME '15)
Originally Printed in Issue #4

On October 12th, Cooper Union was paid a visit by the world famous graffiti artist Banksy. As part of his one month show around New York City called "Better Out Than In", Banksy's piece was set up inside one of the large concrete blocks right between 41 Cooper Square and the First Ukrainian Assembly of God Church . This "Concrete Confessional" depicts a priest inside the concrete block, and appears to be based off of a 1950's photograph by Berni Schoenfield. However, within a day the piece was altered with a white beard and medallion, making the priest resemble Peter Cooper. Inside another concrete block, located directly next to the Banksy piece, is a depiction of Jamshed Barucha, Cooper Union's President. Free Cooper Union claimed

the credit for this work, called "Cooper Confessional", criticizing President Barucha for deviating from the mission statement of the school providing fulltuition merit scholarships to all of its



students. The concrete blocks have since been moved around, leaving the portrait of the president exposed to the sidewalk. Banksy's original work is nowhere to be found.



Photo Credit: Free Cooper Union

INTERVIEW WITH STAMATINA GREGORY, THE NEW ASSOCIATE DEAN OF ART

ANAMIKA SINGH (Art '17)
Originally Printed in Issue #5

The Cooper Pioneer recently conversed with Stamatina Gregory, the newly appointed Associate Dean of Art, via email.

The Cooper Pioneer: What was your first experience with Cooper Union? Stamatina Gregory: It was somewhat mythic. I attended a small parochial high school for girls in Brooklyn, and the claim to fame by the very inspirational art teacher there was that one of his students had gotten into the Cooper Union. Right then, as an aspiring painter, I decided to apply. But by the time I was a senior, though I was very interested in contemporary art, I had begun to identify as a reader and writer, rather than as a maker. So I studied art history and German literature at NYU, near Cooper - but also far away from it so it's interesting to be here in a very different role.

TCP: Can explain your role as Associate Dean and the responsibilities that come with this position?

SG: My role is extraordinarily varied within the school—I'm already involved in many different initiatives in programs, assessment, and development. I work closely with the Dean on day-to-day operations of the school, on developing new graduate programs, and I'll also be working on accreditation, which is a cyclical and ongoing process. At some point I anticipate teaching also, and I'm really looking forward to that.

TCP: You have extensive experience with a variety of colleges and universities. How do you believe these experiences will influence your coming time at Cooper Union? What drew you to the Cooper Union?

SG: In the past, it's been wonderful to work with a really diverse student body

at CUNY, working to reach students primarily interested in things outside of art, as well as having both abundant resources and savvy students in the Ivy League. But Cooper is the best of all worlds: an extraordinary and diverse student body and a faculty of artists making some of the most critically important work today. I'm always interested in digging under the surface of the art world as part of my practice, and that inevitably leads to the foundations of how we construct artists in our society—through pedagogy.

TCP: With the new policy of tuition being instated next year, what changes do you see occurring in the School of Art?

SG: Change might be less tangible to me than to someone who has spent much of their career here. There are changes tied both to tuition and to the ongoing effort to avoid it, and that is the development of excellent graduate programs, which is positive. Even having been here only a short while, – remaining an active place for social critique and institutional critique – a longer process rather than the short reactions generated by crisis. [sic]

TCP: What are some visions you have as you assume this position?
SG: I would love to see more interdisciplinarity. Truly exciting projects are being forged between architects, artists and engineers out there in the world, and it would be good to find some platforms and initiatives for that to happen meaningfully here. And of course, I want to continue the school's engagement with important institutions and practices outside its walls.



TCP: How has interaction with the faculty and student body been so far? **SG:** On the whole, excellent. Although, more than any other place I have been, Cooper unfolds slowly: it seems like a very tight and complicated family, with memories and histories and loves that run deep.

TCP: Do you have a personal motto or mantra that you apply to your professional career?

SG: I love the idea of a personal mantra, because it seems so stable and soothing. But we work in a world in which beliefs and assumptions can and must be subject to change, and that includes how I approach my work. One question I continually ask myself in my work is: so what? What is it about this project or job or conversation that is meaningful now, and what is at stake? It's both a place to end, and a place to start.

TWO WEEKS OF LEAKS

JOSEPH T. COLONEL (EE '15)

Based on an Article Originally Printed in Issue #6

On November 13, Free Cooper Union began to post a collection of anonymously leaked confidential documents pertaining to the Board of Trustees and the Administration of the Cooper Union. At the time of publication, Free Cooper Union has leaked a total of eleven documents that run the gamut from a detailed breakdown of how to prepare a salad for former President George Campbell to a copy of the Code of Conduct for Cooper Union allegedly annotated by Bharucha to a PowerPoint presentation entitled "The Dream Scenario" concerning the "Reinvention of the Cooper Union."

Free Cooper Union, the group responsible for the ubiquitous image of the "Free Education to All" banner draped across the foundation building, formed during the student lock-in of the Peter Cooper suite of December 2012. A major goal of Free Cooper Union is to steer the Cooper Union away from an expansionist education model and towards a more sustainable model dedicated to operating within the constraints of a non-profit educational institution. Free Cooper has previously demanded that Bharucha step down, that the administration publicly affirm the Cooper Union's commitment to free education, and that the Board of Trustees restructure the administration of the Cooper Union in order to implement more democratic decisionmaking structures. As a result of Free Cooper's 65 day occupation of the President's office in the Foundation Building, the Board of Trustees approved the creation of a student representative to the Board and a working group that will propose an alternative, tuition-free model to the Board this December.

The following are brief summaries of the leaked documents at the time of publication. These summaries are not meant to replace engaging these texts in their entirety but rather are meant to serve as an outline of the content contained within the documents. All of the documents mentioned in the following may be found on Free Cooper Union's Facebook page or by going to the link bit.ly/183n8jw

Leak 1. "The Dream Scenario"

On February 11, 2013 the Pioneer printed an interview with then Dean of Engineering Alan Wolf. During the interview Wolf commented on the response to the five reports presented to the Board of Trustees by the Engineering faculty: "I was told by some trustees shortly after the December 5th meeting that they were very impressed with our hard work, our creativity, and with the sophistication of our models. [...] We expect to hear back from them in March." On March 1, 2013 the Board held an open forum Q&A in the Great Hall in which the Board dodged questions concerning the deferral of early applicants to the Art school as well as mentioning that an important meeting would take place on March 6, 2013 (one that took place off campus). It was not until April 23, 2013 that the Board of Trustees announced its intentions to charge tuition to the incoming class of 2014.

Leak one is a PowerPoint presentation entitled "The Dream Scenario: Trustee Reinvention Committee" and dated February 12, 2013. The slides of this presentation contain few full sentences; instead, they contain an average of four to five bullet points.

One slide entitled "Ingredients of a Transformational Vision" had a bullet point saying "Build on Peter Cooper's vision, not the contemporary narrative." A slide with the title "Design" contained a point "Launch a new School of Design that includes Architecture [...] Phase out current fine arts program." The following slide (with the same title) had the point "Leverage synergies across current schools." Another entitled "Science and Engineering" had a bullet point "Provide 50% tuition scholarships to all admitted students" followed in the next slide by "Hire a few computer scientists who are thought leaders [...] to oversee MOOC-based curriculum" [Editors Note: MOOC stands for Massive Open Online Course]

Leak 2. "Helpful Information for Administrative Assistant Position"

George Campbell, current Chairman of the Board of Trustees at the Webb Institute, was hired by the Cooper Union in 2000 and was President of the Cooper Union until his retirement in 2011. In a 2009 article with The Wall Street Journal, Campbell claimed that the Cooper Union had weathered the financial crisis of 2008. It was during Campbell's presidency that the New Academic Building, so named because no one donated enough money during Cooper's capital campaign to justify having their name put on the building, was constructed. In his last year at Cooper, Campbell was paid \$668,473, making him one of the highest paid college presidents in America. In 2011, Campbell was paid a total of \$1,307,483 by the Cooper Union.

Leak two is an annotated document bearing the title "Helpful Information for the Administrative Assistant Position." The 17 page guide begins with a piece of advice: "Unless you like being admonished by the President about using his office as a highway [by walking through it], it's advised that you refrain from doing [so] while he is around." The document details the duties expected of an administrative assistant at the Cooper Union during the Campbell

administration, including how to prepare the President's salad (Campbell is allergic to cucumbers; having the salad delivered unmixed allows the assistant "to construct the salad [himself/herself] and make it look nicer"). The document also instructs the administrative assistant to book luxury hotel suites for Campbell's trips along with "a luxury SUV during the winter, [...] a luxury Cadillac in the summer/spring [...], [or a] convertible" should an SUV or Cadillac be unavailable.

Leak 3. "The Cooper Union Organizational Chart" (Entitled "The Assistant Directors of Blahblahblah" by Free Cooper Union)

Leak three is a series of block diagrams that visually demonstrate the hierarchical structure of the administration of the Cooper Union as it was on December 3, 2012. As pointed out by Free Cooper Union, these charts are out of date as demonstrated by their mentioning of T.C. Westcott as Vice President of Finance and Administration and Linda Lemiesz as Dean of Students, who both no longer work at the Cooper Union.

Leak 4. "Reinvention Media Strategy"

On October 31, 2011, The New York Times published an article entitled "Cooper Union May Charge Tuition to Undergraduates" six hours before Bharucha held an open forum to discuss the Cooper Union's financial problems.

Leak four is a "Media Strategy 10/17/2011 Confidential Draft 2 for Review." The document discusses a media plan that included discussion of the St. Mark's bookstore, the reinvention of the Cooper Union, and outreach to The New York Times. Concerning the media plan for The New York Times, the document states that the administration will "begin by presenting the challenge and then lay out the development of a dynamic action plan within the context of Peter Cooper's far-reaching vision."

Leak 5. Untitled. (Entitled "Accountability?!" by Free Cooper Union)

Leak five consists of a letter written from Phillips Lytle LLP, a full service law firm located in NYC, in response to T.C. Westcott's inquiry concerning "the principal governmental authorities to which Cooper Union has an ongoing accountability." Phillips Lytle LLP referred Westcott to two publicly available documents: the New York State Office of the Attorney General's Chartites Bureau's "Right from the Start: Responsibilities of Directors of Notfor-Profit Corporations" and "Internal Controls and Financial Accountability for Not-for-Profit Boards." The end of the letter to Westcott states that "[b]oth the New York and Federal governments have granted Cooper Union tax exempt status. As such, the school must adhere to the standards and submit filings specified for a charity." The letter was dated January 18, 2012 and has a large "JAMSHED" penned in the upper righthand corner.

Leak 6. "Reinvention: A Ten Year Road Map"

The sixth leaked document was authored by Jamshed Bharucha on October 30, 2011. The document suggests possible strategies to solve Cooper's financial crisis, including analyzing plans to shut down the Engineering school and vacating 30 Cooper Square (which would yield a net savings of \$7,962,817), and plans to shut down the Art and Architecture schools and vacating 30 Cooper Square (which would yield a net savings of \$7,995,871). The document also details the creation of the Revenue Task Force, which "will be charged with coming up with \$7 million in FY2014, \$14 million in FY2015, \$21 million in FY2017, and \$28 million in FY2018."

In the document Bharucha writes, "investments in reinvention should provide immediate pay-off [sic] in academic reputation (when coupled with communications), but only medium to long-term payoff in grants, technology transfer and development." The

document also outlines the creation of "An Institute for Design" at the Cooper Union.

Leak 7. "Code of Conduct: Approved by the Board of Trustees March 14, 2012" (Entitled "Bharucha's Annotated Disciplinary Guide")

Leak seven is a copy of the code of conduct for students as approved by the Board of Trustees on March 14, 2012 allegedly marked up by Bharucha. This code of conduct is the code of conduct found at http://cooper.edu/about/ policies/code-of-conduct. The most prominent underlined section of this leak is the first paragraph of part three named Presidential Right of Summary Suspension: "Subject to prompt review, the President of The Cooper Union may summarily suspend a student from the College when, in his or her best judgment, such immediate action is necessary for protecting the health and safety of the College and/or any member of the College community."

Leak 8. Untitled. (Entitled "Bharucha's Tuition Research" by Free Cooper Union)

Leak eight is a collection of documents that reference free tuition at the Cooper Union. These documents include minutes from the First Annual Report of the Trustees of The Cooper Union, written on January 1, 1860 as well as a mammoth list of court cases involving the Cooper Union. Almost every court case mentioned in the document states that there was no reference to free tuition in the case.

Leak 9. "Board Presentation Talking Points." (Entitled "A Sense of Betrayal" by Free Cooper Union)

The Whelan group was hired by the Board of Trustees in 2012 "to build capacity to lead the institution effectively through a period of financial challenges and organizational change," which cost \$63,000 according to Free Cooper Union. Leak nine consists of an email from Evan Kingsley of The Whelan Group to Bharucha in which Kingsley attached "a preview of that Charlie [Whelan] and I will share tomorrow (Wednesday)[March 14, 2012] at the TCU Board meeting."

The Whelan Group suggested, "Almost universally, Board members recognize that there is an issue of 'community' confidence in the Board related to fundamental policy and financial decisions that were made during the tenure of the previous administration. There was also almost universal consensus that the Board must address this 'confidence issue' in a proactive way ... [sic.] in both word and action." The Whelan Group also observed that "most [trustee] interviewees referred to the [sic.] time when dissent on the Board was decidedly unwelcome."

"Code of Conduct. Revised: November 18, 2013"

This 17-page document is allegedly a draft of the new Student Code of Conduct. A variety of changes can be observed between this code of conduct and the previous version, including a change to the "Preamble" which now reads "The Cooper Union Board of Trustees reserves the right to modify and/or amend this Code at any time it deems necessary" whereas it previously had "The Cooper Union reserves the right..."

Leak 10. Entitled "Unbudgeted Expenses" by Free Cooper Union

This memo and summary of consultants was sent to the Executive Committee to the Board of Trustees and details the unbudgeted expenses for the 2012 fiscal year. It details the advisors hired for "Financial Consulting and Administrative Review"; "Enrollment Management"; "Communications"; "Datatel"; and "Government Relations." In total, \$1,460,000 is listed for approval as unbudgeted expenses for FY 2012.

Leak 11. Entitled "Development Report" by Free Cooper Union

This 55-page report, dated 1/13/2011, details an overview of development at Cooper Union, as well as "the choices to be considered as it [Cooper Union] looks to its future needs and ambitions." It lists two goals, "Operations" and "Culture." "Operations" refers to "development operation, or infrastructure required to progress." In full, the goal is "To create a development organization at the College which will help to sustain and build the financial support required to meet current and future needs."

The other goal, "Culture", is "To Re-Set the Cooper Culture to further promote connections among alumni, parents, and friends to encourage support for the institution." It involves "[making] philanthropy a culture at Cooper" and using the "reunion experience" to achieve said goal. To that end, the report recommends "Programmatic enhancements of \$20,0000 annually for reunions." Other action items include a one-time expense of \$20,000 for "software transitions" and \$30,000 for the purpose of "jump start research."

Leak 12. Entitled "Jamshed Gets Inside Peter Cooper's Brain" by Free Cooper Union

This leak consists of a message by President Jamshed Bharucha to "Members of the Cooper Union Family" regarding an essay about "Peter Cooper's thinking" as well as the 14-page essay itself, entitled "The Vision of Peter Cooper."

Leak 13. Entitled "Board Meeting Schedule" by Free Cooper Union

This leak contains the 2012-2013 annual meeting schedule for the Cooper Union Board of Trustees. It lists the committee, e.g. Investment Committee, or event, e.g. Board of Trustees Dinner, the date, and the time. There is a note stating that meeting locations will be provided "several weeks prior to the meetings."

Leak 14. Entitled "We've Identified The Radicals" by Free Cooper Union

This leak contains minutes of the "Executive Committee Teleconference" which occurred on May 24, 2013 and the "Committee on Trustee Meeting" on June 4, 2013. The former minutes mention "10–15 core radicals who expressed that they were not prepared to vacate the Office of the President until the administration rescinded the recent scholarship policy decision." President Bharucha noted this statement.

2013/2014 THE PIONEER

A SUMMARY OF STUDENT ACTIONS

Originally Printed in Issue #7

Student actions have been taking place on and off campus during this incredibly pivotal moment in the history of the Cooper Union for the Advancement of Science and Art. The summary below is intended to serve as a record of those actions as well as a catalyst for conversation.

December 3, 2013

At around 2:15 PM, small paper pamphlets were dropped from the ninth floor of the New Academic Building and floated down the empty space framed by the triangular staircases that connect the floors of the NAB (hereafter referred to as "the void"). Four distinct pamphlets landed on every floor of the NAB: a copy of an email by Dean Baker announcing the creation of the Ping-Pong club, a copy of an email by Dean Baker announcing that the Ping Pong club had purchased "5 brand new championship international tables," a statement

detailing the concept behind the drop, and a list of grievances. Afterward 2,100 ping-pong balls marked with handdrawn dollar signs were dropped down the Grand Staircase. A few minutes after the drop, students and faculty removed the balls from the Grand Staircase.

December 4, 2013

A march to Jamshed Bharucha's residence was organized. Students carried signs reading "Don't make school work / Make the school work" and "Jamshed Bharucha, how many Trustees does it take to screw the Cooper Union?" Police were seen entering the residence during the demonstration.

December 5, 2013

A march to Jamshed Bharucha's residence was organized. Upon arrival, students sang a rendition of the Christmas carol "Silent Night" entitled "Silent Prez" as well as a rendition of



"Twelve Days of Christmas" entitled "Twelve Days of Reinvention." The lyric sheets for these carols can be found at pioneer.cooper.edu



VERDICT ON WORKING GROUP PROPOSAL

JOSEPH T. COLONEL (EE '15)
Originally Printed in Issue #7

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, non-tuition 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 model.

While the Board "cannot reasonably 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."

The rest of the campus-notice details

the Board's perspective on the economic situation facing prospective students of the Cooper Union, mentioning that "we need to provide additional aid to ensure that any deserving student can attend [the Cooper Union]," as well as outlining the creation of a board to clarify the mission of the Cooper Union for the 21st century. This board "will constitute a group of trustees to work with faculty, students, administration, staff, alumni and friends" and will concern itself with the issues 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."

CONSEQUENCES OF THE PING PONG BALL DROP

CAROLINE YU (EE '15)
Based on an Article Originally
Printed in Issue #9

On December 3, 2013, several Cooper Union students dropped over 2,000 ping pong balls down the Grand Staircase in order to protest the proposed changes to the Code of Conduct. A dollar sign had been drawn on each ping pong ball.

Although no one was injured during the act, five students were called to a judiciary hearing by Campus-Wide Safety Coordinator Alan Wolf. The judicial panel is comprised of faculty and two student representatives. One of the students, Aaron Kuhn (Art '14), was falsely identified. At the hearing, he read a statement in which he said, "I wasn't anywhere near the site of the incident



Illustration by Laura Quan (CE '15)

when it happened. I had nothing to do with it actively or passively. Actually, I wish I had." Two accused freshmen, Maja Griffin (Art '17) and Martina Cox (Art '17), both accepted 50 hours of community service as punishment rather than having to attend the hearing.

The two remaining accused, Harrison Cullen (BSE '15) and Pete Halupka (Art

15), both went to the hearing. In a statement read aloud at the hearing, Harrison Cullen suggested that "while it is possible that Alan Wolf's accusations are founded upon sincere concern for the students of the Cooper Union, his recent history as Campus-Wide Safety Coordinator contradicts this notion," citing Wolf's involvement in "restricting access to restrooms and water fountains while simultaneously blocking fire exits with private security guards" during the occupation last May. Cullen and Halupka

also produced a petition "to which thirty-seven members of the Cooper Union community [had] attached their signatures, thus formalizing their own involvement in the ping pong ball drop." Halupka closed with the following statement: "We have to be reminded of what we value before we stand up for it. [The students] compose this place. I was reminded looking at my peers in the hearing today that the students united will never be defeated."

SENIOR APPOINTMENTS

JOSEPH T. COLONEL (EE '15) Originally Printed in Issue #11

On March 25th, a campus-notice email from President Bharucha notified students, faculty, and staff that Dean Dahlberg would serve as Chief Academic Officer of The Cooper Union and that Dean Baker had been appointed Vice President for Student Affairs and Community Relations. These two positions had never been held at The Cooper Union previously.

As Chief Academic Officer, Dean Dahlberg's numerous responsibilities include, among others, working with the Middle States Commission on Higher Education, Cooper's primary accrediting body, implementing policies concerning intellectual property, improving Cooper's ability to secure grants and contracts,

working with faculty unions on academic issues, and overseeing academic computing. Although Cooper has never had a Chief Academic Officer throughout its history, Bharucha suggests that the need for one arose from the Middle States Commission's suggestion to appoint a provost as the Chief Academic Officer. The decision to appoint Dean Dahlberg was made because "appointing a provost would add a new layer of administration at considerable cost." Bharucha noted that Dean Dahlberg's prior experience at the University of North Carolina Charlotte would help her in her new role.

As Vice President for Student Affairs and Community Relations, Dean Baker will oversee student government, activities, judiciary, health compliance, career services, residential life, local community relations, and buildings and grounds. Describing the reason for Dean Baker's appointment, Bharucha writes, "with the departure of the former director of facilities management and the former dean of students, reorganizing the student affairs division and broadening Steve's role is more cost-effective than filling those positions in kind." Bharucha then goes on to describe Dean Baker's nearly 50 year long career at the Cooper Union.

COOPERNOVA PLACES FIRST

CAROLINE YU (EE '15) Originally Printed in Issue #12

On April 12th, Cooper Union's
CooperNova Dance team competed in
the Empire State Championship, where
they placed first. The performance was
choreographed to a remix of Animals
and Bass Down Low, entitled "Animals
Down Low."

Danielle Verdecchia (CE '13), a Cooper alumnus and avid dancer, helped choreograph the dance routine. I asked her about the development of preparing for the competition: "CooperNova started thinking about performing in competitions at the end of the 2012-2013

school year. Since the group had only just been formed that year, the dancers were content with doing performances solely at school based functions and sports events. As the group became more comfortable dancing together and experiencing each member's unique style, we decided that a competition would be a great next step for the team: it would give us the opportunity to meet new people, experience different types of dance (hip-hop, cheer, lyrical, etc. are styles included in most competitions), and improve on our skills... When choreographing a hip-hop piece, the

music is the most important thing: a good beat and move-inspiring lyrics are key when choosing a song for a routine. Early on in the process, I usually put the song I've chosen on repeat and listen to it for a few hours, mostly just goofing around and letting the rhythm sync in. All it takes is one starting move to get a routine started: once I have that, the rest of the moves fall into place. I like to incorporate dramatic movements during sudden changes in the music, and ripple-effect choreography in sections that would normally seem more mundane. A good way to keep things interesting is to change routines and keep the dancers on their toes-if they're constantly entertaining the audience, then they are doing their job! It's always important to choreograph a piece section by section-if you try to do the whole thing in one shot, the movement begins to look the same and unoriginal. Doing a piece in sections makes each part that you're doing new to you in that moment, and keeps your mind fresh with ideas."

CooperNova will be competing at "The U.S. Finals" competition on May 3rd in Providence, Rhode Island. The team will be in the Senior Hip Hop Division. Most of the teams that CooperNova would compete against are either other college dance or studio teams. Verdecchia said that the team is "very excited to compete and will hopefully continue this legacy on in future years of CooperNova!"



COOPER UNION VISITS IIT BOMBAY

Originally Printed in Issue #12

During Cooper Union's spring break, President Bharucha, Dean Dahlberg, and Professor Tzavelis travelled to the Indian Institute of Technology (IIT) Bombay. The Cooper Union and IIT Bombay are starting a new student exchange program. The purpose of the trip was to enable Cooper faculty to get to know the IIT Bombay faculty and students as well as to see their campus.

I asked Dean Dahlberg how it felt to travel to India as a group representing Cooper: "It was fun traveling as a group that represented Cooper...An IIT Bombay alum, Ron Mehta traveled with us. Ron is a generous sponsor who will provide travel support for both Cooper and IIT Bombay exchange students in the first year of the program. It was fun having Ron show us around his alma mater and reminisce about his time as an undergraduate at IIT Bombay. Everyone at IIT Bombay treated us very well. They were very curious about the environment at Cooper Union and in New York City. Our guides showed us classrooms, labs, student housing and cafeteria. They have a lot of space and equipment. They have an impressive incubator that houses student startup companies. They just opened up a tinker's space. They invited us to participate in the awarding of students who won an app development contest."

Her favorite memory of the trip was touring the Aakash project where the Indian government is sponsoring the development of a \$49 tablet pc called Aakash. The university houses a group of developers to meet India's goal to educate hundreds of thousands of software professionals. Dean Dahlberg also enjoyed a meeting with IIT Bombay students interested in visiting Cooper. She comments that in India "high school students must take a rigorous entrance exam to get into college. The IIT Bombay engineering programs admits only the top students from the over 500,000 students who take the required college entrance exam. The students are incredibly smart, hardworking and ambitious. They remind me of Cooper students!"

Professor Tzavelis noticed that the IIT students are all happy with the student activities. He was also impressed with their labs: "Their labs are much bigger than our labs...They had some old equipment but also the latest equipment - we even visited a nanotech lab which was state of the art. For civil engineering, they had the latest equipment like the ones we have. Their labs were 10 times bigger than ours!" The most apparent difference between Cooper and IIT is the student body size. At IIT, lab classes consist of 150-200 students. On the other hand, Professor Tzavelis noted that a major similarity between Cooper and IIT is the high caliber of students in both schools. He was impressed by IIT students working very hard in groups just like the way students work at Cooper.

The greatest incentive to study aboard is having the chance to travel to a different country and experience the way of life in an entirely different environment. Professor Tzavelis strongly recommends that Cooper students - especially those who have never traveled out of the U.S. - to go visit IIT and see how people live outside of America: "This can be a life



changing experience. It can motivate the student to do more for the society and for their profession. I strongly recommend that students go there for a semester."

The deadline for the study abroad application has passed, but if you are interested in studying abroad to IIT and have not had the chance to check out the program, follow this link: http://cooper.edu/engineering/globalstudies/semester-exchange.

INTERVIEW WITH DEVORA NAJJAR, STUDENT REPRESENTATIVE TO THE BOARD OF TRUSTEES

JOSEPH T. COLONEL (EE '15), CAROLINE YU (EE '15), & SAIMON SHARIF (ChE '15) Originally Printed in Issue #12

The Cooper Pioneer sat down with Devora Najjar (ChE '16) to discuss her role as the Student Representative to the Board of Trustees.

The Cooper Pioneer: How many Board of Trustee meetings have you attended so far?

Devora Najjar: Two plus one over the phone. That wasn't a quarterly scheduled meeting, it was a special meeting that was called where they actually decided on tuition.

TCP: When were these meetings? **DN:** First one was December 8th. The quarterly meetings are Wednesdays. The special meeting was a Friday – January 10th. The one in March was mid-March, March 12th. There are four scheduled Trustee meetings a year – March, June, September, December.

TCP: Can you describe the atmosphere of these meetings?

DN: The first one I was super scared about because I had no idea what it was going to be like and I was pretty convinced that is was just an appeasement position. I thought, "okay, I'm going to get there and just sit around and they're going to do their business." But then I got in there and everyone was all really welcoming and genuinely excited about the position.

The head of the table was Francois [de Menil, the Vice Chairman], Jamshed [Bharucha], Mark [Epstein, Chairman Emeritus], Richard [Lincer, Chairman of the Board], and me. I was right up next to Rich, who moderates the conversation because he's the chairman. He let me speak whenever I wanted to, which was

really cool. I didn't think I was going to have that ability.

I had no idea how to prepare for the meetings. I knew we were going to talk about tuition, but as much as I prepared for it you can't prepare a thing you're going to say. You don't know how the conversation is going to go - what questions they're going to ask you, what aspects they're going to focus on...but it was really cool because in the middle they said "what about the students..." And I was like "Hey! Guess what! I am a student, so I can try and let you know what they would think!" I really had the ability to actually be a voice for students.

TCP: How long were they generally?

DN: The meetings typically went from 8:30 in the morning to 1:30 in the afternoon. There is the general meeting with the board along with any outside parties that were called in to speak or for consultations on matters and such, then they have executive meetings with the board and the president and then an executive meeting without president. These parts of the meetings are generally to discuss matters that can't be discussed in the general meeting because of a conflict of interest or sensitivity of the material being discussed.

TCP: Were you comfortable at the meetings? i.e. did you feel that other members of the board respected your opinion?

DN: Yeah – it was interesting, one of the questions they asked me in the interview was something like "So do you feel intimidated by old men?" And even though there are a lot of things wrong with that question and I was kind of confused by it



at first, after being in the first meeting I realized that it is such a legitimate question in the sense that it really is important that the student rep is totally comfortable speaking to the board members. I'm not scared to say, "ok, can you clarify your statement because I don't understand this vague thing." I'm not afraid to make a statement for the students to the board that I know they might not want to hear. In terms of feedback from the board members after the first meeting, the most frequent comment I got from them was "wow I'm so impressed with your speaking. You were so level headed when you were talking. You are so brave to be doing this." And I was pretty satisfied with that response because I was so scared that I would mess up saying something or I wouldn't be clear enough or something would slip out, and

the board members would just write me off. And Kevin Slavin (Art '95) called me a rockstar, which may or may not be one of the highlights of my life.

It was really important for me to know that the board respected me, because if they didn't want to listen to my opinion or think I was someone they felt comfortable to approach for a discussion, it would invalidate the whole point of the student rep position in the first place.

TCP: What is your affiliation with Free Cooper Union?

DN: I joined Free Cooper in December of 2012 after the first lock-in. I remember seeing the artists attacking Jamshed one day and I was so furious. I thought, "What the heck? How could they do that to him? Obviously it's not his fault - this is not the financial mess he got us in." But I had friends in the art school that told me to come to a [Free Cooper] meeting and see what it's about. I loved this school and even if I didn't know if I loved the way they were going about it, I did agree with what they were fighting for. So I went to a meeting. Then I went to more meetings. I got way more informed on the situation, and found out things I never knew. I got a lot of new and different perspectives on the issue, which helped me get a really great broad picture of everything that happened and was happening and could happen. I made a ton of new friends from all different parts of the school. I learned a lot about non-violent actions and actions in general, group dynamics, and safe spaces - all things that are good to know just being a human being in the world. Proper group building and the kinds of things they should be teaching you in CONNECT workshop.

It was really clear to me that the core of the movement was about fighting for this school and Peter Cooper's legacy and for the ideals of free education. And that was something that I believed in strongly. There were a lot of people whom I know that didn't get involved with the movement because they didn't agree with one or two aspects of the movement. People got caught up in the details and lost sight of the bigger picture, which was free education.

There weren't that many engineers actively involved [in Free Cooper] so I tried to be a liaison, at least for my friends. That was important to me because I knew that even if they were not going to be a part of it they knew they had someone to go to talk to about everything that is going on, and why it's going on, and someone who they can go with who they feel comfortable with if they want to get more involved.

I went to meetings in the spring. I went to the meetings about the second occupy - Jamshed's office. There were jobs given out and I was part of the people who pulled down the black banners that they threw out the windows. And then I occupied through the end of school and then on and off throughout the summer when I had the ability to be in the city. It was a really cool experience - it was really nice to feel like I was doing something to show that we weren't going to let this school go down without a fight. In a really selfish way, I tried to show how much I cared about this school. I did all of this so that no matter what happened, I would know that I didn't stand by idly while this was going on.

TCP: What has been the most surprising thing you've learned (which you can share with us) during one of these meetings?

DN: Their lunches aren't so fancy – they're just sandwiches and pasta salad and salad.

TCP: What other meetings do you attend or hold to talk about the Board of Trustees meetings?

DN: I had one meeting in the Great Hall before the first [Board of Trustees] meeting. I also met with all the student councils beforehand. I talked to anyone I could see to make sure I had people's ideas and thoughts on things and what they would negotiate for, what they wouldn't negotiate for, what they would be willing to cut, what they wouldn't be willing to cut. Because there was no way to guess for sure where the conversation would go, I wanted to have all of my bases covered.

Since the first board meeting, I've been going to the Joint Student Council meet-

ings to hear what's up with them and also to let them know what's going on the board end of things as well as going to individual student council meetings. In addition, after break before the second board meeting I held another forum for the students to talk about what happened at the meeting, get a sense of the student sentiment toward everything that had gone down, and make sure I knew what was important to the student at this point in time so I could properly express that to the trustees.

TCP: How do you feel about student response to your position? DN: It's funny because I wasn't even going to run in the first place because DeVonn [C Francis Art '15] was running, Harry [Cullen BSE '15] was running - and I though cool, good people - I wanted them to represent me. Then we wanted to have three Free Cooper kids on the ballot, but things fell apart and Harry couldn't run so it was just me and DeVonn. I thought, "I don't want to fight against you because I wanted you to represent me in the first place" and then the Board freaked out because I wanted to drop out. Then we had the JSC vote but then that didn't work so I was stuck doing the interview.

In the interview I was like "Hey, you should pick DeVonn." But then I got a call from Rich Lincer and he's like, "Hey, I have some news for you I think you'll be happy about" and I was like "great you picked DeVonn that's awesome!" and then he kept talking and then he was like "No, no we picked you." I told him how would I be happy that I asked you to pick DeVonn. But then I was like, ugh, darn, everyone's going to be pissed now, I don't want to deal with this, and then things were on the internet and this guy who doesn't even know me wrote a comment on Unify or Save Cooper that was a list of six or seven reasons why they picked me over DeVonn and it was all really negative. I was kind of upset because I think DeVonn is a better qualified candidate than I am no question, but that doesn't mean I'm totally unqualified.

But I've gotten good responses from everyone – they seem to be cool with it and me and everything. I think they appreciate how much I try and know what's going on in all of the schools. And I'm like a five foot tall thing with weird sweaters and crazy hair, so I think people aren't too intimidated to just come up to me and say "Hey, wanted to talk to you about something that's going on." It's also great because I'm officially at the center of all of the weird Cooper conspiracy gossip since everyone comes to me looking to see if everything they've heard is true.

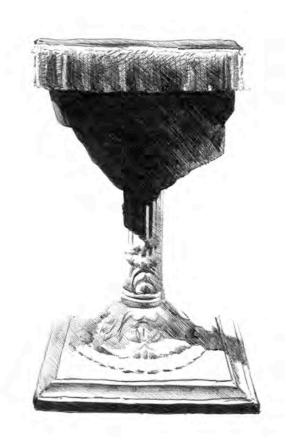
This position is a really huge responsibility I didn't expect to have it but it's really great for me because now I feel morally obligated to be friends with everyone in the school, which I felt before but it's less creepy now. Now I have the excuse to say, "Can I please be part of your life because technically I serve you."

And that's something I think we need more of in our community. I think everyone should introduce themselves in the elevators. A lot of Cooper kids don't approach other Cooper kids in that capacity.

But it's also a little hard for me to properly get student response and student involvement in general. Cooper kids don't always come to meetings – that's a fact. Cooper kids are generally late to things – that's a fact. Cooper kids are really busy with their stuff – that's a fact. So me being in charge of the students is just trying to catch students here and there because I know that there will never be a good time for a group forum where a lot of people from different parts of the school can all make it.

TCP: Is there anything you would like to tell the students?

DN: I love the students at Cooper Union. They are the lights of my life. Like for real, I really like you all. I learn so much from you. You help expand my view of the world and I feel like a more enriched person because of that. I would tell them that I hope they all come to me with all of their questions and concerns and I'll try to get them addressed. It's intimidating to have this position but I hope that I can do right by everyone. I would also say that we are at this turning point right now and it's imperative that we pass the legacy of the school to the incoming classes at Cooper - we can't just have the alumni fighting once the current freshmen leave. I want to have a larger discussion with students how we can bring about that kind of culture within the community and properly educate the incoming freshmen and not isolate them.



EVENTS

FREE COOPER UNION GENERAL MEETING

Joseph T. Colonel (EE '15)
Originally Printed in Issue #1

Folks who walked into the Rose
Auditorium for Free Cooper Union's
General Meeting this past Wednesday
were greeted by a half dozen stacks of
miniature crimson manila envelopes
vaguely reminiscent of the packets given
and received on Chinese New Year.
Unlike their Chinese counterparts, which
typically contain money to usher in a
new year filled with prosperity and good
luck, these manila envelopes contained
contents that outlined exactly why the
Cooper Union projects a \$16,000,000
deficit this school year, one bound to be
fraught with tension, unease, and unrest.

These "disorientation packets" contained a timeline outlining Cooper's financial history, a reader describing Free Cooper Union's demands and principles, and a zine containing five articles and a 990 form detailing the compensation of Cooper's ten highest paid employees.

The meeting began at 9:15 PM with Casey Gollan (Art '13) addressing the nearly full Rose Auditorium on the creation of Free Cooper Union and its actions up until this past summer. Vincent Hui (Arch '15) went on to describe the occupation of the president's office and the press it

generated. Afterward Anna Vila (Art '15) described summer activities associated with Free Cooper Union separate from the occupation, including workshops in Wisconsin about student power. The night concluded with a Q&A session moderated by Harrison Cullen (BSE '15). A recording of the event can be found on Free Cooper Union's ustream account, on Free Cooper Union's Facebook timeline, or at bit.ly/183n8jw

FREEDOM CONCERT

Chae Jeong (ChE '16)
Originally Printed in Issue #3

On October 10, over a hundred Cooper students joined in on a fight for justice through the Freedom Concert. The Freedom Concert was the last of a chain of events that identified a campaign called "Price of Life" during the first two weeks of October.

Price of Life is a faith-inspired but not faith-required campaign that happened within several campuses throughout
New York City in hopes of raising awareness and fundraising to fight human trafficking. From chain tattoos to scandalous posters that read "Sex Slaves for Sale" to t-shirts that were stamped "Abolitionist", members of the student body worked to spread the word about modern-day slavery in the very city that they lived in.

The Cooper community was encouraged to come to events such as the screening of a film about sex and money, a talk

about how pornography effects the human brain, a culture night where a trafficked victim shared her story, and, of course, a concert to celebrate hope and the coming of freedom.

The Freedom Concert consisted of acts from nearly all of the performing groups within Cooper -Ballroom Dance Club, Coopernova, Coopertones, CU Breakdance, Chinese Yo-Yo, Poco a Poco, and CU Gospel Choir -and several individual acts from students and staff -instrumental and vocal duets as well as a piano performance by Professor Daniel Lepek. In addition, Janie Chu, a musician who composes music to abolish modernday slavery, played several pieces and Greg Jao, the director of InterVarsity Christian Fellowship in the New York and New Jersey, spoke about the Price of Life campaign.

In addition to the acts, other groups of students involved in SWE, Zeta Psi, ESC, Culinary Club, Confetti, and Origami Club contributed to the concert as well. From performing to ushering to making crafts to sell, the whole Cooper community contributed to this citywide campaign.

As the two-week campaign drew to a close, Price of Life held a citywide event called the Freedom Festival, where churches, campuses, and other organizations came together for a final push to fight human-trafficking.

All money raised during the campaign will be donated to the Humanitas Fund, where the money will be distributed to World Vision, Nomi Network, and Restore NYC, which are all organizations

that work to fight human-trafficking. The Cooper community is encouraged to continue to work towards freedom by looking into buying fair-trade items and food, and by being aware of its surroundings.

NB: I was involved as the Publicity Chair/ Social-Media Owner and head of the fundraising team.



ART AT COOPER

Matt Ledwidge (Art '16)
Originally Printed in Issue #4

Art is a Bucket

Or so proclaimed the Swiss born writerphilosopher Alain De Botton on the eighteenth of October in a lecture and book signing entitled "Art as Therapy" in the Great Hall. By this De Botton was expressing his belief that art is a container for the most important parts of human experience and that art is more important and relevant today than ever before. De Botton proceeded to explain the "things that art is about" because, as he says, nobody likes very much to talk about it in concrete terms for risk of ruining the ambiguity inherent to all art or becoming overly controlling. This, alongside the institutional framing of the work, hinders the ability of art to bring meaning into the lives of everyone as he believes it can.

De Botton aims to face this problem by repositioning the cultural framing around art in the public in order to make the public a more suitable place to explore anxiety, love, sadness and politics with dignity and seriousness. With wit and erudition he suggested the following to the audience: reorganizing the world's museums by theme; looking as closely at ones partner as Manet looked at asparagus; reconsidering the things we value at different times; remaining curious; continuing to have sex; and using art as an enriching perspective-giving bucket of every aspect of our experiences.

Image of the Studio

How does living and working in New York shape contemporary studio practice on the level of scale, geography, and day-to-day organization? What does graphic design in New York look like?

These were the questions that 'Image of the Studio – A Portrait of New York City Graphic Design' in the 41 Cooper Gallery curated by the Herb Lubalin Centre and the Athletics design studio sought to explore. The exhibition featured works of over 75 current graphic design firms in New York ranging from one-person studios to large firms, from those founded in the 1950's to last year.

Each studio was invited to submit original work and creative portraits of the designers as well as a range of data documenting the structure, history and culture of the various studios. The data was then organized into visualizations and information graphics documenting the various relationships between the studios and their New York location.

The exhibition filled the walls of the space with large panels of creative design solutions, inside jokes, interesting quotes, and information of how the studios view themselves. The information graphics are divided in such categories as "Passion & Mantras", "Influences", "Studio Culture", and "Do's and Don'ts," with the diverse panels telling different elements of the larger story of what might be happening in graphic design in New York City today.

For more information you can visit the accompanying website at http://imageofthestudio.com.

DEAN DAHLBERG PRESENTATION AND Q&A SESSION

Allison Tau (ChE '15)
Originally Printed in Issue #4

Last Monday, October 14th, Dean Dahlberg was invited by the Engineering Student Council to give a presentation to the students about her vision for the School of Engineering followed by a Q&A session. She had given the same presentation to the faculty a week prior.

Her plan includes eight key initiativessome to be added or removed- but at least a set of initiatives revolving around the ideas of 21st century engineering in a global context, leadership, and adaptability in the field. Overall, she plans to work toward increasing the rankings of the engineering school, from #7 to #1, while maintaining a rigorous curriculum, promoting leadership, and improving interdisciplinary work between art, architecture, engineering, and the humanities. Dean Dahlberg's overarching goal for the School of Engineering is to "preserve and enhance academic excellence while moving towards financial stability".

The first point of her vision is academic excellence, which refers to advertising

that this school about being more than just free. Particularly, she talked about how Cooper Union students have a tendency to overload on courses and do graduate-level work as undergraduates. She also hopes to move toward a focus on more faculty research, including a greater number of opportunities for undergraduate involvement in research with professors. The second point refers to the implementation and expansion of fee-based graduate programs, of which there would be two tracks: a thesis track focused on research and a non-thesis track focused on students with plans to go into industry, that she claims would hopefully attract fee-paying students to the Cooper Union. In addition to a fee-based masters programs, the third point of Dean's Dahlberg's key initiatives for the engineering school is the introduction a fee-based pre-college program in engineering to attract gifted college students. While fee-based, the program would provide grants for "underserved" students. The program is what Dean Dahlberg refers to as the "STEM pipeline", an initiative to increase

the number of K-12 students going into science, technology, engineering, and mathematics-based fields.

The final five points Dean Dahlberg only briefly touched upon before ending her presentation, but they are: improve student recruitment and retention, improve communications and ranking, build community, reinvent the C.V. Starr Research Foundation, and implement professional development across all faculty, staff, and administration.

Following the presentation of Dean Dahlberg's eight key initiatives for the School of Engineering, the floor was opened to the students for a question and answer session. Questions from the students were mostly concerned with her ideas about undergraduate research, graduate programs, and certificates/minors. However, Dean Dahlberg decided to end the session early once the students began asking about her stance on undergraduate tuition, since she stated that she had not been invited to speak about that particular issue.

COMMON GROUND FALL 2013

Caroline Yu (EE '15)

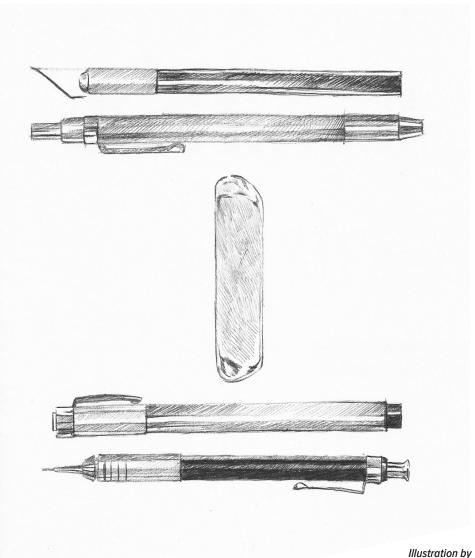
Originally Printed in Issue #5

On November 6th, the third Common Ground was held. The event began with students from each school delivering small speeches in Rose Auditorium. Afterward students headed out to the studios and labs of Cooper Union. These Common Ground events provide the students of the Cooper Union with a necessary reminder that each Cooper Union student has a unique story and body of work. As a result, this most recent Common Ground allowed for increased interdisciplinary collaboration between the three schools.

DeVonn Francis (Art '15) describes the initialization and main purpose of Common Ground: "When Caleb Wang and I initially met to discuss Common Ground, we determined that the main purpose of the event should be to build an understanding and the relationships between the student body via intimate, interdisciplinary dialogues. The underlying strength of the student body, from our understanding, is that every student, regardless of the reason or means by which they were accepted, had a passion to be here and that the diversity of those reasons is what makes an atmosphere like this so rich."

Each semester, many Cooper students carve out a space in the classrooms, labs, studios, and student areas that enable them to study, work, and create. Although Cooper Union is comprised of only a few buildings, there are many spaces unknown to the majority of the student body. Several dozen students toured 41 Cooper Square and the Foundation building – from the art studios on the 9th floor of 41CS to the room with historic scientific instruments from the 19th and 20th centuries on the 7th floor of 41CS to the art and architecture studios in the foundation building.

A highlight of these tours was the anechoic chamber in 41CS, where



Laura Quan (CE '15)

Christopher Curro (EE '15) says students were having "out of body experiences." (To find out more about the Vibration and Acoustics Laboratory website at http://cooper.edu/engineering/facilities/vibration-and-acoustics.)

For those who missed the event, ask an artist to show you his/her work in the 2DD studio on the 6th floor of 41CS, or tour the architecture studios on the 3rd floor of the Foundation building, or sit with an engineer in Frankie's. Although

events like Common Ground help initiate collaboration and discussion between students from all three schools, we all know that each architect, artist, and engineer is more than willing to share the work they have put their time and effort into. It takes time to develop our own skills as an artist, architect, or engineer, but it's also worth the effort to gain understanding from the unique students that make up the Cooper Union student body.

CUAA NOVEMBER MEETING

Caroline Yu (EE '15)
Originally Printed in Issue #6

This past Monday, November 18th, the Alumni Council held its monthly meeting. The role of the Alumni Council as a bridge between students, administration, faculty, and alumni was highlighted throughout the meeting.

Although the Joint Student Council has now recommended DeVonn Francis (Art '15) to the Board of Trustees as the Student Representative, the nomination and selection process was still being discussed at the Alumni Council Meeting. Members of the Joint Student Council recapped what has happened in the past few weeks and answered questions about the student representative nominees themselves. Did the student nominees feel they represented the entire school? Did many students not want to run for representative because of the large commitment? Was two years as representative too long of a term?

There were dissimilarities between statements on how there seemed to be no communication between the Board of Trustees and the students and the perceived eagerness on the part of the Board of Trustees to have a student representative. John Leeper commented on how having representation on a Board of Trustees – with regards to colleges around the nation – is unprecedented. Members of the Alumni Council showed their support in making any needed connection with the Board of Trustees and having "absolutely no problem taking to anyone" about the situation.

Following the discussion on the student representative to the Board of Trustees, Lawrence Hausman gave an update on the CUAA Constitution Committee. The committee has met for the past few years; its latest decisions include proposing a restructuring so that the committee can be more responsive, and carrying out motions to prepare and submit a timeline to rewrite the constitution and bylaws that govern the committee so that they can be sent for a full alumni vote within current academic year. Also, the committee asked the question what it means to be a member of the alumni association regarding final year students and the date of graduation.

Architecture students, Wes Rozen (Arch '05) and Austin Mayer (Arch '18),

then presented the 1 Class 1 Year Fund. The fund will cover tuition fees for 30 students who will be entering the architecture school next year with a goal to reach \$600,000 by January 6th – when students will be submitting their applications to Cooper. This fund would be a temporary restricted fund that is meant to just cover tuition. Several questions and ideas pertained to the need to discuss and market this fund beyond word of mouth and to make sure that the alumni can choose to directly donate to the fund online.

Additional topics of the meeting included an update on the working group and annual fund as well as planning for the holiday party in the middle of December. The meeting's presentation slides, livestream, and minutes can be found by visiting the CUAA website at http://www.cualumni.com/s/1289/start.aspx or by following the link bit.ly/1en1m0B. As a last note, the members of the CUAA would like to encourage current students to attend the monthly meetings.

FACULTY-STUDENT SENATE OPEN MEETING

Joseph T. Colonel (EE '15)
Originally Printed in Issue #7

The Faculty-Student Senate held an open meeting in the Great Hall on December 3, 2013 during club hours to discuss the proposed changes to the Student Code of Conduct. The Cooper Union Faculty-Student Senate, as ratified on April 12. 2011, "is a representative body whose purpose is to advise the President and the Board of Trustees and update the faculty and students on issues pertaining to mission, use of resources and academic issues." (http://cooper.edu/academics/facultystudent-senate/charter) The meeting was called to hold an open forum where the senate could gauge Cooper community response to the proposed revisions to the student code of conduct in order to make a recommendation to the Board of Trustees by the December 4, 2013 deadline.

Chair of the Senate Mike Essl opened the meeting by reading a joint statement stating the reason for calling the meeting, informing the audience of the absence of Jamshed Bharucha and Theresa Dahlberg who were both "out of town [...] and therefore unable to attend," and outlining notable changes to the Code of Conduct.

These changes included a clause widening the jurisdiction of the code to include off-campus behavior and a clause suggesting that "conduct not found in this Code may still be deemed unacceptable and may be basis for disciplinary charges."

Once the floor was opened for discussion, faculty and students unanimously voiced their dissent towards the ambiguity in the language of the code, the process by which the suggested changes were drafted, and the powers the Board of Trustees invested in the Administration regarding breeches of the code. Raw notes taken by Sean Cusack can be found at http://on.fb.me/lhDVe5J.

Architecture students presented a resolution signed by 139 architecture students (out of 141 total) saying "[t] he proposal to alter The Student Code of Conduct is an explicit devaluing of The Student Body, and continues the oppressive and suppressive modes that the current administration has enacted against students. The undersigned students reject the proposed amendments to the Student Code of Conduct, and will consider any changes made without a majority vote of the Joint Student Council void." Afterward a unanimously passed resolution by the Architecture Student Council was presented, rejecting the suggested changes to the Code of Conduct.

Art students presented a petition signed by 139 art students saying "we feel that only those amendments to the Code of Conduct which are initiated and voted on by the students are legitimate. We refuse to accept the changes as they are proposed and, with them, the intent of the Board of Trustees to circumvent the authority of the student body to impose and enforce their own standards for student conduct. [...] Until the students are in control of the Code of Conduct once again, and may initiate, draft, and vote on amendments as they see fit, changes to the Code of Conduct are

considered illegitimate." Afterward a unanimously passed resolution by the Art Student Council was presented, stating "[i]n effect the proposed Code of Conduct takes away integral functions of shared and student governance within the Cooper Union for the Advancement of Science and Art. We the students in the School of Art believe in and are committed to fostering the ideals of a self-determining governing process which encourages 'good morals and good order throughout [our] connection with this institution."

An engineering student (full disclosure: it was me) presented a petition signed by 123 engineering students; the petition was almost identical to the petition presented by the art students. At the time of the printing of this article, there are currently 149 signatures on the engineering petition. No statement was put forth by the Engineering Student Council.

The Senate adopted the following resolution: "The Senate rejects the proposed draft of the "Code of Conduct" received on November 18. 2013 as unacceptable in both process and content. We ask the Board of Trustees to postpone the vote scheduled for December 11, 2013 and to honor the current procedure whereby revisions to the Code of Conduct are approved by the Joint Student Council."

CUAA EMERGENCY MEETING

Caroline Yu (EE '15)
Originally Printed in Issue #8

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 plans.

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 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 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 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 alumnus, asked Richard Lincer about the proprietary information of the algorithms used to show how the tuition model 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 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.

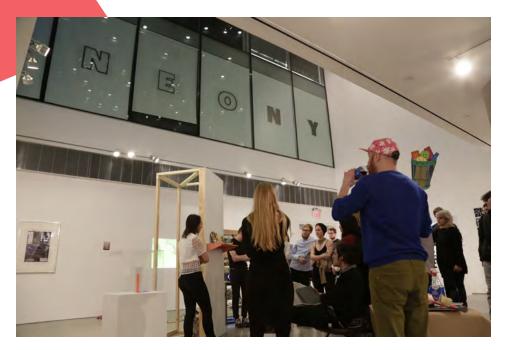
NEO NEW YORK

Anamika Singh (Art '17)
Originally Printed in Issue #9

For the past couple of weeks, Cooper students have found themselves stopping near the large glass panels in the NAB that overlook the gallery space of LL1. Curious students and faculty peer down to see tables, projectors, stickers and quirky looking individuals at a convention of sorts. This is NEO NEW YORK, as the large label on the windows across suggests.

NEO NEW YORK is a Cooper Union-based workshop that aims to educate and assist creative students through a series of lectures, portfolio reviews and meet-and-greets, culminating in a final exhibition hosted on February 15th. Through an application process, NEO NEW YORK picked workshop participants, many of whom are Cooper students. NEO NY is focused largely on redefining visual thinking and conceptualization.

Workshops were headed by prominent designers, artists and innovators such as Paul Sahre, Maja Cule, Jake Yuzna, Alexandra Gorcyznski and Marisa Olson as well as the NY-based trendforecasting group K-Hole. The Pioneer spoke to Virginia Commonwealth University Graphic Design student Michael Walker who attended NEO NY about his experience. Walker states, "I found my NEONY experience to be an engaging exploration of objects, methods, and ways of thinking. Collaborating with international students via a system of small groups created tiers of interaction; it made it so that I could focus intensely on one subject in my group and learn from the way other groups engaged with their subjects." In a progressively virtual and visual world, workshops such as NEO NY at the Cooper Union truly work towards the advancement of Art, spearheading the changing ways that designers and artists define the way we perceive and depict.





INTERVARSITY FEEDS 50

Chae Jeong (ChE '16)
Originally Printed in Issue #10

On Thursday, March 6, 2014, students gathered in the lobby of the New Academic Building at 5PM for an event called Feed 50. Feed 50 is an event held by Cooper Union's Intervarsity Christian Fellowship that is modeled after a larger-scale work done by New York City Urban Project called Feed 500.

Feed 50 works to help the less fortunate in the community around Cooper Union. Student met at 5 PM to pack lunch bags consisting of a cold-cut sandwich, water bottle, and some candy. Students also included some encouragement cards and a slip of paper with the nearest churches and shelters that work with the homeless.

After the lunches were packed, the students each took two lunches with

them –one for the less fortunate and one for themselves. Not only were they tasked to give out food but were also encouraged to sit down and chat with them, pray with them, and to get to know them. Around 6 PM, the participants ventured out, going all the way to Union Square and Alphabet City to share the lunch bags that they packed.

Intervarsity holds this event at least once a semester with the belief that Jesus loves the people of this world so much that it is a person's duty to spread that love. This does not mean, however, that faith is required to attend this event. It is rather a faith inspired event and Intervarsity encourages anyone who can lend a helping hand to participate in these events.



SPRING POETRY SLAM

Anamika Singh (Art '17)
Originally Printed in Issue #10

On February 27th, Cooper Union poets gathered to celebrate the long tradition of spoken word poetry. Hosted by the Black Students Union (BSU), The Poetry Slam was an opportunity for all to get in touch with their inner poets and share the passion of poetry. While the tradition of spoken word poetry dates back to Ancient Greece, the modern form of spoken word originates from the African American Civil Rights Movement and Harlem Renaissance.

Osaze Udeagbala (ChE '15), President of BSU and host of the event was the sacrificial poet of the night, meaning he would begin the line up. Osaze opened the night with his intense but humorous poem Blackberry, his first spoken word performance. Michael Ketigian (BSE '12), a Cooper Union alum and phenomenal

poet then took the stage, setting the tone for a successful night ahead with his poem. After Michael various other poets such as Carson Foley (Art '17), Steven Neuhaus (ChE '15), Chaimaa Makoudi (CE '14), Kenneth O'Neill (ChE '16), Anthony Traina (ChE '16), Hindi Kornbluth (ChE '14) performed. After a short intermission Keagoe Stithm (Art '13), Ratan Sur (CE '15), Keith Caskey (ME '15), Anamika Singh (Art '17), Jimmy Espinoza, and Emma Faith Hill (Art '17) followed, bringing their words to life. The night closed with Sarah Schmitt (Art '17) and her incredible poem "Dear Diary".

The Poetry Slam created an environment in which students were transformed into poets and their words carried the audience to a place of passion, love and understanding. The Black Student's Union gave students here at the Cooper Union the opportunity to truly engage and express themselves through medium of this art. Slam poetry has the power to move and empower its listeners, perhaps a reason why the tradition persists generation after generation. You can view photos of Poetry Slam, taken by Antonia Stoyanovich (Art '16), here: http://on.fb.me/lnskiwY



APRIL ESC OPEN MEETING

Caroline Yu (EE '15) Originally Printed in Issue #12

This past Monday, April 14th, the Engineering Student Council held an open meeting. Dean Dahlberg attended the meeting to give an update on the engineering school. She began her update by mentioning the press release that gave the statistics on the students admitted to Cooper Union this year. The big question is yield, which will be answered on May 1st when the accepted students have to notify Cooper whether they will attending this fall or not.

Faculty searches for replacement positions are being conducting in various departments. The physics department is looking for two full-time professors. The electrical engineering department has conducted interviews for a full-time position. The chemistry department

brought in five people to interview and the computer science faculty search is being put on hold until a new computer science program is fully developed. A second associate dean position will allow for further research and development in graduate programs.

Dean Dahlberg shared the four main programs she has been focusing on. The first is the pre-college program. The second is the Master's degree programs. The third is connecting with companies and have them sponsor student-led projects. The fourth is a graduate degree program in entrepreneurship.

Interesting notes on these programs include the focus on international recruitment since New York City is a big attraction for international students. the focus on supporting new faculty to conduct new research projects with undergraduates, looking at postbaccalaureate programs, looking at the need to rent student classrooms in other buildings around the city, and lastly, generating a non-traditional computer science program that focuses on human and computer interaction, analytics, big data, visualization and informatics.

Other topics that were covered in the open meeting included the calls made to admitted students, an update on the peer mentorship program, an update on the faculty auction, and an update on the logistics of submitting faculty compliments.

CULTURE SHOW 2014: COOPER HUMOR

Yara Elborolosy (CE '14) Originally Printed in Issue #12

For a small school, Cooper happens to have a diverse community, and the Culture Show, run by SAS (South Asian Society), is a wonderful opportunity to demonstrate this. On April 5, 2014, the Great Hall was filled with over a hundred people waiting to see their friends and classmates perform. With the hosts giving a little skit in between each of the acts, the audience was kept entertained throughout. The acts were amazing as usual, demonstrating not just the culture but also the talent of the Cooper Union student body.

There were several vocal acts, showing off the beautiful voices of the students. Gospel Choir, started a couple of years ago, sang a couple of very inspirational songs with beautiful soulful voices. Peter Morfe (EE '16) did a solo act, singing



very graciously as usual and so did Ethan Lusterman (EE '14), who sang and played the guitar. A few of the members of Coopertones did a Disney Medley, singing some very popular songs from Disney movies such as Reflection from Mulan and a Whole New World from Aladdin. Sons of Pitches, four males from Coopertones, sang together for the last time in their Cooper career



and they sang as beautifully as always. Coopertones was the last vocal act, singing several heart-warming songs and had the audience very pleased. The Cooper Union Dramatic Society was also involved and they gave a wonderful preview filled with great acting of their upcoming play, Figaro, which is showing next week.

Yo-Yo club performed, using glow in the dark yoyos to start off their act, which had the audience in awe and ending with various cool tricks. Cooper Union students are also very diverse in their dancing skills, with Ballroom Dance doing very classical and elegant dances and Breakdance doing some amazing tricks and routines. CooperNova had a wonderful dancing routine as well. Boys Dance was very amusing with their animal costumes, which they stripped

off to Jason Derulo's Talk Dirty to the amusement of the audience. Girls Dance was great as well with people from all over and with a surprise guest of the male gender.

The show ended with group dance, which had so many people that both the stage and the space in front of the stage were used. Their beautiful costumes, great music, and interesting dances was the best way to end the

night. But the show wasn't over, as SAS played a video dedicated to the Senior Class who helped them put the show together along the way. There were shirts being sold to help raise money for the costumes for the show and a lot of delicious Indian food served for free at the end of it. If you missed the culture show this year, make sure you get a chance to attend it next year.

FOUNDER'S DAY 2014: THE PETER COOPER BLOCK PARTY

Chae Jeong (ChE '16) Originally Printed in Issue #12

On Sunday, April 13th, 2014, The Cooper Union Alumni Association held The Peter Cooper Block Party for Founder's Day 2014. The event occurred in two sessions, the first being The Awards Ceremony from 10:00 PM to 1:00 PM in the Great Hall. During this time, The Cooper Union Alumni Association presented awards that honored alumni achievements in art, architecture, and engineering, amongst other recognitions of service and dedication. This year, award recipients were the following:





- Jay Moskwitz (Phy '70), for the Gano Dunn Award for Engineering
- Julian Laverdiere (Art '93) and Augusta Savage (Art '25) for the Augustus Saint Gaudeus Award for Art
- Leslie Gill (A '82), for the John Q Hejduk Award for Architecture
- Patricia Buckly Moss (Art '55), for the Peter Cooper Public Service Award
- Sean Cusack (BSE '98), for the Alumnus of the Year Award

In addition:

- Henry Chapman (Art '10), Alexis Lenza (CE '05) and Victoria Sobel (Art '13) were recognized as the Young Alumni of the Year.
- Special Recognition for Extraordinary Service was given to Barry Drogin (EE '83/MEE '86), Michael Borkowsky (ME '61), and Jeffrey Gural.

Following the Awards Ceremony was the Street Fair on Astor Place (between Broadway and Lafayette) from 1:00 PM to 5:00 PM. The Street Fair featured a variety of activities, food stands, and showcase booths. Among those was the Inventor's Row, a series of booths that presented the work of modern day inventors. At 2:30 PM, these inventors took part in an Inventor's Panel where they discussed the process of invention and innovation. Amidst all of the activity on Astor Place, The Coopertones, The



CooperNova Dance Team, and the Daddy Long Legs Blues Band performed on the Jeff Gural Stage. At 3:00 PM, The Peter Cooper Jello Challenge was held and the Street Fair event concluded with the Tealightful Raffle Drawing at 4:00 PM.



Photo Credit: Christine Huh (Arch '18)



EDITORIALS

WHAT IS YOUR LEGACY?

Originally Printed in Issue #7

What's Your Legacy?

Stop what you're doing. Take a good look around. Look out the window and look out into the hallway. Have you spoken to anybody outside of your school today? If you're an engineer, have you talked to an artist today? Artists, have you spoken to an engineer today? Architects, have you left your studio today?

The school has been crumbling at our feet. It's been slower in the past, albeit, but things seem to be deteriorating at an accelerating speed. I feel as though relations between the schools are more estranged than ever. In times of strife, it's easy to withdraw into our comfort zones. It's easy to decide to focus on your work, to say fuck the school I'm going to just do me and get the hell out. It can't possibly fail, it's been standing for 155 years, why not 155 more? This passivity will be the death of the Cooper Union.

What do you want to look back on in five years? Will you be ready to look back? How about 10 years? 20? 30? How about 50 years? Let's look back.

What are you most worried about right now? Is it your calculus final? Completing a model? Finishing your sculpture? Is it that HSS essay that's due the day before break? These present obstacles seem the most pressing. They're easy to look at, to face, to conquer. You can count on the power of a single individual and you have the skill set necessary to complete the task. That's what you go to school for. To gain the necessary skill-sets in order to be successful and innovative in the field of your choosing.

But how do you fix a school? Do you know how to do that? How would you even start? Sign your name on a petition, make a meme, say "I know it's bad and I don't like it but it'll work itself out."

What will this school be like once we have a paying class? We will no longer

be the Free School. There's the New School down the street, but somehow the Free School has a better ring. Now we will be the "School that was Once Free". The melodrama of our situation will resound in the nomenclature.

So come next year, assuming that indeed, we are charging tuition, Cooper will be caught in a divide. It will be both the Free School, and The School that was Once Free. Two schools. Can a school divided stand?

But you go to the Free School, so it's all cool. Those kids who go to the School that was Once Free won't be here till next year and that's practically a lifetime away.

Your inactivity is perpetuating the cultural shift which will eventually destroy the Free School. You are a frog sitting in warm water, not noticing that it's getting hotter. You're sleepy, drifting away, but you're slowly, degree by degree, boiling away.

Jump out.

So what do you see yourself leaving behind? You'll eventually leave this school. You personally won't have payed a dime towards tuition and you'll be patting yourself on the back for having escaped the binds of throttling student debt. But what will be left? A school that is but a shell of its former self. The seniors will graduate, the current juniors, the current sophomores, and last, the current freshmen. And who will be left? The Free School will have been abolished, its ideals forgotten, its legacy diminished, its future dismal.

And how is your class going to be seen? Will you be the class that sat quietly, twiddling their thumbs, letting the Board destroy 155 years of tradition? Or will you be the class that stood up, and said "This is a Free School and it will stay Free!" Will you be the class that enabled destruction? Or will you be the class that took action, unified, and changed the paradigm of student empowerment?

Think about what you're leaving behind. Think about your legacy.

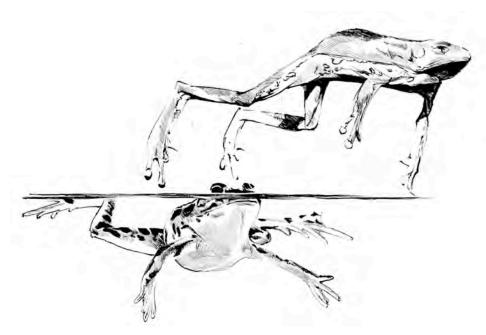


Illustration by Laura Quan (CE '15)

A VOICE LOST IN THE COMMOTION

Saimon Sharif (ChE '15)
Originally Printed in Issue #7

With the flurry of campus-notice emails and torrents of Facebook discussion threads regarding the incidents happening about campus this past week, I feel it necessary to present some words Peter Cooper wrote in a letter to the Board of Trustees on April 29, 1859. It is my sincerest hope that we, as students, take these words to heart and consider their relevance given our current circumstances.

Desiring, as I do, that the students of this institution may become pre-eminent examples in the practice of all the virtues, I have determined to give them an opportunity to distinguish themselves for their good judgment by annually recommending to the Trustees for adoption, such rules and regulations as they, on mature reflection, shall believe to be necessary and proper, to preserve good morals and good order throughout their connection with this institution.

It is my desire, and I hereby ordain, that a strict conformity to rules deliberately formed by a vote of the majority of the students, and approved by the Trustees, shall forever be an indispensable requisite for continuing to enjoy the benefits of this institution. I now most earnestly entreat each and every one of the students of this institution, through all coming time, to whom I have entrusted this great responsibility of framing laws for the regulation of their conduct in their connection with the institution, and by which any of the members may lose its privileges, to remember how frail we are, and how liable to err when we come to sit in judgment on the faults of others, and how much the circumstances of our birth, our education, and the society and country where we have been born and

brought up, have had to do in forming us and making us what we are. The power of these circumstances, when rightly understood, will be found to have formed the great lines of difference that mark the characters of the people of different countries and neighborhoods. And they constitute a good reason for the exercise of all our charity. [...] We should always remember that pride and selfishness have ever been the great enemies of mankind. [Humans], in all ages, have manifested a disposition to cover up their own faults, and to spread out and magnify the faults of others.

I trust that the students of this institution will do something to bear back the mighty torrent of evils now pressing on the world. I trust that here they will learn to overcome the evils of life with kindness and affection. I trust that here they will find that all true greatness consists in using all the powers they possess to do unto others as they would that others should do unto them; and in this way to become really great by becoming the servant of all. These great blessings that have fallen to our lot as a people, are entrusted to our care for ourselves and for our posterity, and for the encouragement of suffering humanity throughout the world.



Illustration by Laura Quan (CE '15)



FACES OF COOPER

ANDREA NEWMARK

Chae Jeong (ChE '16) Originally Printed in Issue #4

The Cooper Pioneer sat down with Andrea Newmark, chair of the Chemistry department, to discuss her education, seeing her former students grow up, and the importance of communicating.

The Cooper Pioneer: Where are you from?

Andrea Newmark: I grew up in Brooklyn. I went to Boston for school for two years and then ended up back in Queens. Now I'm on Long Island. So, I'm mostly a city person.

TCP: Can you tell me about your educational and professional background?

AN: I graduated Queens College with a Bachelor's in chemistry. Then I applied to Columbia to what they called the 4-2 program, where if you had a bachelor's in science you could get an engineering degree. So, I ended up going to Columbia for a master's in chemical engineering and stayed on for my Ph.D. The department at that time was chemical engineering and applied chemistry. My research ended up being more towards the applied chemistry so that's how I ended up here. I graduated Columbia in 87 and came straight to Cooper. I went right from grad school to teaching.

TCP: How did you first find out about the Cooper Union?

AN: Actually, when I first saw the ad for a chemistry professor, I thought that it fit me perfectly, and even though I grew up in the city and went to school here, I hadn't heard about Cooper until I saw that ad. Although, once I mentioned it to my mom (she grew up on the Lower East Side) she told me that she had heard of Cooper Union, but I never did.

TCP: What brought you to the Cooper Union?

AN: When I first saw the ad, I knew it was right up my alley. I had the mixed background of chemistry and chemical engineering... they were looking for a chemistry professor, but it was an

engineering school so it was a great fit. That's really one of the reasons why I came. I also loved the location, the whole history, but it was also a great fit.

TCP: What is your role in Cooper?

AN: I've been the chair of the chemistry department for the past... I guess this is my fourth year. I've been a chemistry professor to the freshmen and juniors, mostly. In years past, I was a freshmen advisor, but I haven't done that in a while. I feel that apart from teaching the chemistry classes, I like to teach students about life, about what they're going to see when they go out into the "real" world and about how to be good people. I feel like that's my role.

TCP: How do you like your job at Cooper?

AN: I love my job. I love the students. I've been here 26 years. I love interacting with the students. They're the best part of Cooper. I'm sure most people say that.

I've kept in touch with a lot of students. I love seeing what they do. We just had one of our alums give a talk and it was great to see her. I love seeing what they have accomplished, both professionally and personally, like having kids of their own.

They're getting closer to my age! When I first started, I was not much older than they were. But somehow, it seems that my past students are getting closer and closer to my age! They have kids now. Actually, I had one student and I was told he has a kid older than my kids. I don't know how that happened.

TCP: What advice would you give to Cooper students?

AN: My advice would be to stop taking so many extra credits and start experiencing life a little bit: get involved in extracurricular activities, professional societies, theater groups, religious groups –whatever you want to be involved in. Put some extra time



into that and take leadership roles, do community service. Taking a ton of extra courses is not necessarily what is best for your career and for you personally. It isn't going to necessarily make you a better person. I think you really need to develop your communication skills and find what you are passionate about. I think by doing extracurricular activities and experiencing all that the city has to offer, you're better positioning yourself.

TCP: Who is your favorite professor at Cooper? Why?

AN: I can't answer that. I think the professors are all really good people and they care about their students. It's a loaded question obviously because I can't say one person over another and, plus I haven't taken any of their classes, so how would I know?

TCP: What are some of your hobbies? **AN:** I like tennis, snowboarding –I love going on Dean Baker's ski trips. I like reading, keeping up with current events, hanging out with my family; that is the best.

TCP: Do you have any closing remarks? **AN:** As I said, I think Cooper is a wonderful place. It's in a great location, one of the greatest cities in the world. I think students should take advantage of all of the things it has to offer. I mean, they're going to take their core courses and graduate. They should work and study hard but I feel that they really need to experience life. Part of going to

college is learning to be a good person and maturing into a responsible adult. I think that people should be doing that a little more than they are. And I can't stress enough the importance of communication skills because when our students go out into the working world or grad school, wherever they're going to be they will need to be able to communicate. I think the one thing

Cooper is lacking in is stressing how important it is for our students to be able to articulate their thoughts, whether in their professional or personal lives. I think they should take advantage of that when they're in school. And try to have fun! It's supposed to be four years of... somewhat of a good time. Of course they're always learning, but it doesn't hurt to have some fun along the way too.

ATINA GROSSMANN

Chae Jeong (ChE '16)
Originally Printed in Issue #8

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? **Atina Grossmann:** 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.

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 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 TAing. 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.

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 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 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 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 there.

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 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 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!

MELODY BAGLIONE

Caroline Yu (EE '15) Originally Printed in Issue #8

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 innercity 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.

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 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.

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 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 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 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? **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 come to Cooper Union, the curriculum is kind of intense and focusing on your studies is important, but as time goes on, students need to find a balance and their college experience should be more than just studying. When you get involved in a project – either with a professor or with some other organization or something

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 activities outside of the classroom.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

MB: Well, obviously, we have a lot of challenges with the decision to charge tuition. People are anxious about what 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 and it can continue to be a unique environment with close student and faculty collaboration and with community projects in New York City. 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 productive members of society in order to influence the world in a positive way and came straight to Cooper.

2013/2014 THE PIONEER

IRV BRAZINSKY

Allison Tau (ChE '15) Originally Printed in Issue #9

The Cooper Pioneer recently sat down with Professor Irv Brazinsky to discuss how he became interested in Chemical Engineering, what brought him to the Cooper Union, and his advice on learning engineering.

The Cooper Pioneer: Where are you originally from?

Irv Brazinsky: Well I was born in Manhattan right here at Beth Israel Hospital, and it's right across the street from where I went to high school at Stuyvesant. I think my parents were living in Manhattan at the time, and I moved to Brooklyn when I was two and a half. I didn't leave Brooklyn until after I graduated from Cooper Union, which was at age 21, and then I went to live in Cleveland for a summer. I've been around to some extent, I lived in Bethlehem, Pennsylvania for a year, I lived in Cleveland for a few years, and I lived in Boston for about ten years, and then I came back to Jersey. So, New York City area. But you could say I'm from Brooklyn.

TCP: Could you tell us a little bit about your educational and professional background?

IB: [I went to] public school, first through fourth grades, Hebrew Parochial School, fifth through eighth, then Stuyvesant High School, Cooper Union undergraduate, Master's at Lehigh, and PhD at MIT. I worked for the National Aeronautics and Space Administration for a few years in Cleveland between Master's and PhD, then I worked for several companies after MIT: Polaroid, Celanese, Foster-Wheeler, and I'd say I have about twenty-five years of industrial and government experience. Then, about thirty years at Cooper Union, late career, no, mid-career.

TCP: So what made you choose engineering and what do you like about chemical engineering?

IB: Well, originally, for some reason,

I remember wanting to be a chemist. And in high school, my classmate Jack Fried said, "Oh, you should be a chem. engineer, because you like math, you like physics, [and] chemists don't get into that," of course he was wrong, and then, he told me about Cooper Union. So here was the chance to go to a great school and be an engineer. So the fact that Cooper Union offered engineering, and there was a heavy math and physics component made me decide to go into chem. engineering.

TCP: How do you think Cooper Union has changed since you were a student? IB: Well, in some ways it's changed a lot and in some ways it's stayed the same. First of all, there's a master's program, there was no master's program when I was here. So that has led to research. and this research has filtered down to the undergraduate level.

TCP: What brought you back to Cooper Union and when did you start working here?

IB: I started working here in 1985. Actually, what brought me back was, well, I was working in industry and I used to ride the bus with a guy name S.I. Cheng. We got to talk, and you know, I was coming out of New York and he was also, and it turned out that he was a professor at Cooper Union, so we had a lot to talk about. And then, he felt that I would fit in with the chemical engineering department, given my background, so he convinced me to apply to Cooper Union. So I applied, this was about 1984, and lo and behold, I got the job. I had to think long and hard about whether I wanted to change the focus of my career, from working in industry, doing design, and that's one of the reasons Cooper hired me. And it took me a while. It was a good career move at that point.

However, I couldn't leave right away, so I remember making the commitment

during the summer of '84, but I did not come to Cooper until fall of '85. During that time there was a lot for me to finish up at Foster-Wheeler, which included three months in Dublin, Ireland working, basically, on Splenda. And we worked on the pilot plant to produce Splenda in a suburb of Dublin. After I came here in '85, I must have spent about ten years consulting for Foster-Wheeler. Mostly the process I consulted on was the decaffeination of coffee using supercritical carbon dioxide. When I first came to Cooper, I used to give a lot of problems in thermo on that, not so much anymore.

TCP: What is your role at Cooper? What is your department's role? IB: Chemical engineering, I believe, was the last of the engineerings to be formed at Cooper, in the late '30s. Chemical engineering is a very versatile engineering, the others are too, but I believe chemical engineering is the most versatile. That's kind of the role of chemical engineering: to supplement what the others do. A lot of people originally didn't even think of chemical engineering as engineering. Industrialized chemistry, maybe, and that was the role in society.

The first few years I was here, '85 to '86, we had core curricula with curriculum coordinators. But we received a disastrous ABET review in '85; I was here for about a month, and I was really shocked and I didn't really know what was going on. And what they decided was that they would have more distinct departments. And they brought in a new dean, Eleanor Baum, and I think she's an expert on ABET. And after she came, the whole school did great.

During my early years here, the chairman of the department was S.I. Cheng. He was chairman from when we reestablished departments, from '86 to '89, then he retired and I became chairman until this past year. Twenty-five years, that's long enough.

TCP: How much do you like your job here at Cooper?

IB: I really like it very much. I look forward to it every morning despite my five-hour round trip door-to-door commute. I like the teaching, I like the research, and it's really good interacting with the students that we have here. You can see that some of them are really interested in what you're saying. And the research; I just came from a Cooper Cooler research meeting.

TCP: What advice would you give to Cooper students?

IB: Same thing I say in class: you're not here to learn how to plug into a series of formulas; anyone can do that. You're here to learn how to learn, [and] to understand what engineering is about. Engineering is very science-based, so pay strict attention to your math, physics, and chemistry courses. You get a lot of math, physics, and chemistry here: I think within each one of them. you're probably a couple of courses short of what you would need to get a degree at other schools. Pay attention. Learn, don't just memorize. And when you start getting into your initial fundamental engineering courses, which you do in each of the disciplines. Again, attack them not as a series of formulas, as you guys say, to plug into, but to really understand what you're doing and learn how to apply. Learn how to think like an engineer, rather than be a grind. Oh, and don't be afraid, when you go to grad school, to go for the best. Ultimately, what you can do because you went to Cooper Union is so good, and that will get recognized individually. So don't get discouraged. You've gotta keep your chin up.

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

IB: I kind of like most of the professors here; I don't know that I should mention anyone in particular. Alright, I'll mention a few. Jameel Ahmad, and the reason I'm going to mention him is because, when I was deciding whether to come to Cooper Union or not—and I took six



months to make that decision when I was offered the job-Jameel Ahmad from Cooper Union came and gave a presentation at Foster-Wheeler. I was very impressed with him and I said, you know, maybe I should come to Cooper Union. Of course I didn't tell him at the time. And when I showed up I said, "remember me from Foster-Wheeler?" S.I. Cheng, well he's still alive, he's 95, and I really liked him very much. I still visit him occasionally in Toms River, NJ. I kind of like colleagues of mine that I had when I was a student: Ellison, in physics, he has since passed away. When I came here, we overlapped by ten years, and he was a favorite of mine. John Bové, of course, was a tremendous favorite of mine. People always ask: did you have Professor Bové for organic? And I say no. He started teaching in September '58, and I graduated in June '58, so I missed him by a summer.

And then, of course, there's Dean Baker. He and I bonded almost immediately after I started teaching at Cooper Union, and here's why. I played one year of junior varsity and three years of varsity basketball for Cooper in the late 1950s. The varsity coach was Dave Tobey, who had also coached Savage University (a phys. ed. school) to two national championships in the late 1920s (equivalent to Division I today). The star of that Savage University team was "Honey" Baker, Dean Baker's father.

There are many others, but I just mentioned a few.

TCP: What are some of your hobbies? IB: I do a lot of reading. I read a lot of history, military history, [and] a lot of United States history. Of course [there's also] sports; I can't really play anymore, though I used to play. In fact, in the mid-90s, we had intramurals and I played on the Chemical Engineering intramural softball team [for] two years. I was the second baseman and Dean Baker was the third baseman. We won the championship each of those years. My hobbies used to be playing a lot of sports, which I can't really do anymore, but I still swim for exercise. I watch sports, that's a hobby. I love Broadway theater music, [and] I love Broadway musicals. I still go to the theater, even though it's very expensive.

TCP: Do you have any closing remarks for the Cooper Pioneer?

IB: The thing with engineering is that there are just so many problems in the world that have to be solved. They need very heavy engineering input. I think that if you come to Cooper Union, you're going to get a good education for that.

BETSY ALWIN

Anamika Singh (Art '17)
Originally Printed in Issue #9

The Cooper Pioneer recently sat down with Betsy Alwin, a technician in the sculpture shop and adjunct professor in the School of Art.

The Cooper Pioneer: Where are you from?

Betsy Alwin: Mound, Minnesota.

TCP: Can you tell me about your educational and professional background?

BA: I went to Undergrad at Viterbo in Wisconsin and Minnesota State University earning both a BFA and a BA in Spanish language. I studied for a semester in Madrid, Spain and went to Illinois State University to earn an MFA.

TCP: When did you first learn about Cooper Union?

BA: From my roommate at Illinois State Spring Ulmer, who graduated from Cooper.

TCP: What brought you to Cooper Union? When did you start working at Cooper?

BA: Spring introduced Illinois State to Matt King, who was a shop tech at the time. He came as a visiting artist and

encouraged me to apply for a job at Cooper. I started September, 2001.

TCP: What is your role in Cooper? What is your department's role in Cooper?

BA: I am both a Technician in the sculpture shop and an adjunct in the Art School teaching Casting Techniques with my colleague, Andrew Wilhelm.

As shop technicians, we make sure everyone learns how to use all the tools in the amazing shop in the Foundation Building and we make sure everyone can complete their projects safely. We are also often there for moral support.

TCP: How much do you like your job at Cooper?

BA: I love this job!

TCP: What advice would you give to Cooper students?

BA: Travel as soon as you can and often. See the world and experience cultures different from your own.

TCP: Who is your favorite professor at Cooper? Why?

BA: Out of deference to my colleagues, I'll simply have to say...myself.



TCP: What are some of your hobbies? **BA:** No hobbies. I have an art career that takes all the energy I can give it.

TCP: Do you have any closing remarks? **BA:** If you'd like to see my work, my website is www.betsyalwin.com

FRED FONTAINE

Matt Lee (ME '15)

The Cooper Pioneer recently sat down with Fred Fontaine to discuss his first few years at Cooper, some advice for current Cooper students, and juggling raising children with teaching at Cooper.

TCP: Where are you originally from? **FF:** I was born in the Bronx, I grew up there, when I was in college my family moved to Bergen County, NJ. I live in Wyckoff now.

TCP: Can you tell us about your

educational and professional background, and how you got into electrical engineering?

FF: Well, I always had a passion for math, but when I was deciding what I wanted to study and do I decided to do electrical engineering; I decided to use math to do some interesting things. I was always planning on being a researcher in Bell Labs. So I went to Cooper because it was a small school like my high school, Hunter College High School. It's a small school, with small classes, and I've been commuting practically my whole life.

After I got my masters here, they offered me a faculty position while I was getting my PhD from Stevens, in Hoboken. I also took some extra math courses at NYU, so I ended up getting my Masters in math as well as my PhD from Stevens. I've been teaching here ever since. After a few years of teaching, I fell in love with the school and just doing what I do here. I gave up going to Bell Labs. Being a professor was challenging, it was interesting. Dealing with students gives the faculty a lot of freedom. They can develop the courses how they like,

decide what to do and what projects to be involved in.

TCP: What did you originally teach? FF: I taught a junior project course and communication networks for the first semester. Then I got into things like circuits and electromagnetics. Eventually I got to teaching digital signals processing only after somebody else retired. The other thing that happened while I was here was that I started to create graduate courses. I think over the years I think I've made about a dozen new graduate courses. And to be honest I learn more by teaching than taking the grad courses at the end of school, because you don't really understand something until you teach it. That gets to this idea of flexibility. It was great that I could develop the courses and go in whatever directions I wanted to. At some point I was doing 5 or 6 courses a semester, some of them just extra like independent studies, and taking 3 courses at Stevens and doing my thesis; I was young and insane! I just completely buried myself in that stuff.

TCP: What is your role in Cooper? FF: As department chair I spend a lot of time doing things. My favorite thing is being in the classroom teaching, developing the courses, and advising students. There's a lot of other things: there's accreditation, which takes a lot of time for the chairman. Particularly in the last couple years with what's been going on with the school there's been a lot of planning and meetings. This year actually it's the first time in a very long time that the engineering faculty has been involved in admissions. I'm the chair of the admissions committee, and we've actually been working with the admissions office, reviewing applications and stuff.

TCP: Previously the engineering faculty didn't have anything to do with admissions?

FF: No, it was just the admissions office. The admissions committee might set overall guidelines like say, take in 25 students in each major, as a target. There's some discussion about whether or not to look at the SAT essay portion. Again it was at a high level, we weren't

involved in looking at the applications or making decisions or anything like that.

TCP: Do you have a favorite professor or colleague?

FF: I can't say. I will say that the faculty I've had, when I was a student here, and a lot of the faculty here, I really have respect for those that challenge themselves and students, try to push the boundaries and think outside the box. Certainly a lot of the faculty I've had have been really inspiring for me. So I think there's a lot of great faculty here.

TCP: What advice would you give Cooper students?

FF: Set your expectations for yourself very high, always try your best to achieve them. Don't necessarily be afraid to take risks. I think sometimes students get a little averse to risk. Everyone is so focused on their GPA or this score or that score. The other piece of advice I'll give people is that whatever plan you have in life doesn't necessarily turn out that way; you just have to have a plan to guide yourself and be prepared to make changes. I never thought in a million years I'd be where I am now. But you have to be prepared, and if you're going to make some decisions that change your life you enter that point being prepared. So don't think today you're going to know what you'll be doing several decades from now, but you can at least plan a position for yourself and try to take advantage of opportunities when they come your way.

TCP: What are some of your hobbies? FF: Raising three kids. My eldest is 15, he's in 10th grade so college is looming on the horizon. My middle child is 12, he's in middle school. My girl is 8, in 3rd grade. I have 3 kids in 3 different schools. That pretty much takes up all of my time. There's some hobbies I'd like to get to; when I started college I gave up piano. I try to play chess as often as I can. But I will say I like reading articles and studying. There's all this high tech stuff, new methods and technologies are so fascinating. During the summer I may read 1 or 2 books, but I'll spend the rest of the time just reading: That's when my kids aren't driving me crazy!



TCP: What thoughts do you have about the future of Cooper?

FF: Things are definitely going to be different. I'm always optimistic about it. It's going to take a lot of work to make things happen. For example, just being involved in admissions and trying to do our best to ensure that we still do get the top students coming here. I think the critical lynchpin is if we still get high caliber students coming to Cooper. Then we can keep doing what we've been doing, we can still sustain the environment here and we can still produce the kind of Cooper alumni that is well known for their special attitude, their self-confident, and their elitism (in a positive sense). But that all hinges on continuing to bring in top students and continuing to offer them the education that they deserve. That is going to be the challenge, and we'll see what happens going forward. I don't think anybody knows exactly what's going to happen.

TCP: Any closing remarks?

FF: Like I mentioned before, I'm still very optimistic about the school's future. I'm still very much invested in this place, I think a lot of people are. If this place is going to survive and thrive in the future, it'll be because of the passion of the people who are here. Sometimes that passion can lead to fevered discussion, but I think the passion people have for this place is one of its strengths.

VICTORIA HEINZ

Chae Jeong (ChE '16)

The Cooper Pioneer recently interviewed Victoria Heinz to talk about how she discovered Cooper Union, her joy of bike riding, and her role here at Cooper.

TCP: Where are you from? **Victoria Heinz:** Originally from Equinunk, Pennsylvania. Now living on Long Island.

TCP: Can you tell me about your educational and professional background?

VH: I graduated from Cooper, with a bachelor's in chemical engineering. Then, I worked in construction for a couple of years, first as a site engineer and then in project management. In 2009, I came back to Cooper to work here – in the chemistry labs.

TCP: When did you first learn about Cooper Union?

VH: My town is really small (population density under 20 people per square mile) and a lot of people from the city and suburbs down here own houses up there. The people who bought the house nearest to my grandmother's house moved there from the East Village. They knew I wanted to go to New York and that my parents wanted me to study engineering so they suggested Cooper. That's how I heard about it.

TCP: What brought you to Cooper? When did you start working here? VH: Well, I really wanted to move to New York and this was the only school I applied to that wasn't in PA. I got in and I came. Then I came back in 2009 to start working here after a few months of typing "chemistry" and "chemical engineering" into NYC job searches. I actually found the listing on craigslist.



TCP: What is your role in Cooper? What is your department's role?

VH: I am a Chemistry Technician and part of the chemistry department. We do chemistry! But I also do hazardous waste management and chemical inventory for the school in addition to lab prep/maintenance.

TCP: How much do you like your job at Cooper?

VH: I really like this school – the students, the faculty, and the staff. It's my favorite working environment of all of the jobs I've had so far.

TCP: What advice would you give to Cooper students?

VH: I've known so many Cooper students for so many years. I don't know – they're all so different. There really isn't an overarching piece of advice. But you are all very smart. When you get out into the world, you'll realize that, even if you lose track of it while you're here at Cooper. You're going to be fine. People at Cooper are some of the most

intelligent people I have ever met. It's a good group!

TCP: Who is your favorite professor at Cooper? Why?

VH: I don't know if I had a favorite professor. We'll skip that one! (All-time favorite alumnus, Eric Heinz EE '05, my husband. . .)

TCP: What are some of your hobbies? **VH:** As far as physical activities go, I love bike riding, and only bike riding. I love construction stuff. I do minor renovations, on my apartment and the homes of any family and friends who let me. I also paint, and not just walls – I enjoy painting and drawing. I play the piano, not so much anymore – we can't really fit a piano in the apartment. I love road trips and driving in general, and acting!

TCP: Do you have any closing remarks? **VH:** Not really...

DIONNE LUTZ

Chae Jeong (ChE '16)

The Cooper Pioneer talked with Dionne Lutz to discuss why she decided to come to Cooper and how she likes it here.

TCP: Where are you from?

Dionne Lutz: I'm from –let's say New York!

TCP: Can you tell me about educational and professional background?

DL: I received my BS from SUNY
Purchase and then got a job at Albert
Einstein College of Medicine. I work
there for a few years and then got my
MsEd at Pace University. I then taught
at NYC DOE for a few years before
coming to Cooper. I taught at a school in
Brooklyn; it's close to Brooklyn Tech in



TCP: When did you first learn about the Cooper Union?

DL: After my classroom was broken into for the second time in two weeks, I decided that school was no longer a good place for me to work. I went onto Monster and there was listing for Cooper. My background is in biology and I wasn't too familiar with the ongoings in engineering, but I applied anyway.

TCP: What brought you to Cooper Union and when did you start?

DL: I started in October 2010. First of all, it was an exciting job that looked good on paper. It was a job that would get me out of the bad school I was in. It was just a chance to utilize the educational background that I just got in my Master's –I wanted to use it. I also wanted to be more involved in science, doing more hands on, lab-y stuff. In teaching science, you don't really get that. Being a technician in a laboratory is ideal. It combines both the education and the hands on experience.

TCP: What is your role at Cooper?
DL: My role is to facilitate projects ongoing in this lab, as well as maintain it. I help any professors with their labrelated projects or course work. I will also change around my schedule to accommodate student projects, like if a club requires C14 supervision. That way all the students can participate in as many activities as physically, mentally,

and engrossingly possible. **TCP:** How much do you like your job here?

DL: Very much! I'm very ecstatic with this job. It's a very laid back and dynamic community. It's also very engaging. Like I said before, my background is in biology. I only had one semester of physics before coming here and I took up to Calc II, I think. So, this is a whole new world to me. Just as you students are learning, I am learning a lot about engineering – about how things are made, how problems are solved.

TCP: Do you have any advice for Cooper students?

DL: Go big! When I moved to New York City, I didn't have a job. I had a little bit of savings that I essentially used up and I was literally about to get a cash advancement on one of my credit cards in order to pay rent when I got my first job. So if you have an idea of what you want to do, go for it.

TCP: What are some of your hobbies? **DL:** I like to knit. I like to watch football. I'm trying to get into running but that's not going well. So I think I'm going to try tennis or something when it warms up.

TCP: Any closing remarks?

DL: Enjoy your time here. Take advantage of the resources available to you now. They say that these are the best years of your life, but any year can be the best year of your life.

MIKE ESSL

Anamika Singh (Art '17)

The Cooper Pioneer recently chatted with Mike Essl about how Kiss influenced his life, his Mr. T memorabilia collection, and posting golf balls on Facebook.

The Cooper Pioneer: Where are you from?

Mike Essl: I grew up in Abington, a suburb outside of Philadelphia.

TCP: Can you tell me about your educational and professional background?

ME: I attended the Cooper Union from 1992 to 1996 and studied mostly graphic design and a little print making. From 1999 to 2001 I attended the Cranbrook Academy of Art where I received an MFA in Graphic Design. In 1996 I founded the award winning graphic design firm The Chopping Block. For the last 10 years I've designed books for Abrams Comic Arts, Chronicle Books, DC Comics, Rizzoli, and Titan Books, and in 2008 I co-authored Watching the Watchmen with Chip Kidd and Dave Gibbons. My work has been shown by the Cooper Hewitt National Design Museum in the 2003 Design Triennial and by the Museum of Modern Art in the 2011 exhibition Talk to Me.

TCP: When did you first learn about Cooper Union?

ME: When I was a kid I was going through my father's record collection and discovered Kiss's Rock and Roll Over. Finding this record was a religious experience. The buzz saw, the bright colors, the custom typography, and the way Gene Simmons's tongue wrapped around the spindle made me want to be a graphic designer. I was so excited that I went to my junior high's library and found a copy of the book Milton Glaser: Graphic Design. It was either in that book or in another article about Glaser that I learned about the Cooper Union.

Years later, after graduating from Cooper, and after I had returned as a professor, I was showing my work at a conference and included a slide of Rock



and Roll Over. Minutes later I was on the phone with the designer, Michael Doret, and learned that he too had attended the Cooper Union. Every time I tell this story I get chills, Cooper Union was changing my life before I even knew it existed.

TCP: What brought you to Cooper Union? When did you start working at Cooper?

ME: That's easy, I love teaching. I came back to Cooper Union to teach because I believe in the true mission of the Cooper Union and I wanted to give back to the school that had given me so much. In 2001 I was hired as an adjunct to teach Two-Dimensional Design and in 2003 I was hired full-time as an assistant professor.

TCP: What is your role in Cooper? What is your department's role in Cooper?

ME: I'm currently an Associate Professor with tenure. This means I teach two or three classes a semester and work with the standing committees of the School of Art. For years I was the Chair of the SOA Academic Standards Committee and for the past two years I've been the Chair of the Faculty Student Senate. We do not have departments in the School of Art

but I oversee the graphic design classes and curriculum.

TCP: How much do you like your job at Cooper?

ME: When I started in 2001 I loved my job. Now that "reinvention" has arrived at the Cooper Union I find it is a miserable place to work. Before the decision to charge tuition I was told by a member of the board of trustees, "If you do not support reinvention you will lose your job." and "If you do not support reinvention we will close the School of Art." In short, no, I do not like my job at Cooper.

TCP: What advice would you give to Cooper students?

ME: Do not squander Peter Cooper's gift of a full-tuition scholarship. Give back. Create something for the public good. Help each other. Do not get a tattoo of the Foundation Building on your chest. Do not post on Facebook about golf balls.

TCP: Who is your favorite professor at Cooper? Why?

ME: Sorry, I can't answer this. Too tricky for me.

TCP: What are some of your hobbies? **ME:** I am the co-owner of the world's largest Mr. T memorabilia collection. I own over 2000 pieces and my partner, Greg Rivera, owns about 3000. I also co-host Issues, a podcast about comic books.

TCP: Do you have any closing remarks? **ME:** I would like to quote Peter Cooper, emphasis mine:

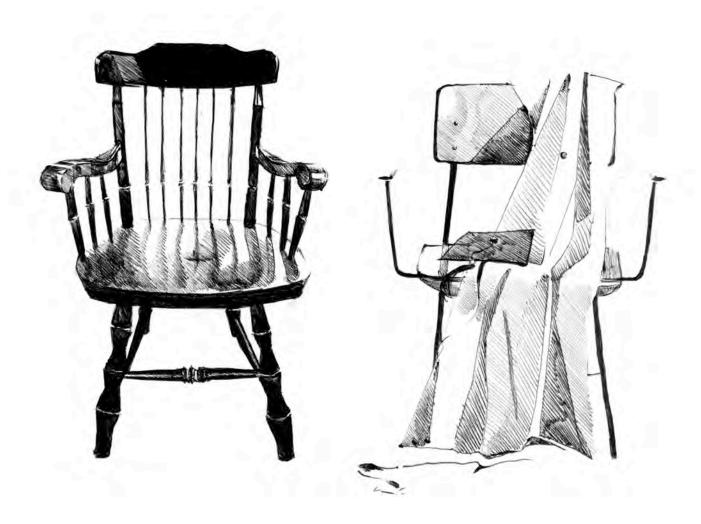
From a letter to the board of trustees on the founding of The Cooper Union: "In order to encourage the young to improve and better their condition, I have provided for a continued course of lectures, discussions and recitations in the most useful and practical sciences, to be open and *free to all...*"

—Peter Cooper, April 29, 1859

Peter Cooper addressing the first graduating class of The Cooper Union:

"The exercises of this evening will terminate the first session of the Cooper Union, "For the Advancement of Science and Art." The income of the corporation derived from the rents of the stores and offices and of the Hall, has been sufficient to maintain a free reading room filled with magazines and newspapers, a picture gallery, the school of design for women, classes of instruction in chemistry, mechanical philosophy, mathematics, music, architectural, mechanical and freehand drawing, free of expense to all applicants."

-Peter Cooper, June 29, 1860



ALUMNI INTERVIEWS

Over the past year, The Pioneer collaborated with The Center for Career Development to interview art, architecture, and engineering alumni. We would like to thank Jolie Woodson and Robert Thill for connecting The Pioneer with Cooper Union alumni. Alumni are an integral part of our community and The Pioneer would like to thank the alumni who took the time to share their Cooper experience and advice for current students.

JULIAN LAVERDIERE (Art '93)

Caroline Yu (EE '15)

This interview was completed Fall 2013.

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

Julian LaVerdiere: I didn't belong to any clubs at Cooper; however, back in '93 you could consider the 4th floor shop as sort of a private club. The teachers and shop staff were all very close and there was a shop kitchen in the north end where many stories and technical secrets were shared. I'm sorry that this secret meeting space no longer exits.

TCP: What is your favorite memory of

JL: My fondest memory is of the spirited and heated critiques held in the 4th floor sculpture studio classes of Nikii Logis, Hans Hackke, Doug Ashford, and Mark Dion. These classes were where pits fights, group therapy sessions and loveins rolled together.

TCP: What specific aspect of Cooper has influenced you the most during your career?

JL: Cooper taught me to have a social conscience and to consider all political implications of what it is I do and say. I still weigh my choices on the moral scales that Cooper gave me.

TCP: Why did you choose to pursue a Master of Fine Arts degree?

JL: I chose to go to the Yale sculpture program right after Cooper not because I wanted a MFA, but because I was very interested in the teachers that were running the program and the artists that had recently graduated from it. I wasn't after an MFA per say, I was looking to further my discourse in a community of thought that I found inspiring and

believed continuing my studies would help me find a truer path. At the time it was difficult to choose between the Yale Program and the Whiney Studio Program. Now in retrospect I am grateful to have a Master's degree, and can see how many doors it has opened behind

TCP: Do you still speak to your classmates?

JL: I am still close with a few of my Cooper classmates, and remain very close with most of my fellow Yale grads. I have come to recognize that the most important thing I gained from these schools was the familial bond with my classmates. I speak with Kevin Slavin regularly, he's part of the Alumni Council. Patty Jenkins - film maker - I see her occasionally. The most valuable thing at Cooper is the kinship here. Those bonds are the ones that will help you the most when you choose your paths.

TCP: What was your first job or project out of Cooper?

JL: One of the special things about Cooper is the way its alumni look after its up and corners. As a student, I worked for a Special Effects company owned by a Cooper alumnus named Jamie Sailles. And upon graduation I began working for the Design studio of Chuck Hoberman developing surgical equipment for Johnson & Johnson.

TCP: Can you describe your current job, industry, and/or company? What is the theme of your current work? JL: After graduating from Yale in '95, I started a Production Design Company with three other Yale grads: Vincent Mazeau, Paul Myoda, and Randall Peacock. The company was structured



so we could support our art studios by being set designers for commercial fashion and film. Over the years I could no longer differentiate between these two fields, as these began to blend and meld together. I currently have my own company and work as a Commercial Film Production Designer and Art Director. I'm responsible for designing sets, choosing film locations, suggesting creative means for shooting, or designing props for special effects. It's a fun job! It's a management job but it's also a design job. I am represented by an agency in Los Angeles and travel between the coasts on film projects. Recently in the past two years, I have art directed Sacha Barron Cohen's recent film, "The Dictator," had eight

of my sculptures exhibited in the new "Amazing Spiderman" film to be released this year, and have production designed a dozen television commercials for major clients including Google, Sony, and Mercedes.

TCP: Are there any other career experiences you would like to highlight to students?

JL: I have found being a production designer to be a dream job, and never knew such a position existed when I was a student. It's the perfect fusion of Cooper's three schools: Art, Architecture, and Engineering. I would strongly recommend Cooper students

look at the film and media industry with open eyes and hearts because there are some very exciting opportunities there.

TCP: What advice would you give to current Cooper students, specifically art students?

JL: I would strongly emphasize the importance of maintaining the communal bond that Cooper fosters. I found my greatest assets to be my fellow students – when banded together as a working team we accomplished so much more. I would also advise students to seek out alumni for work advice and opportunities.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

JL: I hope Cooper can remain a meritocracy and maintain its standard of excellence as it makes the regrettable transition from charitable institution of higher learning into an institution for profit. I hope finding students of means won't pollute the students. But the teachers are great here. I hope the unique boutique quality will keep it special. The art school will always stand alone – it's not dependent on technology as the others so it's more theory based. That's intellectual property that can't be purchased.

LUIS VASQUEZ (ME '06)

Saimon Sharif (ChE '15)

This interview was conducted in Summer 2013.

The Cooper Pioneer: What is your favorite memory about Cooper?
Luis Vasquez: Definitely the late night study sessions, you were tired and at times frustrated, but it was a great feeling knowing that you were not alone, that many others were there also in the same battle. It also helped that if you didn't know something, some else in the group did know it. It also helped that Ray's was opened 24/7 for late night pizza runs.

TCP: Do you still speak to your classmates?

LV: I speak to only a handful of classmates on a regular basis, the ones that I was closest to during Cooper. I'm pretty sure though, that I'm friends with most of my classmates on Facebook.

TCP: What was your first job out of Cooper?

LV: That would be Energizer as a Mechanical Engineer. I met them at a career fair in Columbia, they later flew me to Ohio to interview. They had me in a special two year program for engineers. In those two years, I got to work in their various manufacturing plants in Missouri, Vermont and finally

Ohio. The Missouri plant has since then closed.

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

LV: I'm currently working at Bloomberg LP as a software developer. I work in the Trading Solutions Branch of R&D. We develop the software for Sell side companies to carry out their day-to-day trading, including Profit & Loss, 7 year trade history, compliance, and analytics.

TCP: Are there any other career experiences you would like to highlight to students? E.g. Did you change fields? LV: I did change fields actually. I got both my undergrad and masters degree at Cooper in Mechanical Engineering. I even worked 2 years as a mechanical engineer before going back for my masters. I always liked software, so while getting my masters degree, I took many courses (under Carl Sable) to better learn programming. Next thing I know I'm interviewing for a software developer position at Bloomberg and I was made an offer.

TCP: What mechanical engineering project are you most proud of? **LV:** Definitely most proud of my Master's thesis project: A Parallel Hexapod Digitizer. Our intended application was



for use during minimally invasive knee surgery. It pushed me to learn many things outside of my field.

TCP: What advice would you give to current Cooper students, specifically engineering students?

LV: I would advise that you get out there and start working as soon as possible. If you can get an internship while at Cooper, go for it. If not, I recommend you join the workforce after undergrad and get exposure into the field you have been studying for the past 4 years (hopefully just 4!). This will give you better perspective outside of the

classroom. Ideally you'll discover that you love your field and then you're welcome to pursue higher learning, if not, you now have the chance to switch gears and find your calling.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

LV: I have hope that Cooper will continue to be a school attracting top talent, continue to be a major NYC educational landmark, but most importantly that we move pass this turbulent time period. Cooper is supposed to be a community to harness outstanding students. The current state of affairs threatens that

environment. The students shouldn't have to feel defensive against Cooper administration, this gives us bad press and doesn't help with donations. I'm grateful for all the work on behalf of students and the administration and hope we move pass this soon and continue to drive Cooper forward.

LYNN CUSACK (ChE '04)

Caroline Yu (EE '15)

This interview was completed Summer 2013.

The Cooper Pioneer: What clubs or groups did you enjoy the most during your time at Cooper?

Lynn Cusack: That is a tough question! I have many fond memories of clubs and sports at Cooper, and I made a lot of friends through these organizations. If I had to pick just one it would be the Swing Dancing club - it's where I met my husband for the first time! I joined as a freshman and was an active member for 4 years - to this day my husband and I still like to show off our dancing skills when we get the opportunity.

TCP: What is your favorite memory of Cooper?

LC: Now this one is easy - the people. Not only did I meet my husband at Cooper, but I made lasting friendships with some really great people.

TCP: What specific aspect of Cooper has influenced you the most during your career?

LC: While a strong core foundation in math and engineering has been important in my fundamental understanding of how chemical manufacturing processes work, another equally important skill I honed at Cooper was how to manage a tremendous amount of activity and how to prioritize when it can't all be done.

TCP: Do you still speak to your classmates?

LC: Yes I do. I still regularly see a handful of classmates and I use Facebook to keep in touch with many more people. I know Facebook can seem a bit impersonal but I have actually found it to be a great way to hear about things like new jobs, weddings, children, etc., and it makes me feel good to see my friends doing well, even if we haven't seen each other in a long time.

TCP: What was your first job out of Cooper?

LC: Immediately after graduation I started working at Infineum, a petroleum additives company that formulates, manufactures, and markets additives for lubricants and fuels. In layman's terms, we design and manufacture the 'active ingredient' in products like motor oils, and we formulate and test fully finished oils that will ultimately be sold by our customers on the shelf to consumers like you and me. Infineum is a joint venture of ExxonMobil and Shell with local facilities in Linden, NJ, which is where I am located. My first assignment was in the Manufacturing Technology organization where I was responsible for supporting manufacturing processes in the US and in Italy. I also worked with our Technology organization on new product development, in particular scale-up design and experimentation. My primary role was in the office but I was frequently in the laboratory and pilot plant. In 2007, I transferred into the Bayway Chemical Plant where I began as a process engineer and then became an operations supervisor and



member of the plant leadership team. This was a tremendously challenging job and though it was quite difficult, I will carry the experience and learnings with me for the rest of my career.

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

LC: In 2012, I transferred into Infineum's Technology department where I now work directly with our customers on applications for passenger car and heavy-duty diesel engines. The additives industry is highly specialized and obtaining approval for products requires careful planning, execution, and documentation of expensive test programs. I am responsible to work with our customers to understand their specific product requirements and then design and test a product to meet those needs. The scope can include computer

modeling, laboratory experiments, and specific engine testing where we actually run a fired engine at a third party lab under specific conditions to test the performance of the product.

TCP: Which chemical engineering project are you most proud of? LC: When I was a supervisor at the plant we had been struggling with a filtration issue on one of the manufacturing units. The work-arounds that were implemented to ensure good product quality were onerous and expensive, and I made a strong case to install a new filtration unit. It took a team of people more than 2 years of design, planning, and execution, and in May of 2012 we successfully started up our new filter. The people who worked on the project were incredibly talented and dedicated, and I will always remember this project with a smile as I recall the look of pride on everyone's faces the day we declared victory.

TCP: Which non-technical project or event are you most proud of? **LC:** I have been an active volunteer for many years and have been involved with various organizations including Habitat for Humanity, United Way, YWCA, Red Cross, and the Wounded Warrior Project.

TCP: What advice would you give to current Cooper students, specifically engineering students?

LC: There are several engineering schools in and around NYC. While Cooper offers an outstanding education, relevant work experience is a very heavy factor in many company recruitment programs. I have been a recruiter for nearly 10 years and in general Cooper students have been defensive on work experience, but I am happy to say that in recent years the gap has been closing. I hope to see the trend continue! I realize it is not as easy to obtain work experience when there is no formal co-op program at Cooper,

but the importance of this experience is well worth the effort. Also, there is a growing community of alumni looking to help. If students aren't sure about what they want for the future, try approaching the alumni association, or see if your professional society has contacts. I remember hosting both formal and informal events where alumni were invited to talk about their career paths since leaving Cooper and in general these events went over well with students.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

LC: Like everyone I am hopeful that the school returns to its tuition-free model. I also want to see Cooper Union remaining as the benchmark school in art, architecture, and engineering; I never want to see the quality of education at the institution compromised.

MARTIN FINIO (ARCH '88) Caroline Yu (EE '15)

This interview was completed Fall 2013.

The Cooper Union: What club or group did you enjoy the most during your time at Cooper?

Martin Finio: I didn't belong to any clubs or groups during my time at Cooper. I don't remember them being a big part of the architecture school culture, which, being so small and intimiate, felt like its own club to me. I do remember, however, joining a swim team training class at NYU's Coles gym at the urging of two other classmates. It was VERY early in the morning, and VERY intense. I thought it would kill me, but in fact it was probably the best antidote to the mental intensity of the studio.

TCP: What is your favorite memory of Cooper?

MF: It was such an important and formative time for me...there are many

powerful memories, most of them revolving around late night charrettes in the studio with classmates. But perhaps one of my most favorites is also one of the earliest. Coming to New York as a 17-year-old kid from the suburbs was indelible enough, but I also remember being invited to a party that first week of school by some upperclassmen. The conversations I had with them that night gave me a palpable sense of belonging, and a feeling that I was in exactly the right place.

TCP: What specific aspect of Cooper has influenced you the most during your career?

MF: I think the idea that architecture is, first and foremost, a discipline as opposed to a profession, has been the greatest continual influence. While I don't pretend to be operating outside the profession (and in face I embrace it)

I still approach our work with that frame of mind.

TCP: Do you still speak to your classmates?

MF: To a handful, but not on a terribly regular basis. I do have continued relationships with several faculty members. A year or so after graduating, I worked in the office of Tod Williams and Billie Tsien, both of whom were part of my second year faculty. I stayed there for almost ten years, which was the single most important experience for me after Cooper. My relationship with them remains strong. And, come to think of it, I was just invited by a classmate to California to consultant on a large project she is overseeing as part of a non-profit she heads. I'll be heading out there shortly.

TCP: What was your first job out of

Cooper?

MF: My first job, which was self-created, was to rip the aluminum siding off my parent's house and replace it with cedar. That, and several other building and renovation projects over that summer helped demystify the construction process for me. After that, a classmate told me there was an opening in the small firm he was working in and urged me to join him. We worked on cinema designs throughout New York City (the Village East Cinema among them). After a year or so of that I approached Tod and Billie, and the rest, as they say, is history...

TCP: Can you describe your current jobs? What is the theme of your current work?

MF: My wife and I founded our firm about 14 years ago, immediately after I left Tod and Billie's office (actually, I was moonlighting long before I left their office, but they probably won't appreciate hearing that...). We have intentionally maintained a wide range of work, with a special interest in work involving the arts. One of our current

projects is masterplanning the campus of Bennington College, which will include the design of a new building. [Also,] the exhibition design of a large show at the Philadelphia Museum on the work of Fernand Leger, and a new preschool building in Williamsburg, Brooklyn.

TCP: Can you describe your professorships? What do you like about critiquing students?

MF: Teaching is an indispensable aspect of my life. I've been a critic at Yale's Graduate School of Architecture for as long as I've had my firm, and both feed each other in uncountable ways. It's taken me many, many years to feel like I know anything about teaching, but all the clichés apply: it's far more difficult (and in turn rewarding) than it looks, and the best teachers, in my opinion, are those that still consider themselves students of their discipline.

TCP: What advice would you give to current Cooper students, specifically architecture students?

MF: Unlike many other careers, architecture's is a slow trajectory. Patience is therefore an important

virtue.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

MF: Of course I hope, in the short run, that Cooper gets its financial house in order. I hope that the current decision to charge partial tuition is designed as a temporary measure, implemented as a part of a larger strategy that will rebalance the school's operating budget and return it to a full scholarship program within a reasonable timeframe. It's saddening to know that the energy and focus of the school has been derailed from its educational mission while it confronts its fiscal woes. I also hope, however, that Cooper's reputation does not rest solely on its being "free." I'd like to think that, even if that aspect somehow disastrously vanished, Cooper would still be held in the highest regard for the education it provides its students. This is not in any way to say I would promote anything other than a full scholarship institution, only that I hope the school keeps its focus on its academic stature and excellence in the 21st century.

MONICA ARBOLEDA-PENA (ChE '94)

Saimon Sharif (ChE '15)

This interview was completed in Fall 2013.

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

Monica Arboleda-Pena: While going to Cooper Union I belonged to several organizations including AIChE, SWE, SHPE and ΔH , the only sorority in the school at the time.

TCP: What is your favorite memory about Cooper?

MA: I meet my best friends while going to Cooper. Maybe it was all the hard work and effort that we put into "surviving" Cooper Union that brought us together. We still keep in touch and we are a very important part of each

other's lives.

TCP: What specific aspect of Cooper influenced you the most?

MA: I truly think that my experience at Cooper Union greatly shaped the person that I became as an adult. I thought Cooper was a great equalizer and those who make it do it by their own effort. Also, the fact that the great city of New York is your campus had an amazing influence in what I like and appreciate about all the places I have lived in ever since.

TCP: Do you still speak to your classmates?

MA: Yes. I keep in touch with several of them.

TCP: What was your first job out of Cooper?

MA: I went to work for ExxonMobil and, almost 19 years later, I am still happily working for them.

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

MA: Unlike most of my classmates, I am still doing engineering. I am a technology expert and I provide technical assistance to affiliates and licensees all over.

TCP: Are there any other career experiences you would like to highlight to students? E.g. Did you change fields? **MA:** I work for a very large company and have been able to have many different

"careers" without leaving the company. I have moved nine times in the time I have worked for them living on all three coasts (New Jersey, Virginia, Louisiana and California) and on either side of the Canadian border (Alberta and Montana). Between the moves and travelling for work I have been privileged to experience different cultures and parts of the world. I basically get to start new every time I move, but I also get to build on the prior experiences. There has been little chance to be bored.

TCP: What chemical engineering project are you most proud of?

MA: I have been fortunate to be able to see projects from conception to deployment. There are a couple of reactors out there that I saw on paper first and then got the pleasure to startup.

TCP: What advice would you give to current Cooper students, specifically engineering students?

MA: I think the best advice I ever got in

that sense was: Find something to work on that you enjoy and that is worth your time and effort. The money will follow.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

MA: My biggest hope for the school at this point is that it goes back to being free as air and water, like Peter Cooper intended. I'm afraid there are too many downfalls as a result of the tuition charge.

OLIVIER COQUILLO (CE '09, MCE '10)

Saimon Sharif (ChE '15)

This interview was completed in Fall 2013.

My name is Olivier Coquillo. I was born and raised in Haiti, and I came to the United States in August 2004 after graduating from high school. I spent two years in Florida before moving to New York in order to attend Cooper Union.

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

Olivier Coquillo: I started attending Cooper in August 2006 as a transfer student from Santa Fe Community College (Gainesville, FL), and I was considered to be a sophomore. During my first semester at Cooper, I founded the Cooper Union Finance Association (CUFA), which allowed me to lead a group of more than twenty students interested in finance. Our mission was to bridge the gap between an engineering education and the finance profession. We were able to reach out to Cooper alumni working in the finance industry, and we organized a couple of very successful events with guest speakers from JP Morgan, Lehman Brothers, Goldman Sachs, Citigroup, Acadian Asset Management, and other financial institutions. I enjoyed my experience with CUFA because it allowed me to grow my network within the financial industry in which I started developing a strong interest as soon as I moved

to New York. I also enjoyed being the president of a club and working with other smart students on common goals. Unfortunately, the 2008 financial crisis put an end to my CUFA experience. When people within my network started losing their job, I heard my inner voice saying "hum...maybe you should stick to engineering."

TCP: What is your favorite memory about Cooper?

OC: My favorite memory is my reaction when I was rejected the first time I applied to Cooper in 2005. I was attending a community college in Florida, and I had a 4.0 GPA. I decided to transfer to Cooper, because my career goals required a solid educational background and it was a great opportunity for me - an international student - to receive free engineering education from one of the top schools in the United States. I also thought that my chances to get admitted were high, since one of my former high school classmates was already attending Cooper. When I received my rejection letter in the mail, I was very disappointed, but ... I did not give up. On that same day, I made the decision to apply for the next academic year. This motivated me to work harder on my weaknesses and maintain my 4.0 GPA. I was the happiest man on earth when I received a different kind of letter in the mail the following year; I was very proud of myself. My rejection in 2005



followed by my admission to Cooper in 2006 taught me a lesson that I applied as a college student and that I continue to apply to my personal and professional life: your reaction to an event that is not in line with your goals will always determine how far you will move forward.

TCP: What specific aspect of Cooper influenced you the most? **OC:** My admission to a prestigious engineering school and my full-tuition scholarship influenced me the most. I am very grateful to have been given the opportunity to become a member of the Cooper family. Our life purpose

as human beings is to become the best version of ourselves and serve others. When I was admitted to Cooper, it was as if I was offered a second chance to continue to fulfill my life purpose. My home country, Haiti, has been giving birth to many smart and talented children, but unfortunately the educational system does not respond very well to their educational needs before, through, and after high school. On the other hand, there are great college programs in Haiti, but not nearly enough, considering the number of high school students who graduate every year. If all Haitian students, regardless of their career choices, decided to stay in Haiti after high school, some of them would have to settle for less than they truly deserve. I was fortunate enough to be able to attend one of the top high schools in Haiti. During my senior year - a year of extreme political instability - my class was asked by one of our teachers to take a few minutes to reflect on our career goals in relation to the recent political changes and write down our five-to-ten-year plans. I had always wanted to be a doctor, but when I was asked to think about where and who I wanted to be five to ten years down the road, there was a problem. I wanted to be a surgeon, but I was not comfortable with other people's blood and especially the blood of people who are close to me. Therefore when I was confronted with this simple question, I experienced some kind of an epiphany. It would be difficult for me to become a successful surgeon if I couldn't work around blood. And since I was always interested in infrastructure work and always intrigued by other nations' capability to build magnificent buildings, bridges, tunnels, and roads, the construction industry was very appealing. My thought was "if they can do it, I can do it too." However, if I wanted to be successful in the construction industry, I needed a strong educational background - the kind of education that schools in the US were offering. This is why my admission to Cooper was a gift, and I had to take advantage of that opportunity to the fullest. Failure was not an option; I could not even think about having a thought about failing. I was like a machine programmed to succeed, and this fact

was tested many times. I remember spending long hours without eating, because I was too busy with classes and school work. There were days when I didn't know if it was sunny, raining, or snowing outside, because I would get in the engineering building before 7am and get out after 11pm. I also remember sitting in one of the computer labs working on a project for hours and getting up to go use the men's room, but I ended up on the downtown 6 train on my way home; I was so tired that my brain had given up.

Every day that I walked on the floor of the Albert Nerken School of Engineering, I kept reminding myself that only a few are given that opportunity and that I had to do whatever I needed to do to succeed.

TCP: Did you pursue any post-graduate degrees?

OC: Yes I did. After graduating with my Bachelor's Degree in 2009, I stayed at Cooper to complete my Master's Degree in civil engineering. But I have to say that this choice was based more on circumstances than personal interests. Before the 2008 financial crisis, I had the opportunity to go to three career fairs that Cooper organized in Fall 2006, Spring 2007, and Fall 2007. I remember hearing senior students saying that they did not know what company they wanted to join, because they had multiple choices. My experience was different as a senior during the 08-09 academic year. It was very frustrating for me to attend career fairs where the majority of the construction companies were not offering full-time positions at that moment. When I graduated in May 2009, I had gone to a few interviews with no full-time offer. I started looking for a job instead of looking for the best opportunity to launch my professional career. Eventually, I chose to stay at Cooper instead of settling for less than I deserved, and I am happy that my old self made that decision. Today, I am proud of my accomplishment and especially of my successful completion of my Master's thesis on seismic engineering in Haiti. I am currently considering pursuing a Master's Degree in business administration, because I

feel that an MBA will set me up for a greater position in the construction management world.

Students who are wondering if they should attend a post-graduate school right after their undergraduate studies should take a closer look at their career goals. I knew that I would prefer joining a construction management firm over a design firm before I graduated from Cooper in 2009, but there is something I did not know about a Master's Degree in civil engineering. The sad but honest truth about my Master's Degree in civil engineering is that it has been almost useless to me in the construction management world.

TCP: Do you still speak to your classmates?

OC: I do speak to my former Cooper classmates when I see them. Most of them are my Facebook friends, and we are also connected on LinkedIn. Unfortunately, I was not able to develop a strong friendship with any of my classmates. It was no one's fault, and if you think about it, we are all part of the same Cooper family. If I had to do it again, I would probably do a better job at connecting with some of my classmates on a personal level. I underestimated the power of networking when I was a college student. I reached out to Cooper alumni with CUFA (See Question 1), but my thoughts on the importance of networking were limited. When I was a college student, I was not totally convinced that "who you know" was sometimes more valuable than "what you know". This does not mean that you should not value a strong educational background. It simply means that a strong educational background is not enough after graduation. When you graduate from Cooper, you will start seeing that the smartest people are not always the one on top of the hierarchy of an organization. In fact, the smartest people usually work for the person who mastered the laws of professional relationships. I hope Cooper students get to learn that lesson or at least experience it through internships before they graduate. No one should turn down great opportunities to network with people who are in positions where you want to be or people who

are doing things that you want to do. Academic success is great, but beyond the great walls of Cooper Union, there is something called experience on which people put a higher price. And very often, it is "who you know" that will allow you to gain that experience.

TCP: What was your first job out of Cooper?

OC: I completed my Master's Degree in December 2010, and I was hired by a world leading construction and development company in March 2011. My first task was to help a project manager in Elizabeth, NJ to get ready to mobilize in Albany, NY for the construction of a new business school. A few months later, I transferred to Manhattan to work on the renovation of the United Nation headquarters until December 2012.

TCP: Can you describe your current job, company, and field?

OC: I relocated to California in January 2013 to work on the Silicon Valley Berryessa Extension project, which is

a ten-mile extension of the BART line from Fremont to San Jose. The project includes the construction of two stations, one in Milpitas and the other in San Jose. Since I joined the group in January, I have had several roles, and one the most rewarding experiences was managing the 2013 summer internship program. Substantial completion is scheduled for 2016, and I look forward to continuing to enjoy this great learning experience every single day.

TCP: Are there any other career experiences you would like to highlight to students?

OC: I would like to talk about one thing that I realized when I left Cooper. When you are a college student, there are many things that you can do so that your future professional self can thank you. I wish I had spent more time on improving my AutoCAD and my Google SketchUp skills. I also wish that I had invested more time in learning how to read construction drawings: architectural, civil, utility, electrical,

mechanical, structural plans and more. It is unfortunate that learning how to design and read construction drawings is still not a requirement for many civil engineering programs across the United States. Moreover, students at Cooper should focus more on developing their soft skills than I did when I was a student. Your communication skills for instance can make a huge difference in your career. Even your ability to write short, clear, and to-the-point email messages will set you apart from others who write confusing or unnecessary emails that get you nowhere. In addition, it is very important to maintain a positive attitude when you launch your professional career. I wish someone had taught me how to be more patient and be able to identify learning opportunities in everything that I do, from the most boring and tedious task to the most significant role of my career. Your learning experience obviously does not stop after Cooper. When you are no longer a Cooper student, you continue to be a student of life.

RICHARD VELAZQUEZ (ME '94)

Caroline Yu (EE '15)

This interview was completed in Summer 2013.

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

Richard Velazquez: I was involved primarily with 4 clubs at Cooper -AIAA ASME, SAE, and SHPE (Society of Hispanic Professional Engineers). I was the President of SAE during my senior and graduate year and a founding member of SHPE. It's difficult to choose between SAE and SHPE. With SAE, my classmate and I were the first entry for Cooper Union in an SAE competition back in 1994, which was a great experience on multiple levels. SHPE was like a family and both organizations helped me land my first job with Honda - SAE by providing the experience of designing and building a vehicle, and

SHPE by bringing in so many great companies to their annual conference to meeting with Engineering students. This is where I first met the Honda recruiters that I later interviewed with and accepted a position as an automotive body design engineer.

TCP: What is your favorite memory of Cooper?

RV: I have a lot of great memories of Cooper; from pulling all-nighters and disguising the lab to look unoccupied so security wouldn't kick us out at 3am to our annual egg drop competitions from the Foundation building. My favorite memory of Cooper Union would have to be related to the SAE Mini-Baja entry. I recall preparing a proposal for Dean Baum to fund Cooper Union's first actual entry into the competition. A team had tried to enter the previous year but failed to produce any results,

so the Dean was hesitant. During my meeting with her, she interrupted my presentation and simply asked me, "Can you do this?" I replied in the affirmative, and she gave me approval to spend \$2,000 on the spot. I partnered with my friend and classmate George to design and build this vehicle, and I spent countless hours in the basement of the then Hewitt building (in the corner of a little used gym) cutting and welding, eventually moving to the art building to finish the construction of Cooper's first SAE vehicle. The two of us went to Canada to race with the help of my brother, Jiovanie, and friend, Abdel and were blown away by teams of 20 or more students with custom trailers and professional racing equipment. In the end, it was an experience I'll never forget (and one that helped me land my first post-college job).

TCP: What specific aspect of Cooper has influenced you the most during your career?

RV: The late Prof. Hollenberg taught us not only to be conscientious and thorough in our work, but also emphasized the presentation of our work to a larger audience. Throughout my career I've seen that no matter how great your work is, if few people see it or are exposed to it, the impact will be small or non-existent. His guidance on presentations helped me at Cooper win a competition for the ASME Old Guard Competition as well as throughout my career in countless presentations.

TCP: Do you still speak to your classmates?

RV: Yes, some of them. I made a long-term friend at the Cooper Union whom I had maintained contact with for many years. Reconnecting with my former Cooper Union classmates has become easier through Facebook and LinkedIn. It's great to see all the different paths everyone has taken since the good ol' days at Cooper.

TCP: Why did you choose to pursue a Master's degree in a different field? RV: After 7 years of being an automotive design engineer, it was time to take the next step in my career. I wanted to focus on the front end of the new product development process, being the person who came up with the ideas and strategies for the product, instead of the engineer responsible for bringing the vision to reality. I also wanted to switch out of the automotive industry with the hopes of getting into the video game industry, ultimately pursuing a management track into the executive ranks versus a technical track. I felt the best way to accomplish my goals was to obtain an MBA.

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

RV: I'm the Sr. Director for Global Innovations at PepsiCo focused on technology and marketing equipment. Within the Marketing Equipment Innovations group, I drive technology innovations and product roadmaps for two of our three equipment platforms and form strategic partnerships with

other technology companies to leverage new and emerging technologies in our designs. The ultimate goal is to make equipment that is engaging for consumers and helps build stronger connections with our many brands. I lead a team of program managers along with cross-functional groups in marketing, engineering, design, finance, and legal to bring to market several key initiatives, including the Pepsi Interactive Vending machine (www. pepsiinteractivevending.com) and Pepsi Digital Smart Cooler. This is a relatively new division at PepsiCo and they recruited me through LinkedIn based on my experience driving Global Product Planning for the Xbox 360 team at Microsoft. In addition to bringing these products to market, I've created programs to feed our innovation pipelines including a summer internship program focused on creating new experiences for our digital platforms, a partnership with Tec de Monterrey in Mexico for developing new industrial design concepts, sponsoring a case competition through NSHMBA for developing innovative monetization strategies, and much more. I also serve as an Executive Advisor for our Hispanic Employee resources group, and regularly speak at several colleges and universities on career development, marketing, and new product development.

TCP: What mechanical engineering project are you most proud of? What non-technical project are you most proud of?

RV: On the technical side, I'm most proud of my design work on the Porsche Cayenne during my time in Germany. This was Porsche's entry into the SUV market and the body designs were used on two platforms; the Cayenne and the Volkswagen Touareg. This also led to my first feature in a publication, as a newspaper in Puerto Rico discovered I was the first Puerto Rican to have worked on the design of a Porsche and sent a correspondent to interview me regarding my design work for the company. Cayenne and Touareg were both very successful new vehicle launches.

The non-technical project I'm most

proud of is the Seattle Chapter of NSHMBA (National Society of Hispanic MBAs), which I co-founded in 2005 and served as President for four years until returning to New York in 2011. Not only did I help establish a successful chapter of this national organization, but I learned a great deal about being a leader and running an organization along the way. I was able to grow our Board of Directors and volunteer base from only 4 individuals to 34 by the time I left, established the largest diversity recruiting event on Microsoft's campus, built strong partnerships with local organizations and government, and much more. My work was recognized with a Puget Sound Business Journal 40 under 40 award and the NSHMBA Brillante award - the highest recognition the organization bestows. Most of all, I formed strong bonds and relationships with leaders in business, the community, and educational institutions that form some of my strongest networks.

TCP: What advice would you give to current Cooper students, specifically engineering students?

RV: My one piece of advice would be to develop your "soft" skills along with your technical skills. This is something that I didn't really do until later in my career at my detriment. For better or worse, it's not always the smartest, hardest working, or most technically proficient person that gets ahead in the workplace. The relationships you form, the networks you build, the way you interact with people, and your ability to connect and communicate with others is almost as important as your technical proficiency, especially as you start advancing in your career. This was a tough lesson for me to learn since idealistically I felt that the workplace should be a true meritocracy, but after working at six separate major corporations, this realization is nearly universal. The best leaders and the best managers are not necessarily the smartest people in the room and a lot of times, they don't have to be.

TCP: What hopes do you have for Cooper over the next ten years, and beyond?

RV: My main hope for Cooper Union over the next ten years is that it will return

to Peter Cooper's vision that "Education should be free as air and water". Speaking from personal experience, my family did not have the money to send me to college, and despite having worked all throughout high school, I certainly didn't have enough saved to pay for an education equivalent to what Cooper Union provided me. My time at Cooper set the stage for my entire career, and I'm certain that my life trajectory would have been significantly altered (and not in a positive way) had I not been provided this free education. Beyond that, I would hope for the continued progress Cooper has made in providing lab space and practical experience to students to complement their theoretical studies. I've been impressed with the progress the Cooper Union SAE motorsports team has made since my first entry for Cooper Union in an SAE Collegiate competition back in 1994. That experience was critical in obtaining my first job offer postgraduation, and an area I hope the school continues to build and develop. Finally, I hope that the career and/ or marketing departments continue outreach to prospective organizations interested in hiring talented students. Within a few months of starting at PepsiCo, I was surprised to learn from a colleague in the engineering group that he flies to Chicago to recruit engineers. I asked him if he recruits at the Cooper Union, at which point he said he never heard of the school. Since then, I've informed our talent acquisition and engineering teams about opportunities

for recruiting from Cooper Union. I've also created several internship positions and have hired four Cooper students for those slots. However, we can't solely rely on alumnae within an organization to bring recognition and awareness of Cooper Union, so a concerted effort to target and promote the school at key placement locations seems to be a great opportunity over the next few years.

References:

Here are a couple of posts I wrote a while back on the SAE competition http://richardvelazquez.wordpress.com/2011/02/08/1994-sae-mini-baja-east-competition-from-cooper-union/http://richardvelazquez.wordpress.com/2011/02/15/1994-sae-mini-baja-east-in-quebec-canada/

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LETTER FROM THE EDITOR

I know it's been a hard year and strange year for all of us at Cooper Union. We're in a limbo of sorts, a year before tuition has been instated and a year after its been announced, hence the title "Year Zero". I'm not one for naïve optimism, but I truly believe in Cooper Union. In the words of James Stockdale, "You must never confuse faith that you will prevail in the end – which you can never afford to lose – with the discipline to confront the most brutal facts of your current reality, whatever they might be."

I am proud to announce Chae Jeong (ChE '16) will be Assistant Editor-in-Chief next year, and Editor-in-Chief the year after. *The Pioneer* will continue to serve as a neutral, transparent, and accurate record of the news in our community as we navigate the year ahead of us.

Saimon Sharif Editor-in-Chief

