

ATCOOPER

SUMMER/FALL 2020 THE COOPER UNION FOR THE ADVANCEMENT OF SCIENCE AND ART

“The piece was made to demonstrate the strength and determination that the Class of '24 has to create artwork and collaborate across the distance that currently separates us. Instead of highlighting an individual, like a typical college commitment post, the goal of this work was to show a united trio of artists, each as important as the other in accomplishing unified goals. For me, this piece is a clear declaration of my intent to not only overcome but also to harness the unique challenges that we now face and create engaging work.”

—Clyde Nichols, Class of 2024, School of Art



PERSISTENCE

The image on the front cover came to our attention via Instagram in May, when Clyde Nichols, an incoming first-year student in the School of Art, first posted it as his “I’m going to Cooper Union!” announcement. He provided the text in a subsequent email explaining the intent of the work. The other two students, Anahita Sukhija and Innua Anna Maria (seated) are also incoming School of Art first-years. Clyde’s work exemplifies the Cooper spirit of surpassing limitations by bringing determined, creative individuals together, whether physically or metaphorically, to build something bigger than themselves.

This issue of *At Cooper* aims to capture that same spirit as it has played out during one of the most extraordinary periods in the 161-year history of The Cooper Union for the Advancement of Science and Art. In March, of course, the entire campus shut down—a Cooper first—due to COVID-19. Even during the pandemic of 1918, Cooper Union did not close its doors since that virus had no asymptomatic carriers. Symptoms developed within 24 hours of catching the “Spanish flu,” so if you were well enough to walk to class (wearing a mask, then as now), you were non-contagious. Fast forward 102 years, and this time the campus community dwindled from some 1,300 individuals to being all but empty. On average, only 15 critical employees remained on campus by the third week in March. Studios left behind for spring break remained in stasis for months. Labs were hastily packed. The Residence Hall went from 158 students to just 12. The Great Hall, a locus for information, organization, and comfort during countless public crises, stood empty. And yet, The Cooper Union was not closed. Classes continued, and so did our work, research, art, public programs, collaboration, and education. The Class of 2020 continued on to its graduation day on May 27. This was celebrated not by a commencement ceremony (that was postponed until all can safely gather again) but instead through a video tribute released at the same moment that our traditional commencement would have begun.

Around the same time, an urgent demand for social and racial justice resurged, sparked by the killing of George Floyd and many other Black people by police. At The Cooper Union, a day of reflection was called. Town hall meetings were convened, and a process of examining and implementing policies, pedagogy, and institutional structure to support racial equity began to take shape.

Meanwhile, The Cooper Union faced a significant projected budget gap for the fiscal year as a result of the public health crisis. Though the institution met its FY 2020 budget, the pandemic introduced major obstacles to building financial support.

At Cooper | Vol. XLX, No. 1, Summer/Fall 2020 | Published by the Office of Communications | 41 Cooper Square, New York, NY 10003

Matthew Bower | Communications Specialist | matthew.bower@cooper.edu

Mindy Lang | Creative Director | mindy.lang@cooper.edu

Andrew Arnold | Managing Editor | andrew.arnold@cooper.edu

Angela Starita | Senior Writer | angela.starita@cooper.edu

Kim Newman | Media Relations Manager | kim.newman@cooper.edu

On the cover: The Cooper Union, Class of 2024, Clyde Nichols A'24. (From l): Clyde Nichols, Anahita Sukhija, and Innua Anna Maria, the School of Art

& RESILIENCE

Aside from the usual fundraising avenues, including the donation envelope you find in this magazine, a first-ever “Concert for Cooper” was presented in August. Before the pandemic, planning for a new, annual gala event had begun. As with everything else, that plan changed dramatically and a virtual benefit featuring celebrity musicians and actors as well as alumni and students raised more than \$400,000. (Watch on [youtube.com/cooperunion](https://www.youtube.com/cooperunion).)

Despite the challenges, The Cooper Union enters the 2020-21 academic year having held tuition flat for the second, consecutive year and providing scholarships that combined with other financial aid covers, on average, 78% of all undergraduate tuition. This year also marks the fourth in our 10-year plan to return to full-tuition scholarships for all undergraduates.

For Fall 2020, Cooper classes are online with labs and studios available in a limited capacity that allows for safe usage. Students who are attending remotely received project kits from their schools for certain classes to approximate the work more typically done in-situ. A full schedule of speakers and lectures has populated the fall calendar, and our incoming class of first-year students is as eager as their predecessors to make their mark, no matter and perhaps because of the circumstances.

The Cooper Union has long prided itself on fostering a sense of agency and collaboration amongst its students. From the looks of Clyde Nichols’ early contributions, that spirit is continuing to build unabated.



LEARNING INTO THE FUTURE

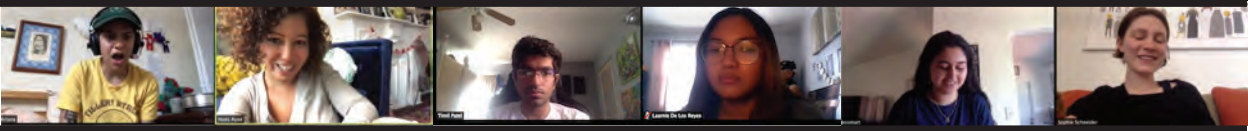

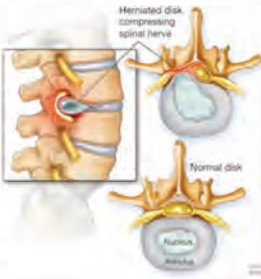
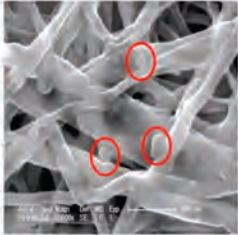
Courses *Biomedical*

- Materials Science for ChEs (sophomore)
- Biomaterials (undergraduate elective)
- Separation Process Principles (senior)
- Senior Lab II (senior)
- Polymer Technology and Engineering (graduate elective)
- Drug Formulation and Delivery (graduate elective)
- The Science and Art of Brewing (Independent Study)

Research *MT. Simui*

- Controlled drug release
 - Microsphere encapsulated biologics for spinal repair
- Electrospun polymeric biomaterials
 - Medical applications
 - Carbon capture
- CFD modeling of ORs for post-operative infection prevention

Smart Biomaterials



With courses remote, preparations for the fall semester at Cooper became a call to innovate

For many in higher education, the challenges of the COVID-19 shutdown have evolved from a crisis response into a set of creative constraints for approaching a new academic year. Following a swift pivot to all-online classes in the spring and then summer, the decision came in mid-June to pursue a mainly remote teaching mode for Fall 2020 while retaining some in-person access to studios and labs. To deliver on that plan, Cooper faculty and staff explored how to translate the institution's hands-on ethos to the limitations and possibilities of this changed learning environment.

Ruben Savizky ChE'98, Associate Dean for Academic Affairs, noted that many courses had to be "altered dramatically" to fit into a virtual format. It initially presented a great challenge to professors, who wanted to ensure academic rigor in the online setting. Yet, he said, "it was

actually very impressive how quickly faculty, students, and staff were able to accomplish this" even in the spring.

One department that took a proactive approach was chemical engineering. As early as April, Professor Daniel Lepek ChE'04 began reaching out to educators from schools around the world, sourcing advice and best practices for teaching engineering curricula remotely. Professor Jennifer Weiser found ways to extend digitally based practices she had already been using in the physical classroom.

Sharing knowledge across departments proved equally fruitful. Lisa Shay, Associate Dean of the Albert Nerken School of Engineering, led a series of spring workshops for instructors on educational pedagogy as it related to online learning. "These were quite well-attended and were really interactive," Professor Savizky said.

OF LEARNING

“Both full-time and adjunct instructors participated and were quite eager to exchange ideas of what worked (and what didn’t) in their online classrooms. The workshops were so popular and successful that we continued them throughout the summer.”

According to Savizky, many of the lessons learned last semester informed Fall courses. Barry Shoop, Dean of the School of Engineering, formed three ad hoc committees consisting of students, faculty, and staff to gather feedback on the spring experience and strategize how to move forward. Since mitigating COVID-19 remains a necessary priority, filling classrooms and labs to their normal capacity was not an option. As a result, the committees arrived at a flexible model: lecture classes would be online and a small number of project-based, lab, and capstone courses would take place in person with social distancing and safety protocols in place.

The School of Engineering also created project kits with funds from the IDC Foundation, called CU@Home, to support certain courses. According to Savizky, these included “course-specific materials that were carefully designed and assembled by Cooper Union faculty and staff members. In addition to providing students with the ability to do their project-based coursework at home, sending students these custom kits is unique and adds tremendous value to the online component of their education.”

The Irwin S. Chanin School of Architecture made similar adjustments since the spring. Dean Nader Tehrani commended faculty, staff, and students for “inventing an entirely new way of building a school together under the duress of separation and isolation.” Re-imagining the student experience meant engaging questions not only about teaching, but about space, collaboration, and architectural practice. In

What follows is a diary of the last several months at The Cooper Union, documenting announcements, decisions, and extraordinary responses to the pandemic from within our community.

March The first case of the novel coronavirus is reported in New York City on March 1, prompting the first campus-wide communications.

“As of now, we have made no changes to classes, activities, operations, and events on our campus. Our Safety Committee has approved a pandemic flu response plan and will continue to provide updates as information becomes available.”

—Safety Committee, March 2

“In times of fear, unfortunately some may act in discriminatory ways or treat people with less than the dignity that everyone deserves. Let us commit to fighting against this and to ensure that, together, we are acting with facts, are informed by science, and will redouble our efforts to ensure the dignity of everyone, regardless of race, ethnicity, sexual orientation, gender identity, religion, physical or mental ability, age, or health condition.” —Laura Sparks, president, The Cooper Union, March 2

“Our Information Technology Department is currently enabling an online platform to support online teaching, learning, and working should circumstances change that would affect ongoing operations on campus.”

—Safety Committee, March 10

“After weighing the facts and the input from many, we will adjust our academic schedule in the coming weeks to help prevent person-to-person transmission of the virus ... Monday, March 30—Online classes begin.”

—Laura Sparks, March 11

“The situation changes daily. Yesterday, NYC declared a local state of emergency ... We care deeply about the health of our students and employees. As a result, as an administration, we have decided to close our academic and administrative buildings beginning Saturday, March 14 ... and will move to a remote work environment ... ” —Laura Sparks, March 13

March 15 The Center for Disease Control recommends no gatherings of 50 or more people. New York City Mayor Bill de Blasio announces that public schools will close indefinitely, effective immediately.

some cases, the constraints of going online yielded surprising successes, including an extraordinary virtual End of Year Show. (See page 20 for full story and view the show at archeoyos2020.cooper.edu.) But it also meant relying heavily on digital tools and technologies over physical model-building and fabrication. “What we felt was really missing for our students was the studio and its impact on our pedagogy,” said Assistant Dean Hayley Eber AR’01. “For the Fall semester, acknowledging that studio culture is such a vital part of our pedagogy and community, we have opened the studio, with all the classrooms on the third floor as well as the Houghton Gallery, and therein spaced out the desks with respect to physical distancing protocols in order for students to engage their studio space for making and collaborative work.” First-year architecture students each received their own “Cooper Box” containing specialized materials, tools, and resources to support drawing, model building, and other hands-on work, whether on campus, at home, or anywhere around the globe.

A re-imagined End of Year Show was also presented by the School of Art, with student works showcased online through the end of the year. (See page 20 for story and view show at endofyearshow2020.cooper.edu.) Like the other two schools, the School of Art developed a set of kits to be mailed to students, giving classes a shared opportunity to work with provided materials and creative prompts set by instructors. “We learned that having a sense of flexibility and elasticity in a fluid and rapidly evolving scenario was the only way to make heads or tails of anything,” observed Adriana Farmiga A’96, Associate Dean of the School of Art. “Having a longer lead-up to the fall was welcome in the sense that we had more time to plan, even if the complexities of an unknown future added to our work on this.”

Going remote has in some sense perhaps benefited the institution’s mission of public engagement. At the outset of the closure, a group of faculty, students, and recent graduates collaborated to quickly switch the School of Art’s Intradisciplinary Seminar (IDS, funded by the Robert Lehman Foundation) to an online format,

which is continuing this fall. The course, co-taught by Omar Berrada and Leslie Hewitt A’00—who was recently named a 2020 Guggenheim Fellow—is a required class for art students, but also includes a series of talks open to the public. The IDS team made video recordings of the talks available for free on the school’s website, bringing a fascinating array of contemporary artists, critics, and thinkers to a wider audience.

Interdisciplinary initiatives across Cooper are finding novel ways to move forward as well. Thanks to a leadership gift from the IDC Foundation, the Art, Architecture, Construction, and Engineering (AACE) Lab, which launched in early 2020, is now expanding its advanced fabrication capabilities with a new second-phase facility. According to AACE Lab Director Harrison Tyler, technicians have been preparing innovative systems to enable students to make use of the facilities remotely or with limited low- and no-contact, in-person access. A virtual portal, for example, allows students to submit files to be laser-cut, 3D-printed, or fabricated on-site by staff members.

The lab’s staff is also compiling online course resources for teaching software and hardware workflows. “One of the biggest projects for the fall has been collaborating with faculty in the three schools to make sure that the AACE Lab works for them,” said Tyler.

Another Cooper-wide effort making gains this fall is a new type of course structure known as Vertically-Integrated Projects (VIP). Before the onset of COVID-19, The Cooper Union decided to join 36 schools around the world in offering VIP coursework, which is a concept pioneered by professors at Purdue University. The course, being taught online for now, allows students to participate in long-term projects with colleagues from other disciplines while applying theoretical knowledge to real-world problems.

“I tend to think that this situation should encourage us to do more project-based learning, not less, in order to enhance the sense of community and belonging through shared goals,” said Assistant Professor of Electrical Engineering Neveen Shlayan, who has spearheaded the VIP initiative at Cooper. “I believe the VIP program can make this possible by providing a platform

for students and faculty to discuss and find solutions to our rapidly changing landscape of real-life problems through projects that embody their complex and interdisciplinary nature.”

The pandemic hasn’t been the only catalyst of change in the last many months. Converging with all this curricular reinvention has also been a renewed awareness of the need to address racial inequalities within and beyond the classroom. As students voiced their concerns over the summer (see page 18), faculty and deans began critically re-examining how to strive to eradicate racism.

Each of the three schools, along with the Faculty of Humanities and Social Sciences, are now in the process of planning their own initiatives to engage faculty, students, staff, and alumni in ongoing dialogue about racial injustice, including holding regular town hall conversations throughout the semester, designing curricular workshops, and forming a student advisory committee to participate in the planning of Cooper’s public programs. In addition, work continued on decolonization, which is the process of deconstructing and reconstructing curricula to represent an inclusive, global perspective.

Students are leading on this front as well. As part of first-year orientation, the Black Student Union and the Cooper Climate Coalition, in collaboration with Assistant Dean Nada Ayad from the Faculty of Humanities and Social Sciences and various faculty members, launched a semester-long series of discussions centered on the theme of intersectional justice and how race, culture, class, and gender impact one’s risk of experiencing discrimination, prejudice, and oppression. The program, open to the entire community, also provides a monthly webinar featuring guest lecturers.

No doubt incoming and returning students face an unusual semester, but with this experimentation comes opportunities for learning, creating, and thinking in ways that would have been difficult to imagine just six months ago. And as much as having lab and studio access may be quintessentially Cooper, so is the spirit of inventiveness with which the community is forging ahead. ■

“I will ask all faculty to reconsider the expectations of their courses, recalibrating homework, rethinking dialogue, and reimagining creativity in the event that we do not have access to the shop and AACE Lab on the 4th floor, nor the computer lab on the 7th floor. Physical models of a certain size may become challenges to achieve, but paper models remain inexpensive and something that anyone, in any location, can build with very limited resources. How do we rethink scale and exploration under these new constraints? This stands to be a new design problem in itself.”

—Nader Tehrani, dean, The Irwin S. Chanin School of Architecture, March 16

“Since our last communication, we learned that, yesterday, a Visiting Professor tested positive for COVID-19. He was last on campus on Tuesday, March 10 and had no symptoms at that time. I am pleased to report that he is already feeling well and is following the mandatory protocol of self-isolating at his home. We have reached out to the Department of Health about this confirmation and, following their protocols, have separately contacted the students, faculty, and staff who we believe may have been in close contact with him.”

—Laura Sparks, March 16
Eventually this individual would fully recover. In time, other cases among those who worked or studied on campus would be diagnosed.

“It is with a heavy heart that we also must cancel the May Commencement ceremony in its traditional on-campus format, as well as the End of Year Show, Senior Shows and Exhibitions, and all other events planned through the spring semester. We are determined to still celebrate our students’ accomplishments, especially their fortitude during this unprecedented time, through alternative formats. I hope you will join me and participate in our future celebration of the Class of 2020, in whatever form it ultimately takes.”

—Laura Sparks, March 18

“Little did we realize that when we began the Microsoft Office 365 implementation in Spring 2019 that our most significant challenge would begin a year later. Starting with a single class test in late February, we faced the task of importing all of the enrollment data and completing the setup of all of the classes in Microsoft TEAMS [a video conferencing platform] in just two days. Coupled with that was reorganizing the IT team overnight: part-time staff became trainers, managers became schedulers, and everyone took on a new role. For two weeks we trained faculty every day and we went from less than 50 active TEAMS users to 1,285 active TEAMS users.”

—Robert Reinckens, chief technology officer, March 24

Lessons Learned

KIT NICHOLLS, DIRECTOR, CENTER FOR WRITING

When a student visits the Center for Writing the first time, there's sometimes a period of adjustment. A first one-on-one meeting might go something like this:

"I want you to check the grammar on this for me." "Well, that's not quite how we do things here. We want you to be able to edit your own work, so we'll help you learn how to recognize when your sentences need some sharpening. But we won't do it for you." "Oh. But my professor said I should come here to get my grammar problems fixed." "But your professor probably really meant for you to come here to learn how to be in control of your own writing, right? Otherwise, why are either of us here? Let's start from what you're trying to say in this essay. What was fascinating to you about Go Tell It on the Mountain?"

That shift, from "fixing" a few technical problems to engaging a student at the level of ideas, is central to our philosophy. People usually develop technical skills only when they're motivated by something deeper—understanding something about the nature of chemistry, articulating the philosophical basis of an architectural plan, framing a new body of artwork within a contemporary social issue. Helping students navigate that change, helping them begin to understand that writing is for developing and communicating their thinking, is something that all of the teachers in the Center know how to do very well.

Then came COVID-19, and suddenly we became the students facing what we didn't know well. The immediate necessity was to solve technical problems: We had to figure out how to get students and our staff in the same place at the same time, looking at the students' work together. With IT's help, we were up and running quickly in March, piloting our virtual one-on-one sessions before spring break and before our world changed completely. It was then that we began to discover that much like students seeking a quick fix to technical problems in their writing, we were worrying about the wrong thing.



"We had to find new ways to help students focus on their ideas and why they mattered—by embracing or eschewing technology..."



It wasn't the problems with software that ultimately mattered—those weren't too hard to fix—it was the deeper problem of helping students learn in this strange time we're in.

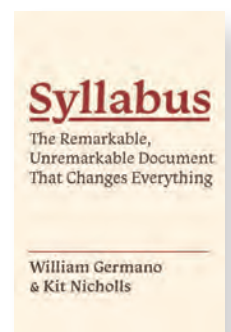
We discovered, in fact, that good teaching sometimes involved making less use of the technology available to us. Sometimes students could focus better without any video, just people talking and looking at a document together. Sometimes we had to focus on what was real and material, what was not virtual, even taking the time for students to write about where they were sitting at home and how it felt to be there.

Sometimes we even had to use part of our time for students to be completely offline, to leave the call for a few minutes so they could do some writing or editing away from the watchful eye of a webcam. We had to find new ways to help students focus on their ideas and why they mattered—by embracing or eschewing technology—and we had to meet students wherever they were. And where they are now is all corners of the globe, all kinds of states of mind, all sorts of family or economic situations.

Even if before the crisis we knew where they were physically (across the table from us), many of the same concerns would affect our work. So we're staying close to the basics, helping the students we're working with learn the best way they can. The Cooper Union is, more than any other college I've known, made up of the people in it and the ideas and things they make. It can be hard to see that making from afar, and it can be hard to make when you don't get to do it directly with other people, in the flesh. It was no surprise to us that it's also hard to teach from afar. To say it in a metaphor: You can't really play music together online, because of the subtleties that are lost—the way an intake of breath cues the next note, the microsecond of eye contact. Our efforts have focused on finding ways to recreate those subtleties, to make real music together as best we can. And it turns out that in our work online you can focus on your own craft, and you can reflect on what's hard, and you can get better from that reflection. Maybe you can even finally get better at grammar, too. ■

William Germano, professor of HSS, and Kit Nicholls co-authored *Syllabus: The Remarkable, Unremarkable Document That Changes Everything*.

The book, which came out last month from Princeton University Press, provides an accessible and fresh look at “how redesigning your syllabus can transform your teaching, your classroom, and the way your students learn.”



IMMEDIATE HELP FROM THE

Critical supplies stretched thin across New York-area hospitals hit hard by the influx of COVID-19 patients in the spring. That's when several Cooper volunteers and alumni-led businesses organized creative efforts to support healthcare workers on the frontlines.

Using Cooper's brand-new interdisciplinary maker space—the Art, Architecture, Construction, and Engineering (AACE) Lab—a volunteer group of staff and faculty from all three schools and various departments came together to organize a production line for fabricating 1,500 protective face shields.

With the lab's 3D printers running 24/7, the volunteers observed strict social distancing protocols, working one at a time to switch out prints, laser-cut components, and sterilize the materials before delivering them to NYC Makes PPE, an organization that coordinates the distribution of face shields to New York City hospitals. This school-wide effort to print face shields was funded by an anonymous donor, in addition to being made possible by a \$2 million grant for the AACE Lab awarded by the IDC Foundation in 2018.



Top to bottom, l to r:
SITU's screening booth prototype and a rendering of a pop-up playground testing site
Steven Hillyer AR'90 producing PPE in Cooper AACE Lab
Lena Imamura A'08 modeling PPE made at Name-Glo
Healthcare workers at Elmhurst Hospital with donated supplies

COOPER COMMUNITY

- **Lena Imamura A'08**, co-founder of New York City-based contemporary neon studio Name-Glo, pivoted her business to 3D-printing protective face shields to donate to health workers. The effort was coordinated with help from other Cooper alumni, including **Yuri Masnyj A'98**, an adjunct professor in the School of Art; **Taylor Shields A'09**, a 3D-printing engineer at NYU's LaGuardia Studio; and **George Ketigian IE'07**, director of prototype engineering at the Silicon Valley investment firm Playground.

"As School of Art alumni we've been training for this moment for a long time. As a philosophy, as a methodology, as a culture, the Cooper ethos has allowed us to have the resources, skills, and heart to do something like this. It's also given us the confidence to see it through."—Lena Imamura A'08

- **Hannah Rawe A'07**, whose practice includes sculpture, fabrication, and model-making, manufactured acrylic intubation boxes, which provide a protective barrier through which medical workers can access patients' airways.
- SITU, a Brooklyn-based architecture practice founded by **2005 graduates Brad Samuels, Sigfus Breidfjord, Basar Girit, Aleksey Lukyanov-Cherny, and Wes Rozen**, developed a mobile COVID-19 screening booth prototype designed to allow medical practitioners to examine a large number of patients while minimizing their risk of exposure. SITU has been user-testing the prototype in hopes of refining the design and eventually coordinating with city agencies and hospitals to place testing booths in areas with high densities of coronavirus cases.

"What became clear pretty quickly is that working at the intersection of design, fabrication, and manufacturing has made us well-equipped to respond to the current need for PPE." —Brad Samuels AR'05

"[SITU's] production line is exactly the kind of solidarity that will get us through this. Day by day, we are assessing what we need to keep our frontline workers safe—and the ability to produce protective equipment here in New York City is critical."—Mayor Bill de Blasio

- Crye Precision, a Brooklyn-based military clothing and equipment company founded by **Gregg Thompson ME'98/MME'01** and **Caleb Crye A'97**, worked with the City of New York and women's wear brand Lafayette 148 to manufacture protective surgical gowns.
- **Greg Loibl ChE'92/MChE'94**, co-founder of Poughkeepsie Revolutionary Cooling Systems, quickly shifted operations to manufacturing protective face shields for use at retirement homes and hospitals in the lower Hudson Valley and nearby Westchester, one of the New York counties hit hardest by COVID-19. The company is best known for producing the Cooper Cooler, a rapid wine cooling system that Loibl invented with his undergraduate advisors.
- In Jackson Heights, Queens, **Shekhar Krishnan BSE'06** collected 5,000 masks for donation to the emergency and OBGYN departments at Elmhurst Hospital, which has been described as the epicenter of New York's COVID-19 crisis. Krishnan, a lawyer involved in anti-displacement legal services and advocacy for low-income communities of color, also co-hosted a webinar on housing and tenant rights for those financially affected by the shutdown.
- Techmer PM, a materials design company founded by **John Manuck CHE'69**, who is the current chairman and CEO, developed a new solution for enhancing fabrics used in the production of protective face masks. The company's Charge Enhancer technology can be added to the production of particular types of filtration fabrics to enhance the material and help it retain an electrical charge that improves its filtration efficacy.

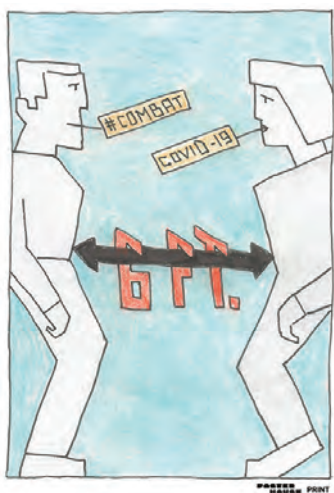
- To support local food producers and small business retailers faced with the challenges of social distancing, **Michael Petralia ME'06**, sole proprietor of engineering consulting firm Honest Hands, deployed resources to provide community businesses with the tools and capabilities for serving their customers digitally, such as online services and scheduled pick-up of provisions.
- **Barry Drogin EE'83/MEE'86**, publisher of The Alumni Pioneer and host of The Cooper Union History Project website, set up a COVID-19 NYC Resources page, which included a Quote of the Day culled from the daily news conferences of Governor Cuomo and Mayor de Blasio.
- **Dr. John T. O'Connor CE'55**, a former faculty member and dean at the University of Missouri-Columbia, generously made his personal library of environmental engineering publications available online to the Cooper community as the school shifted to remote learning.
- The late **Milton Glaser A'51**, **Seymour Chwast A'51**, and **Emily Oberman A'85** are among the prominent artists, designers, and illustrators who created uplifting messages to replace billboard ads in Times Square and across the city. The PSA campaign is a collaborative effort between Times Square Arts, the Poster House, *Print Magazine*, and civic engagement platform For Freedoms.
- **Shigeru Ban AR'84** designed a solution to help members of Japan's homeless population who had previously relied on 24-hour net cafés for temporary shelter. When the cafés shuttered in Yokohama, Japan due to COVID-19, Ban and his team converted a martial arts center into a temporary shelter with individual privacy and spacing at safe distances to prevent coronavirus spread.

- Through his nonprofit Serving the People, **Lucien Smith A'11** helped produce “BFA Student Show,” a global student-organized digital art exhibition. Students from nearly 60 participating schools exhibited work that they made during the Spring term. The idea came to Smith when School of Art graduating senior Ben Werther reached out to Smith for help as art schools were facing the difficult decision of cancelling in-person end of year shows.
- Topos, a company co-founded by **Will Shapiro AR'13**, assistant professor adjunct, went from using artificial intelligence to parse big data about cities, to parsing pandemic data for the public good on a free website they call the COVID-19 Compiler. ■

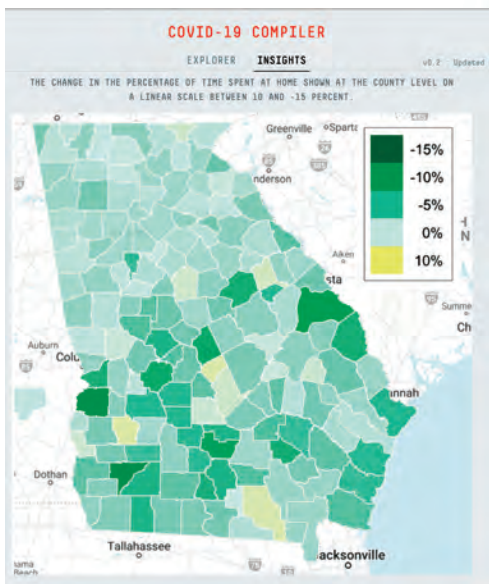




Top to bottom, I to r:
Poster designs by
Milton Glaser
Emily Oberman
Seymour Chwast



Shigeru Ban's
temporary shelter
in Yokohama, Japan
COVID-19 Compiler
from Will Shapiro/
Topos



The alumni quoted below are just a few who found ways of applying their practice and expertise in the midst of crisis.

“We are doing everything we can to keep the plant running during this time. We have a Pandemic Plan, but reality and a plan are very different. We are, like everyone else, hoping for the best and planning for the worst. The staff is working disrupted schedules and long hours. They are juggling childcare while protecting public health. We have a clear mission. I am proud to be a part of it.”

—Shannon Spence CE'96, division deputy director at the H. L. Mooney Advanced Water Reclamation Facility, Virginia

“I am continuing to work on my art despite this craziness. I was supposed to have an exhibit at the Riverside Gallery this April, but of course that was postponed. I am working on a series called ‘New York Storefront Stories’ using ‘Mollage,’ a term I coined, to document the remaining old mom and pop stores, and now I am afraid that because of the citywide shutdown, many of them will not reopen, so this project is even more important.”

—David Reibman A'77

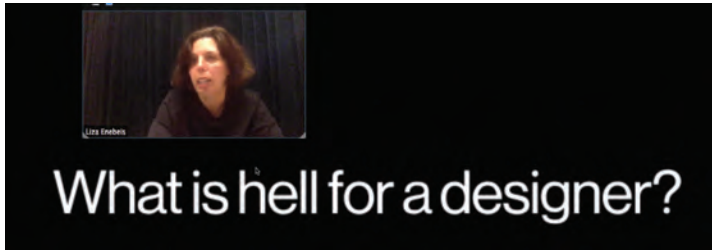
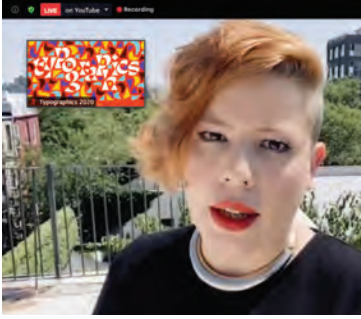
“I started my first day at AECOM, the world’s largest architecture firm, on Monday, March 16. ... [T]hat afternoon the official region-wide email was sent out: everyone was to stay home. ... Then, two weeks later, I got a Sunday email asking me to be on site Monday morning at State University of New York College at Old Westbury. ... For the next three weeks and to this day, I have been on site every day, project-managing the construction of a temporary hospital (accurately: Alternate Care Facility). The Army Corps has contracted AECOM and top contracting firms to build a 920-bed facility in the course of three weeks! The pace, the stakes, and the nature of this project has completely redefined my understanding of what architecture can do.”

—Ivan Himanen AR'10

“Predictive modeling is one of the tools that will influence the decisions policymakers will make about when and how to reopen our society, so we need to be critical consumers of them. These models can help guide decisions about how much testing we need and how many trained contact-tracers must be in place before physical-distancing measures can be safely relaxed. Builders of these models must be transparent about their models’ assumptions, strengths and weaknesses, and make clear what purpose they are best used for.”

—Ron Brookmeyer MATH'75, Dean of The University of California, Los Angeles Fielding School of Public Health, writing for the *Los Angeles Times* in a recent op-ed titled “Predictions of where the coronavirus pandemic is going vary widely. Can models be trusted?”

NEW WAYS TO GATHER FOR



Now in its sixth year, Typographics, Cooper's enormously successful conference for type designers and typographers, moved to a virtual platform and ran from July 22–26. The results were an extraordinary increase in participants from around the world. The conference organizers—led by Cara Di Eduardo A'85, head of typography programs at Cooper—were able to offer the online conference free of charge thanks to increased funding from sponsors during this unprecedented situation. Similarly, TypeLab, the hands-on workshop section of the conference, which was held in June, exponentially expanded its international audience. Besides workshops held in multiple languages, sessions covered a wide variety of scripts including Arabic, Indic scripts like Devanagari and Tamil, Thai, a little-known script called Nūshu from a remote region of China, as well as CJK—collective characters common to Chinese, Japanese, and Korean. ■

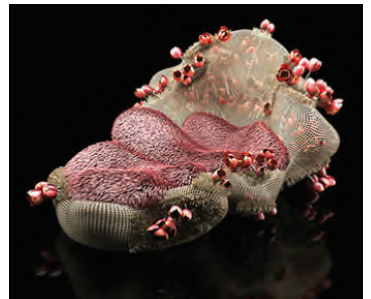
April 7
Remote Lecture
Josep Ferrando: *Inhabited Infrastructures*



April 14
Remote Lecture
Daniel Bonilla:
*tab>| Praxis
& Research*



April 9
Remote Lecture
Electric Mud:
Presentation of
The Surreal Visions
of Hernan Diaz
Alonso/HDA-x



April 16
Online Screening
The Destruction
of Memory:
The War Against
Culture and the
Battle to Save it



EVENTS



The Cooper Union on Demand re-broadcasted past events with new introductions throughout the spring.

Top to bottom, l to r: Daniel Arsham A'03, Sidney Blumenthal, Atul Gawande, and Judy Chicago

April 15
In Conversation
Human Body/Carbon City:
The Environment from
Two Different Scales,
Elisa Iturbe and Austin Smith

April 22
Artist Talk
Elle Pérez: 2020 Wolf Chair
in Photography

Debbie Elliot/NPR

Far left: May 12
Greg Tate, "Hello Darknuss:
The Radical Black Futurist
Imagination vs. Slavery, Inc.

Left: April 29
2020 Eleanore Pettersen
Remote Lecture
Mabel O. Wilson

March 18 The first virtual lecture during the COVID-19 shutdown is held.

March 20 Governor Cuomo announces a "PAUSE" of all New York State non-essential businesses and institutions beginning March 22 at 9 pm requiring much of state workforce to stay home.

"Since we do have a residential population, it was important to continue to provide housing options for students who had no other alternatives. The most difficult part of those initial weeks in March was having to make substantial decisions with information that was constantly changing. What were facts one day, were no longer accurate a day later. Making long term decisions that impact hundreds of people is challenging under these circumstances. It was about making decisions that protected our community first and foremost, while also allowing us to maintain and preserve what it is that makes us Cooper."

—Chris Chamberlin

"As our academic life has changed, we feel our method of assessment must also change. Upon recommendation from each of the four faculties and with the approval of the deans and the president, all Cooper Union students will be graded on a Pass (P)/No Credit (NC) basis for the Spring 2020 semester. The move to this grading format does not reflect a lowering of expectations for our students, but rather, it recognizes the widely divergent learning and life circumstances students are now experiencing. Accounting for different time zones, technology access and skill, and living conditions, we believe that this is a more suitable approach in the current environment."

—Office of Enrollment, March 30

ALUMNI AND OTHERS GIVE FROM THE HEART

In a year like no other, the Cooper family found new ways to give back to our school, to the world, and to one another with resilience, ingenuity, and heart. From Zoom reunions to fundraising in support of our students, we have seen the bonds that connect us grow stronger than ever in the face of challenges great and small. We are proud to share these Alumni Affairs and Development highlights from fiscal year 2020 with you, and we are grateful as always for all you make possible for The Cooper Union.



Cooper donors gave from the heart in response to the pandemic, contributing hundreds of thousands of dollars to the COVID-19 Emergency Relief Fund. This critical support covered unexpected institutional expenses including hardware and software for Cooper's transition to an online spring semester and continues to provide emergency assistance grants directly to students in need.

"Cooper Union was a huge part of my parents' lives and meant a great deal to them ... I'm sure my parents would be happy to know that the bequest is helping Cooper Union through such a strange and difficult situation."

—Ken Greenberg, son of Pearl A'48 and Murray ENG'49 Greenberg

"If you keep in touch and stay involved it's not just nostalgia, it's the realization of the value of the things you learned. The time is right to reconnect—meet recent graduates, come back to Cooper to recruit—it's time to get involved."

—Mariam AR'95 and Frank ME'93 Cantelmi

"I made my contribution and feel so good about it. What a stretch it was for me at this time but I must say, in doing so, I was flooded with a sense of hope and well-being. I'm grateful every day for my incredible education that continues to sustain me. Thank you a million times for keeping the torch bright!" —Katherine Kollar AR'82

X \$5 MILLION BECAME \$10 MILLION

Since June 17, 2019, more than 2,000 Cooper alumni and friends stepped forward to meet our anonymous donor's matching challenge raising over \$5 million in new or increased contributions to Cooper. We are so grateful to our challenge donor and to those of you who helped us reach this ambitious goal as of June 23, 2020.

GIVING TUESDAY NOW #GivingTuesdayNow, an initiative launched in May 2020 in response to the global impact of COVID-19, alumni and friends raised \$332,262 to help Cooper through this crisis. There remains much work to do in maintaining Cooper's progress against the 10-year Plan to Return to Full-Tuition Scholarships, and #GivingTuesday 2020 (December 1) will again be part of that effort.

REUNION 2020 AND REUNION 2021 Reunion Alumni Anchors from the classes who celebrated milestones this June organized virtual events for their classmates around the world, drawing strength from one another at a challenging time for all. We thank these volunteers for working hard on behalf of their classmates and for making our Virtual Reunion possible. Save the date for our super-sized in-person Reunion next year, June 4-5, 2021, honoring alumni from milestone Reunion years ending in 0, 1, 5, and 6 and open to alumni from every class year.

FRATERNITY AND AFFINITY GROUPS GIVE BACK

Fraternity and affinity groups give Cooper alumni the chance to stay connected and give back, whether through networking and mentorship or by fundraising for a school they love. We thank them for being part of our Cooper family!

- **Lambda Sigma Kappa Fraternity: raised over \$500,000**
- **Cooper Union on Wall Street: raised \$385,000**
- **Cooper Alumni at Exxon Mobil: raised nearly \$300,000, including \$150,000 in matching gifts from Exxon Mobil**
- **Cooper Alumni in Law: raised nearly \$100,000**

To learn more about other Alumni groups at Cooper, or to start your own, visit support.cooper.edu/affinitygroups.

Visit support.cooper.edu/vsotcu2020 to view our first

VIRTUAL STATE OF THE COOPER UNION

Filed this summer, it features institutional updates from our Deans, President, and Board Chair on how our students, faculty, and staff are growing and adapting in response to a rapidly changing world.



Concert for Cooper Raises Over \$400k

Patty Jenkins A'93 and Daniel Arsham A'03 are among alumni who appeared and generously supported the Concert for Cooper.

On August 12, more than 600 viewers tuned in for the premiere of Concert for Cooper, a star-studded virtual benefit of musical performances and spoken word interpretations, highlighting some of the most historic figures to have ever graced Cooper Union's Great Hall. From Brian Stokes Mitchell as Frederick Douglass and Tracey Ullman as Betty Friedan, to Alan Cumming as Larry Kramer, Jodi Long as Susan B. Anthony, and Tokala Black Elk as Chief Red Cloud, these and other actors gave voice to the Great Hall's legacy of serving as a destination for civic engagement and debate for nearly two centuries. Cooper alumni, including Daniel Arsham A'03, Patty Jenkins A'93, Malcolm King EE'97, and Dick Schwartz ME'57 shared their perspectives of Cooper's significance to their lives and disciplines. And musical artists from singer/songwriter Ben Folds to our own Coopertones entertained and inspired. It was a magical evening celebrating the story and impact of The Cooper Union, and thanks to the many alumni, faculty, staff, and friends who supported the benefit, the show helped introduce Cooper to new audiences and raised more than \$400,000 in support of our return to free tuition. If you missed the program, you can still view it on [youtube.com/cooperunion](https://www.youtube.com/cooperunion). (Nearly 4,000 people have watched since its Aug. 12 premiere!).

EVENT CO-CHAIRS

ANNE CHAO | ERIC HIRSCHHORN ME'89 | LEE SKOLNICK AR'79
BRIAN STEINWURTZEL | RACHEL L. WARREN

COOPER FUND PARTNERS

Anne and Albert Chao | Alan Fortier ChE'79 | Sally Gottesman
Newmark Knight Frank | Steinwurtzel/Gural Family | Rachel L. Warren

COOPER FUND LEADERSHIP CIRCLE

Allied Universal
Security Services
Archstone Builders LLC
Collaborative Construction
Management, LLC
First American Title
Insurance Company
Gene CE'64 and Susan
Briskman
Square Mile Capital
Management LLC

INNOVATORS FELLOWS

Ed Dineen ChE'76
Howard L. Zimmerman
Architects, P.C.
Stephanie and Mark Penrod
Peter Gerazounis, MG
Engineering D.P.C.
Rally Restoration Corp.
Rich, Intelisano & Katz, LLP
Robinson & Cole LLP
Robert Roth
Vertical Transportation
Consulting, Inc.
Anonymous

Thanks to Great Hall supporters: The Charina Foundation Fund
and The Robert David Lion Gardiner Foundation

"... [W]e have heard from many students who want to help in some way—whether aiding the efforts in New York City to fight the spread of the virus by fabricating masks or materials or helping the Cooper community come together virtually during these trying times. Please continue to share your ideas and your talent in whatever ways you can. Faculty and staff are beginning to work in these arenas as well, and we will accomplish more together. Yes, our remote operations make this more difficult to coordinate. But Cooper students are resourceful and have agency—two critical qualities we all need now to gain some control in this uncertain situation."

—Mike Essl A'96, dean, School of Art, March 27

"Online collaborative practices are nothing new. Some of us have been taking them on for years. What we did not know is the degree to which they might become critical in times of urgency. Now, as we face the dire conditions of isolation under the wrath of COVID-19, we have been trying to bring others on board: to share, discuss, draw, and communicate by way of alternative media. Studio learning might end up being the most challenging, but we will experiment and explore, inviting failure along the way."

—Nader Tehrani, March 20

"I ask that you work together with your classmates, faculty, and staff and embrace this new educational paradigm to get the most that you can from the courses you are completing. Education is a full-contact, personal journey—embrace it! I would also ask that you take every possible opportunity to remain connected. As we isolate ourselves to prevent the spread of COVID-19, we each need to take care of our mental health by deliberately finding ways to remain connected with friends, family, peers, and your Cooper community."

—Barry Shoop, dean, Albert Nerken School of Engineering, March 30

April Though Work-Study and student lab techs continue to be paid, the deepening financial strains have a notable impact on students. The Carroll and Milton Petrie Student Emergency Grant Fund becomes a critical resource. Created to provide quick response emergency grants to matriculated students in good standing with short-term financial emergencies, the fund seeks to assist students so that they may continue their education at The Cooper Union, rather than being forced to take a leave of absence or to withdraw.

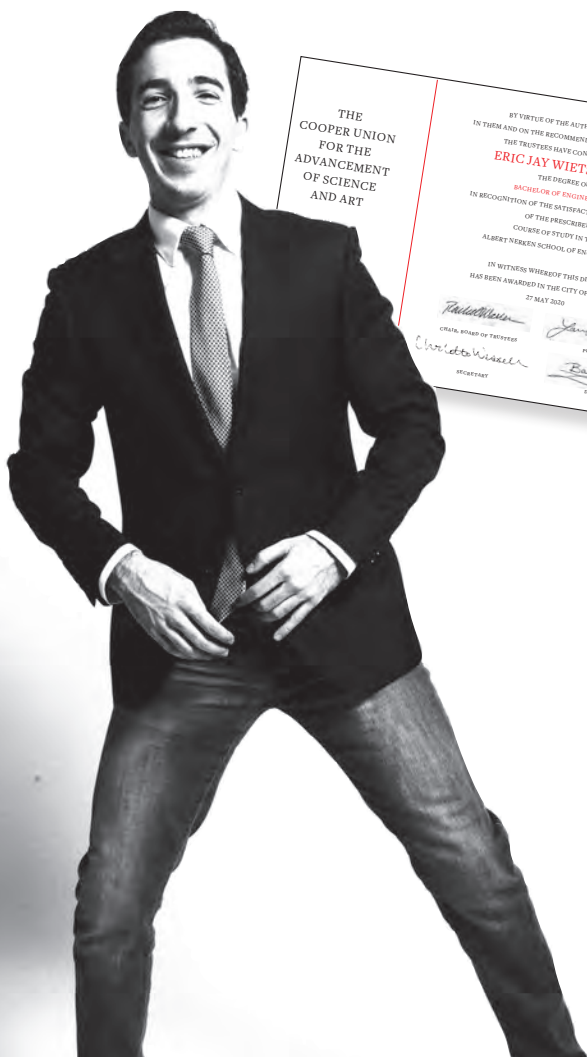
CELEBRATING THE CLASS OF 2020



Jeremy Son; Kayla Montes de Oca; Helmuth Rosales
The Irwin S. Chanin School of Architecture



Elvin Hu; Paolo Mentasti; Eric Goins
School of Art



The year's graduating class is perhaps unlike any other in Cooper history. But in spite of unexpectedly having to complete their final semester from home, several hundred people became new Cooper Union alumni, demonstrating their creativity, scholarship, grit, and imagination.

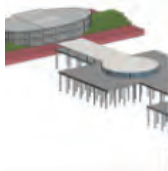
Although an in-person ceremony was not possible in the spring, to celebrate the Class of 2020 properly, the Cooper community came together to host a special virtual tribute (watch on [youtube.com/cooperunion](https://www.youtube.com/cooperunion)) livestreamed on May 27, the day the traditional commencement would have taken place—with the promise of eventually welcoming the graduates back again for a formal commencement once it is safe again to do so.

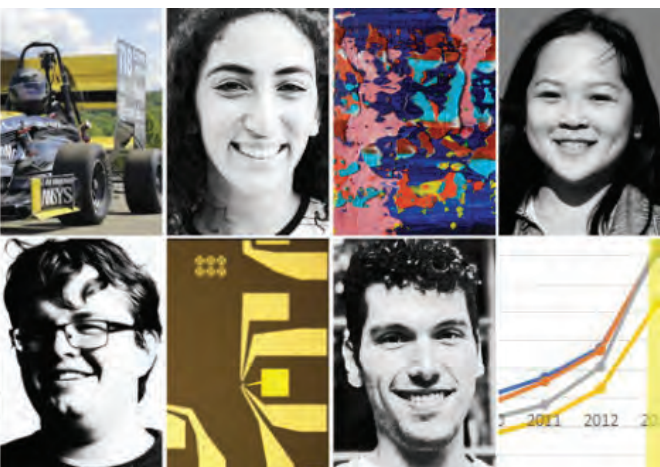
Diplomas were quickly mailed to ensure members of the class would have them in-hand for the day of the tribute. Graduates gathered at home with family and friends—some decked out in commencement wear of their own making—for the online event, which was hosted by President Laura Sparks, Board of Trustees Chair Rachel Warren, and deans and faculty members from across Cooper.

Several alumni involved in COVID-19 relief efforts (see pages 8-11) were also invited to offer words of inspiration to the graduating class, sharing video messages that conveyed the power of a Cooper education, particularly in responding to the worldwide health crisis.

The tribute livestream concluded with a remote musical performance by the Coopertones. Graduates and their families then reconvened for a Cooper-wide celebratory video call followed by breakout celebrations hosted by each of Cooper's three schools.

The invitation to share tribute messages was opened to all alumni, and the Class of 2020 was welcomed into the alumni community with words of congratulation, support, and encouragement. ■





Qi Tong Han, CE; Aziza Almanakly, EE; Carena Toy, BSE; Connor Lowry, ME; Michael Lange, ChE, Albert Nerken School of Engineering

School of Art graduate Dan Lucal recorded a celebratory video for his YouTube channel showing how to create a DIY cap and gown at home using trash bags.



“Some of us are facing more challenges than others. Some are scared or grieving. Some are fine. Some will emerge as helpers. Some will be helped. But all of us can find moments of resilience, friendship, discovery, and enjoyment. ... Let’s take turns being sources of strength and joy.” —Laura Sparks, April 5

May As classes and public programs continue (all online) through the end of the semester, everything different starts to become the new “normal.” The mental, physical, and financial impacts of the pandemic also become apparent. Additional mental health benefits are made available to employees and counseling is added for students. Testing for COVID-19 is made free under the healthcare plan, and telehealth and online health services are newly covered.

“Our teams have worked hard to prepare for our online summer due to extended stay-at-home orders and the uncertainty about when those orders might be lifted in New York City and other parts of the country, and we are ready. On Tuesday, May 26, we will open our summer session with a number of additional course sections added to accommodate students, both incoming and returning, who have asked for and will be taking advantage of these expanded offerings.”

—Laura Sparks, May 22

May 27 On what would have been commencement day, The Cooper Union released a Tribute to the Class of 2020 video, followed by a real-time, virtual gathering. The tribute included messages to the graduating class from the president, chair of the board, various deans, and alumni of each school. Here are some of their words:

“I don’t think anybody would have thought that you would be presenting your final projects over Zoom, but I want you to know this: the strength of the work and intellectuality that you brought to the projects was simply phenomenal. You have flown in the face of this pandemic. ... All of us in the school of architecture are here to support you in any way we can. ... I look forward to your leadership as a group of emerging young architects who are fortified with a knowledge and a sense of responsibility that we all need right now.”

—Steven Hillyer AR’90

GLOBAL AWAKENING

Students Demand Justice

As protesters took to the streets of the East Village and around the world this summer, Cooper students quickly went to work creating signs and artwork to mount in the windows of the Foundation Building, voicing support for Black lives and calling for social justice. Students also invited reflection on The Cooper Union's own historic legacy as a place where previous generations came together to lead the fight for civil rights and urged the institution to make meaningful change in pursuit of a just and equitable student, faculty, and staff experience. Gatherings with students, a reading and speaker series centered on intersectional justice, trainings and workshops, and curricular initiatives within each of the academic divisions were immediately put into action as community members renewed their collective commitment to this work.



CU BLACK FUTURES

MENTORSHIP FOR BLACK FUTURES

Launching this Fall, CU Black Futures is a pilot program led by Cooper's Black Student Union (BSU) to connect its members with Black alumni for one-on-one mentoring and exchange throughout the academic year. This new mentorship program is aimed at offering guidance to students as they navigate their time at Cooper and includes fostering interpersonal support in refuting anti-Blackness within a predominantly white institution, assisting with professional development, and helping set career goals. The BSU hopes the program will help build community and historical memory between generations of Cooper graduates.

For more information on the CU Black Futures program or if you would like to be a mentor, please contact Anna S. Covatta, Assistant Director, Alumni Affairs at anna.covatta@cooper.edu or 212.353.4139.



Torey Boyd

"The good news is that Cooper has already prepared you for what to do next. And right at this moment in time what could be next is to do something to help the world. It's a strange moment and having the skills, the brains, the talent to put voice to a thought is a wonderful thing to be able to do." —Emily Oberman A'85

"One of the things that stands out for me in this crisis is that the world that we enter after this pandemic ... has now been laid bare: the deep-seeded, systemic inequities and injustices in our city and our society and how the most vulnerable are communities of color and our immigrant communities. So I would urge all of you with the privilege and power of our Cooper education—not just an academic education, but a humanitarian education about our city, about structural inequalities—I would urge all of you to use that privilege to fight for the world we believe in." —Shekar Krishnan BSE'06

June After the deaths of George Floyd and others, a world-wide examination of endemic racist practices begins with renewed energy. Cooper starts its own process of looking within and expressing solidarity with oppressed minorities. An information hub, "Responding to Hate," is launched on the institutional website and a series of communications is released over the coming weeks. Among other actions taken, President Sparks declares Juneteenth a school holiday going forward.

"Today, I ask you to join me in identifying the concrete steps that each of us will take to better understand somebody else's lived experience; to fight for an educational system and an economic system that makes opportunity accessible to all; to make The Cooper Union, New York City and our country safer, kinder, and more loving places for everyone."

—Laura Sparks, June 1

"I don't have the words right now to express exactly how I am feeling, and I'm not going to pretend that I do. I do know, though, that I am angry, and I know that I care deeply about each and every one of you. I know that many of you are also angry and are mobilizing in different ways to join the fight against white supremacy, racism in all its insidious forms, and the killing of black and brown people. One thing I can do now is try to provide you with some initial resources. But first, I want to thank The Black Student Union and the Cooper Climate Coalition for organizing a community gathering and discussion session earlier today. There were over 70 students, faculty, and staff together in that space."

—Chris Chamberlin, June 1

RE-IMAGINING EXHIBITIONS



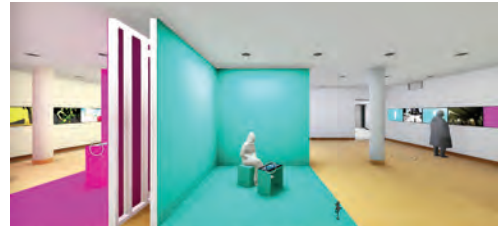
All images courtesy of The Irwin S. Chanin School of Architecture



Advanced Topics in History, Theory, Criticism.
Avant-Garde as Method: Vkhutemas and the Pedagogy of Modernism. Faculty: Anna Bokov;
Crossings. *The Street Finds its Own Uses for Things.* Faculty: Austin Wade Smith.



Design IV, Fall. *Frames, Followers, Fictions.*
 Faculty: Florian Idenburg.



Advanced Concepts. *Realtime.*
 Faculty: Farzin Lotfi-Jam, Greg Schleusner.

Faculty, students, and staff in The Irwin S. Chanin School of Architecture collaborated to bring the decades-old, End of Year Show tradition online in the spring. Using Unreal Engine gaming technology to visualize and simulate the Foundation Building, the exhibition allowed visitors to traverse the building’s spaces and explore student work in a digital environment. It included work from across all five years of undergraduate design studios, from first-year foundational Architectonics through Thesis, as well as work from the Master of Architecture II program, seminars, and other courses.

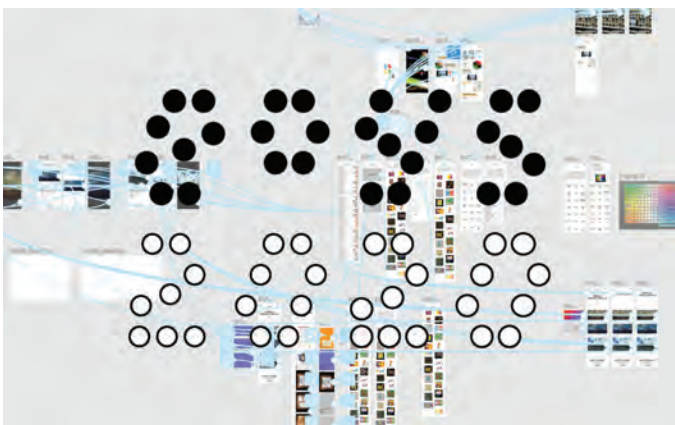
“In creating this virtual space, we hoped to frame the all-important spaces of The Cooper Union as we know them, but also to inhabit them in ways that take advantage of the virtual, suspending disbelief in conventional constraints. Thus, we hope that this exhibition is a judicious and critical curatorial lens into our space of learning, demonstrating the significance of how and why we design our own environments,” said Nader Tehrani, Dean of Cooper’s The Irwin S. Chanin School of Architecture.

EOYS | ARCHITECTURE archoeys2020.cooper.edu

Curators: Steven Hillyer AR'90, Farzin Lotfi-Jam
 Production Coordination & Editing: Chris Dierks
 Exhibition Design & Fabrication: Taesha Aurora,
 Jesse Bassett, Dylan Dewald AR'20,
 Andrew Hebert, Maksymilian Mamak,
 Austin McInnis, Qicheng Wu
 Graphic Design: Mark Rossi
 Web Design & Development: Richard Yee A'18
 Videography: Mauricio Higuera A'13
 Information Technology: Wayne Adams,
 Jeff Hakner, Marget Long, Keith Ng,
 Robert Reinckens
 Facilities Management: Nick Haviaras, Raemar
 Jenkins, Shameel Moore, Thomas Tresselt
 Photography: Lea Bertucci

EOYS | ART endofyearshow2020.cooper.edu

Diego Herrera A'21, lead designer
 Lucas Zeeberg A'22, lead designer
 Richard Yurewitch A'22, designer
 Caitlin Edwards A'23
 Martia Thomas A'23
 Amanda Blanca A'23
 Erin Sparling



Likewise the School of Art launched its own virtual End of Year show developed by a team of students and faculty. While all online, in many ways the 2020 End of Year Show mirrors the School of Art undergraduate student exhibitions from decades past; the exhibition publicly positions more than 200 works from over 200 students across all four years, with selected works representing the entire 2019-2020 academic year. As a result of the pandemic, students and professors pivoted to online learning and the exploration of a diversity of site-specificity as central to a studio-based program. And like the changing dynamic of how work was made, the virtual End of Year Show reflected what it means to be a digital representation documenting a year in flux.

Visitors to the virtual exhibition start with a live camera feed of Cooper's landmark Foundation Building, the space where much of the school's studios, classrooms, and shops are housed. The site navigates the variety of work across a directory of student artists, projects, studios, and areas of study, while also allowing visitors to explore via a "forum" that generates chance encounters between works. Works are tagged for multiple areas, reflecting on the interdisciplinary central to the school's ethos. Although the current crisis has necessitated an online mode for sharing and experiencing work, the site aims to open up a new model for future End of Year Shows, in partnership with a physical experience. ■

June 4 President Sparks declares a day of reflection, suspending all Cooper business and inviting the Cooper community to join in a series of online conversations about race, education, social justice, and how Cooper plays a role in all of these.

June 8 A letter titled, "Collective Student Response to Fostering an Actively Anti-Racist Institution," signed by 451 students of The Cooper Union, was sent to all senior administrators and deans. It was highly detailed, with bulleted action items for each academic branch as well as the institution as a whole.

"My commitment to you is that we will act in a way that is both urgent and sustained, recognizing the singular purpose of ensuring that The Cooper Union is a place that feels safe, joyful, and equitable while working to reverse, collectively, the impact of centuries of systems, policies, and behaviors of white supremacy, structural racism, and inequitable access to power, privilege, health, and economic opportunity that have led us here and continue to define our daily lives."

—Laura Sparks, June 12

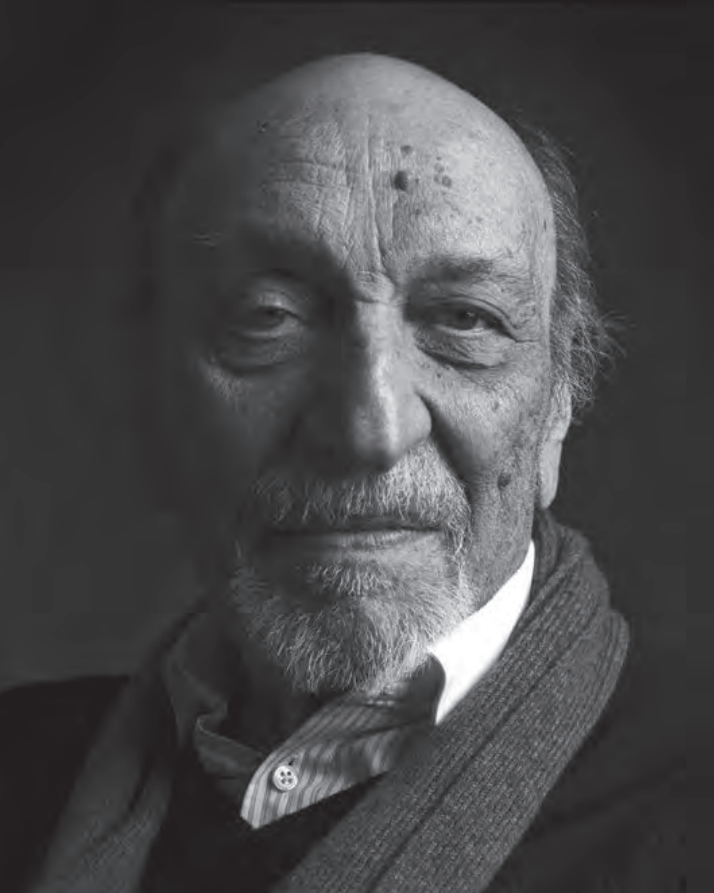
During the month of June the deans of each of three schools, as well as the Faculty for Humanities and Social Sciences, release statements of solidarity and pledges to further action in response to the student letter of June 8. On June 29 a letter signed by the entire presidential cabinet, outlining specific plans of action, is sent to the community. It reads, in part:

"We appreciate the desire for ongoing dialogue and an overall framework for further work and action towards becoming an anti-racist institution. For many reasons, including social, economic, political, and academic power structures; long-held cultures, practices, and belief systems; and the histories that drove these, the work is hard, complex, and uncomfortable for some. We accept that and commit to taking it on, for it is only in cutting through this complexity and taking on the discomfort that we can achieve fundamental, lasting change. We understand both that the challenges are grounded in centuries of history that will take time to address and that the need for change is urgent; we are committed to both short- and long-term action."

IN MEMORIAM

Milton Glaser A'51

The Cooper Union community mourns the passing of Milton Glaser A'51, Trustee Emeritus, former faculty member, and a 1951 graduate of Cooper's School of Art. He passed away on Friday, June 26, his 91st birthday. Glaser, with several of his Cooper classmates, co-founded Push Pin Studios, a graphic design studio that helped define the profession's modern era, before setting out on his own. A prolific designer, known for his iconic "I ♥ NY" logo, he influenced and educated generations of designers in the practice of graphic design and its ability to effect positive social change. A generous donor to Cooper and recipient of the President's Citation, Glaser is also remembered for his commitment to education and his countless campaigns to raise awareness for humanitarian issues. He is survived by his wife, Shirley Glaser, a 1956 School of Art alumna who remains an integral member of the Cooper community.



Margaret Morton

Margaret Morton, former School of Art Professor, passed away unexpectedly in New York City on June 27, 2020. She taught, mentored, and motivated generations of Cooper students who passed through the school. For many, their Cooper education began with Professor Morton in the first-year Foundation 2-D Design course. In addition to graphic design and photography, she was known for teaching Art of the Book, an annual course exploring the medium of the "artist's book." She had a profound influence on four decades of designers and photographers.

Morton was a gifted photographer who chronicled the lives and ingenuity of homeless people. In 1989, she began documenting the improvised housing created by people living in Manhattan's Tompkins Square Park. In the decades that followed, she built a remarkable record of how people live and survive at the edge of a society that overlooks them. Phillip Lopate has written, "Margaret Morton has been doing remarkable, indeed invaluable, work at the juncture of photography and social documentation. She is our modern-day Jacob Riis." Every image and oral history she produced serves to honor an individual she encountered in the city's parks, vacant lots, abandoned buildings, and underground tunnels.

Morton received her MFA from the Yale University School of Art. She began teaching at The Cooper Union School of Art in 1980 and became full-time faculty in 1985.

—Ellen Lupton A'85





BILL N. LACY

The Cooper Union's ninth president, Bill N. Lacy, passed away on August 25. During his tenure as Cooper's president from 1980–87, the college celebrated its 125th anniversary, mounted multiple exhibitions, including “Rauschenberg/Performance,” and greatly expanded its free, public programming in the Great Hall. From the start of his presidency, Lacy helped revive music on the Great Hall stage, and under his leadership, the school established the Herb Lubalin Study Center of Design and Typography, one of the nation's first graphic design archives.

A native of Oklahoma, Lacy dreamt of being a professional basketball player before training as an architect at Oklahoma State University. He practiced architecture throughout his career, eventually working for illustrious clients such as the Kimball Art Museum, the J. Paul Getty Trust, Harvard University, and many others. He held multiple positions in academia, including president of the American Academy at Rome (1977–80) and later of SUNY-Purchase (1992–2002).

Lacy's influence was far-reaching: he had been director of Architecture and Design at the National Endowment for the Arts and served as executive director of the Pritzker Architecture Prize from 1988–2005.

Dean Nader Tehrani of The Irwin S. Chanin School of Architecture said that President Lacy was instrumental in helping counter corporate forces that were subsuming architecture. Dean Tehrani noted, “In an age when design in the public realm was on the decline, Bill Lacy championed many architectural causes, and his central voice on key cultural committees, among them the Pritzker Awards Jury, served to give rise to critical voices of that era.”

Mid-to late June In an unsurprising expression of the Cooper Union “can do” attitude, both the School of Architecture and the School of Art launch online versions of the annual End of Year Show. In both cases, the work launching the sites is organized by a coalition of students, faculty, alumni, and staff. (See pages 20–21.) In the midst of this plans for the next semester, and beyond, are announced.

“For the fall, our plan will be to continue all classroom and studio teaching online. This will reduce the census in our buildings, freeing up space so that we can provide physically distanced access to labs and student studio space. We will also have dedicated classroom teaching space available to faculty should you wish to utilize Cooper classrooms and technology to conduct online classes.” —Laura Sparks, June 20

“In the fall semester, we teach 100 unique courses with 165 different sections. Of these, 24 are project, lab, or capstone courses. Because of the severe classroom and laboratory occupancy constraints imposed by the social distancing protocols, we have decided that lecture courses will be delivered online and we have prioritized in-person classes to project, lab and capstone courses. We are doing our very best to retain the ‘authentically Cooper’ element of your educational experience. You should also know that we plan to return to traditional grading in Fall Semester 2020.” —Barry Shoop, June 22

“... [W]e will continue with online teaching in the Fall for all studio, workshop and lecture-based classes, in addition to reviews, desk crits, and discussions. Central to our planning is to creatively find ways to construct a community and foster the culture of the school while online, recognizing that we need new forms of engagement. We're exploring the concept of homerooms, both for mentorship and academic advisement, but also as a space for disciplinary engagement with select faculty in smaller groups ...

—Dean Nader Tehrani and Assistant Dean Hayley Eber AR'01, School of Architecture, June 23

“... Our goal is to allow students to spend less time on Zoom and more time working. For studio classes, this may look like two class sessions, or multiple groups and meeting times. ... In the meantime, we're working with all professors to adapt their syllabi for online teaching. We understand that the abrupt transition was difficult for both students and faculty, and we're asking that all classes adapt to this new format.”

—Dean Mike Essl A'96 and Associate Dean Adriana Farmiga A'96, School of Art, June 23

KEEPING COOPER SAFE

Student life looks very different this year. The pandemic has meant rethinking almost every facet of how students work and connect. And yet there is still the familiar flurry of activity that marks a brand-new year of thinking, creating, and collaborating. Thanks to Cooper's essential workers, technicians, and operations staff, summer preparations for a "hybrid" back to school experience have helped ensure that, while most courses are being taught remotely, at least some of that work can continue safely in person.



Campus health and safety by the numbers

- 125 hand-sanitizing machines installed around campus
- 3,000 protective masks distributed to students, faculty, and staff
- 1,000 thermometers given out for self-administered daily temperature checks
- 60 sheets of plexiglass purchased for dividing personal workspaces and desks
- 50% reduced campus-wide building density

- Building interiors were deep cleaned over the summer, including complete sanitization of all air ducts. HVAC systems were upgraded with high efficiency air filters (Merv 11-13), which are approved by ASHRAE as being effective in preventing the spread of COVID-19 and are changed out monthly.
- CUSAFE, a smartphone app developed by Cooper's Safety and Security and IT departments, was released to help tightly monitor building access and share alerts, resources, and news. Anyone entering the buildings must have prior approval, submit negative COVID-19 test results, and complete daily health screens by filling out a questionnaire, available via the app.
- All buildings are operating at reduced capacities, allowing for social distancing and safely distanced flows of foot traffic guided by signs and directional lines. Masks must be worn at all times while on campus.
- Students work in assigned individual studio or lab spaces and come in on staggered schedules to reduce density. Workspaces are cleaned daily, with sanitizing wipes provided to wipe down equipment.
- A total of 64 first-year and transfer students and 7 RAs, along with professional staff, moved into the Residence Hall this semester. Residents were required to quarantine for 14 days upon move-in (however those from

“The thing about Cooper is that the classes have always been small and therefore it makes it a lot easier to adjust to the social distancing guidelines,” says Alex Cho CE’22, who has been going into 41 Cooper twice a week for civil engineering courses. “The labs feel pretty normal, other than wearing masks, and often I forget we are in the middle of a pandemic until I leave the building after class. It is a little weird seeing the lobby so empty sometimes during the day.”

New York’s non-mandated quarantine state list who tested negative were able to end their quarantine early).

- Students live in single-occupancy bedrooms but share apartments. Outside visitors are prohibited, and students are expected to maintain social distance and wear masks around anyone not living in their apartment.
- The Office of Student Affairs launched a new student activities portal, giving clubs and extracurricular groups an online space for coming together and organizing virtual and socially distanced events. This year’s Fall Festival for student clubs was held through the portal.
- The Cooper Union Library introduced a redesigned website with expanded online services and a contact-free borrowing system. Patrons can reserve books and periodicals online and pick them up just inside the library doors.
- A few ground-floor spaces have been transformed into student internet cafes, offering safe access to computer stations divided by plexiglass. The internet cafes operate on a reservation system and are cleaned between uses. ■



“... [W]e have been actively working to close an initially projected \$5 million budget gap (nearly \$2.5 million from the operating budget and \$2.5 million in endowment fundraising) while remaining steadfast in our commitment to a 0% increase in tuition next year and to the planned increase in average student scholarship levels, as defined in the financial plan.”—Laura Sparks, June 25

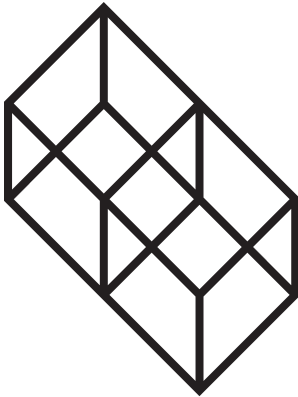
July to August Following the recommendations of Department of Health experts from the State and the City, Cooper rolls out a *Returning to Cooper Guide*, detailing protocols for limited access to campus and for student use of labs, studios, and shops. The institution also designates an internal contact tracer in support of the State’s tracing efforts.

“For those of us on campus, our shared responsibility, our social contract is crucial for keeping one another safe, for doing our part to help mitigate the virus by heeding all of the safety protocols and guidelines. We’re asking anyone who is here at Cooper to sign a personal responsibility pledge that outlines these requirements. Combatting the pandemic is absolutely a group effort. We have a responsibility to one another and to the city we love—and of which we are a part—to stop the spread of this virus.”—Laura Sparks, August 31

September Thanks to administrative efforts to contain costs, the institution closes \$2 million of its initially projected \$4.5 million budgetary shortfall for FY2021. Cooper’s alumni and friends help make this promising start to a difficult year possible, while students settle into a semester of remote learning and a limited on-campus experience.

“We have been planning virtual interactions and hosting some outdoor time on the 4th floor Residence Hall terrace for folks still in quarantine. The RAs and RD have also done some door-to-door programming, handing out treats and checking in. We see many of the students when we deliver packages and food to their apartment doors while they are still in quarantine—the staff has been essential in getting deliveries to them to help get through the quarantine period.”—Grace Kendall, Associate Dean of Students, September 3

Looking Forward Despite the negative financial impacts of the pandemic, Cooper has not been thrown off from its commitment to return to free tuition. And though the months ahead remain uncharted territory, the hope is that modes of working and learning can keep evolving in a safe direction.



THECOOPERUNION

THE COOPER UNION
FOR THE ADVANCEMENT OF
SCIENCE AND ART
COOPER SQUARE
NEW YORK, NY 10003

NON-PROFIT ORG.
US POSTAGE
PAID
S. HACKENSACK, NJ
PERMIT NO. 1077

NOW STREAMING

IN CASE YOU MISSED ANY OF THESE RECENT VIRTUAL PREMIERES...YOU CAN STILL CATCH THE RECORDINGS ON COOPER'S YOUTUBE CHANNEL

[YOUTUBE.COM/COOPERUNION](https://www.youtube.com/cooperunion)

