

THE CITY COLLEGE OF NEW YORK

CCNY *TODAY*



2018
REPORT
FROM
THE
PRESIDENT



“ We are, every one of us, on the front lines of a struggle for the future and the soul of our nation. What we do every day, at City College and at places like City College, is this: we set ourselves against the proposition that the American dream is small, or restricted, or ungenerous. We defy the idea that where you come from, or how you got here, or where you pray, or what you look like, or who you love has any bearing on your place in our society. We reject the idea that the circumstances of your birth define the pathways of your life. We work in the understanding that we do not now live in the world we were meant to inhabit—we build it, every day, and defend what we build when we must. And on this campus, I promise you, we will make that defense.

**Vincent Boudreau, President
The City College of New York**



TABLE OF CONTENTS

- 02 MESSAGE FROM THE PRESIDENT
- 04 DOWNTOWN FILM FESTIVAL SHOWCASES RICH CULTURES OF THE AMERICAS
- 05 SHAKESPEARE AND THE GLOBAL DOMINANCE OF ANGLO-AMERICAN CULTURE
- 06 FILM PIONEER HANS RICHTER'S LEGACY OF INDEPENDENT FILMMAKING
- 08 LEADERSHIP IN THE SERVICE OF DEMOCRACY: SCHOLARSHIP IN ACTION
- 09 PREPARING OUR STUDENTS FOR THE NEXT STEP
- 10 SNOW DAYS: REMOTE SENSING IN CARIBOU, MAINE
- 12 MOVING THE NEEDLE: THE ARTICLE ABOUT RACE AND HEALTH THAT CHANGED AMERICA
- 14 AGENTS OF ACTION, AGENTS OF CHANGE
 - Student Activists Oppose Gun Violence
 - Weathering the Storm: Teaching After Maria
 - Women Determined to Alter Real Estate Landscape
 - Nationally Recognized Mentor Focuses on Diversifying Engineering
- 18 FROM CCNY TO THE PLANET, WITH LOVE
 - From the Amazon to the Arctic to Asia: Understanding and Protecting Biodiversity
 - Educating the Next Generation of Leaders in Urban Sustainability
- 20 ACTING LOCALLY
 - Mini-Medical School: Working Together for a Healthier Harlem
 - Students CREATE New Ways to Eliminate Workplace Barriers for People With Disabilities
 - The J. Max Bond Legacy: Building Urban Futures in Upper Manhattan
 - CCNY Brings Joy of Theatre to Harlem School
 - Inspiring Young Minds Thousands of Miles Away
- 26 RESEARCH AND SCHOLARSHIP FOR THE COMMON GOOD
 - Turning Trash Into Energy
 - Exoskeleton Vies for \$4M Mobility Challenge Prize
 - To Understand the Influence of Fake News, Call a... Physicist?
 - How Do Plants and Bacteria Do It?
 - CCNY Leads International Complex Fluids Project
 - By the Numbers: Research Overview
 - Selected Faculty Books / Films / Performances / Exhibitions
- 32 LEADING THE CONVERSATION
- 34 THE COLLEGE AT A GLANCE
- 35 PHILANTHROPY FOR RENEWAL
 - Moxie Foundation Gift Invests in the Spirit of Creativity and Change at CCNY
 - Building a Single Foundation to Oversee Philanthropy at CCNY



MESSAGE FROM THE PRESIDENT

We stand at a moment when we can clearly see the misshapen fruits of a societal retreat from the ideals of public higher education as a collective good that is utterly vital to the fabric of our democracy. Where once we accepted that the whole people would benefit when the whole people were educated—where once we were unambiguous in our willingness to define an educated population as a societal strength and a public good, we are now too often asked to see public education as an discrete benefit for individuals who have acquired, or will acquire, their degree in a place like CCNY.

But when society refuses to see how everyone benefits when everyone has a path to education, it begins to ask why this student, or that, deserves particular support—why any one of us should agree to allocate resources to support some unnamed other. When a nation begins to ask such questions, particularly of our public and shared goods, we enter a dark season. We become smaller, and more isolated, and weaker as a people.

No democracy has long survived without a robust mechanism for educating the whole people. When educational opportunities grow more restricted, or educational institutions weaken, a hollow space opens up in the fabric of our public lives. And out of that void come all manner of ugly things: intolerance, superstition, closed mindedness. The void exudes a climate for violence. It encourages disaffection, and societal rifts and governments that lean toward repression.

We have, as a nation, moved in fits and starts away from repression, moved toward a greater understanding of one another—not always or in every place, or for everyone, but at least in ways that bend, as they say, towards justice. But the road has never been untroubled, and we are today working through a tough patch, marked in places by what seems a willful embrace of what is meanest and least generous in our nature.

This puts us, every one of us, on the front lines of a struggle for the future and the soul of our nation. What we do every day, at City College and at places like City College, is this: we set ourselves against the proposition that the American dream is small, or restricted, or ungenerous. We defy the idea that where you come from, or how you got here, or where you pray, or what you look like, or who you love has any bearing on your place in our society. We reject the idea that the circumstances of your birth define the pathways of your life. We work in the understanding that we do not now live in the world we were meant to inhabit—we build it, every day, and defend what we build when we must. And on our campus, I promise you, we will make that defense.

We embrace our role at the forefront of social change, recently ranked #1 in promoting social mobility in our student body by the Harvard-based Opportunity Insights out of 369 selective U.S. public colleges. And we are proud to be a part of a university system that’s leading the country in this regard.

We must rededicate ourselves to social mobility and in that rededication, broaden our conception of what it means on our campus. We live in a time when social mobility, the great engine that drove our public life through the middle years of the last century, has become, in the words of Joseph Stiglitz, a statistical anomaly, and we cannot tolerate such a state of affairs.

We—The City College of New York—are an institution filled with writers and researchers: professors who, in their different departments, in their differed fields of endeavor, are identifying and attacking the barriers to social mobility. We are not working in Harlem merely because our campus happens to be here. We have been drawn, with our particular commitments to justice and equity, to this special spot, to undertake very specific kinds of work. And it is that work, and this place, that keep us close. Together, we are an institution dedicated to an all-out assault on the barriers to social mobility, and it’s time we started to say that.

Vincent Boudreau,
President

THEY CAUGHT US A SPARK

BRAD WALROND

A poem, written by a 2006 alumnus of City College, on the occasion of the Investiture of its 13th President, March 29, 2018.

World had not used us well Laid us asance.	Note said, these physicians expert in addiction & trauma
Stroked our Jewels Took them for granted	Syllabi make manifest the tools to treat it.
Left us thirsty, begging for something like God—	But this Westside City clinic Smelled of nothing but pages and pages;
for any moment that might could give a Life its meaning.	<i>Papyrus</i> , I know now, mere fodder for the fire
ii.	What if some perish from the smoke?
Poverty ain’t never been ‘bout money; can’t be the repose we suppose	Embers at the risk of too much pressure Might just rain down diamonds!
Can’t afford the time spent & not saved.	vi.
Spent & not saved.	Doctor’s deep tissue massage Pressed down hard as third-degree burns
iii.	In hot pursuit of bone— Something at last to hold on to.
Surgeons left note for our next of kin	Yes! Just enough friction might could make the wildest dreams
Advised:	As palpable and magnificent as bonfire.
“if we polish too quick too careless brilliance is fleeting.”	vii.
Obliged these teachers offered to train us Off the beaten track;	Ideas have always been accelerants handled with care.
Prune our overcast thoughts into vision.	A Master teacher’s friction set them ablaze, Nursed only the hungriest back to health
iv.	Left no mark on those thought themselves
Ignorance ain’t never felt nothin’ like bliss. Enrolled us off the street half-dead near blind from livin’	Too full Too fortunate
working class studies in still art sat stone cold as Survival by anaesthetic	When we caught fire we were as necessary and unremarkable as tinder.
opioids pop like multi-vitamins Past lives pack into a stupor	That’s why we won’t never forget Can’t never forget
Our futures had slipped into neutral’s noose & fell madly in love with forgetting.	They caught us a Spark God damn and we took it in
v.	Like a breath
These operations then, perform best cold-turkey	Survived it Like a breath
Recovery will require a victim’s memory	Singed salted & thirsty
Thinking is torture— Aims to extract that which is useful.	for another.



2018 TAFFNY AWARDS INCLUDED

Americas Award for Best Short Fiction
GLORIA ETERNA
Yimit Ramirez (Cuba)

Best Short Animation Award
LA CUCARACHITA MANDI
Martanoemi Noriega (Panama)

Best Short Documentary Award
EBB TIDE
Vivian Rivas (USA)

Best Short Experimental Award
REENACTMENTS
Nancy Wyllie (USA)

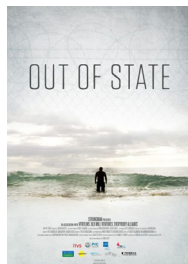
Special Jury Mention (Fiction)
DESDE EL PRINCIPIO
Miguel J. Soliman

Special Jury Mention (Animation)
UN 9 DE ABRIL
Edgar H. Alvarez

TAFFNY AWARDS WERE PRESENTED AT
A GLITTERING AWARDS CEREMONY
AT THE SMITHSONIAN NATIONAL
MUSEUM OF THE AMERICAN INDIAN

The Documentary and Animation Jury included Miguel Rueda, acclaimed filmmaker and animator; Freddie Marrero, award-winning producer/director; and Pilar Rico, lauded filmmaker/editor. The Fiction and Experimental Jury included Colombian actress Kika Child; Ana Maria Hernandez, Professor and Director of Latin American Studies at LaGuardia Community College; and Justin Mugits from the Smithsonian National Museum of the American Indian. Samantha Choos and Martin Bonilla coordinated the jury and the technical aspects of the event.

DOWNTOWN FILM FESTIVAL SHOWCASES RICH CULTURES OF THE AMERICAS



“This celebration of what our diversity adds to us all has never been more important. Or more fun!”

Juan Carlos Mercado
Dean of the Division of Interdisciplinary Affairs

For a week in June, the fifth edition of The Americas Film Festival of New York (TAFFNY) lit up downtown with the celebration of the vibrant cinema of Spain and the Spanish diaspora.

A cultural project of the City College Division of Interdisciplinary Studies at the Center for Worker Education in collaboration with the National Museum of the American Indian, TAFFNY gives New Yorkers—including the 29% of New Yorkers of Hispanic heritage—a unique opportunity to see award-winning films from Argentina, Brazil, Canada, Colombia, Costa Rica, Cuba, the Dominican Republic, El Salvador, France, Honduras, Mexico, the Netherlands, Panama, Peru, Spain, and the United States.

“The Americas Film Festival of New York aims to create a new culture of cinematography appreciation by providing a dynamic space for the public and artists to meet and reflect on multiculturalism and diversity in our society, while promoting the work of new and emerging filmmakers,” explains Dean Juan Carlos Mercado. “This celebration of what our diversity adds to us all has never been more important. Or more fun!”

Curated by Diana Vargas, Emmy-award winning artistic director of the Havana Film Festival in New York, and coordinated by Professor Carlos Aguasaco, TAFFNY opened with the New York premiere of “Handia” by Spanish directors Jon Garaño and Aitor Arregi. The title, which means “giant” in the Basque language, is a touching drama about the tough life of mid-19th century traveling circus “freaks.” It portrays “an uneasy universe with complexity, subtlety, emotion and truth,” according to Carlos Boyero of the Spanish newspaper *El País*, winning ten 2018 Goya awards—the national annual film awards of Spain. The festival closed with the New York premiere of “Out of State” by Native Hawaiian filmmaker Ciara Lacy—a character-driven documentary that chronicles the experience of two men who discover their cultural identity while held as inmates in a private prison, thousands of miles away from their island home of Hawaii. Closing activities also included a special celebration of City College’s MFA in Media and Film featuring a selection of award-winning short fiction and documentary films produced by CCNY film students.

Event venues included the CCNY Center for Worker Education, the General Consulate of Argentina, the King Juan Carlos I of Spain Center at NYU, the Martin E. Segal Theatre Center at the CUNY Graduate Center, Instituto Cervantes New York, and the Smithsonian National Museum of the American Indian.

SHAKESPEARE AND THE GLOBAL DOMINANCE OF ANGLO-AMERICAN CULTURE

Shakespeare scholar András Kiséry has had a very good year.

In January his proposal for a study of the dissemination and consumption of English literature between the 16th and 18th centuries—“Forming English Literature in the Early Modern World”—won a coveted grant from the National Endowment for the Humanities for research leading to a new book. Only 10% of the proposals made the cut.

Kiséry explains, “In 1600, no one cared for English writing outside of England. By 1800, English was among the most influential, most widely known literatures globally, and certainly in the Atlantic world. How did this happen? Through what agents: printers, publishers, translators and of course readers; through what connections and networks of trade and culture did English books enter into European and global circulation? And why does this matter? This is part of the history of how English became the global language of the 21st century—and the global dominance of Anglo-American culture... a story of our own world.”

The author also sees his personal story in this larger narrative—the life-altering story of how “a not particularly disciplined student in late-20th century Hungary” became an English major, almost by default. The Hungarian school system required two majors; Kiséry was fortunate enough to have some great teachers of Shakespeare in both Hungary and in the UK, and so his accidental major became his passion.

“My interest in literature was always driven by an interest in history—what I wanted to understand was not just the texts, but also, what people made of them, how people understood them or used them, what their role in the culture was.” This confluence of history, literature, and culture is where Kiséry has lived ever since. And now with the NEH grant, Kiséry will spend the next year conducting research in U.S. libraries, and abroad at research libraries in Germany and the United Kingdom, as preparation for his next work, *Books, Space and English Literature*.

Kiséry’s year got even better in May, when his 2016 book, *Hamlet’s Moment: Drama and Political Knowledge in Early Modern England*, now also out in paperback, was shortlisted for the 2018 Shakespeare’s Globe Book Award—the most prestigious literary award to a scholar whose first monograph has made an outstanding contribution to our understanding and appreciation of Shakespeare and his contemporaries. *Hamlet’s Moment* identifies a turning point in the history of English drama and early modern political culture: the moment when the business of politics became a matter of dramatic representation.

Teaching at CCNY is especially fascinating to this popular professor because of the wide variety of perceptions our diverse students bring to the literary text. Kiséry believes that trying to bring these different perspectives into conversation also reveals a lot about the texts themselves—frequently teaching him about the specific ways in which something intended for a different age and culture can work in completely new contexts.

Kiséry is a 1994 graduate of Hungary’s Eötvös University (BA, English), University of Bristol in England (MA in Shakespeare and English Literature, 1995) and Columbia University (PhD in English and Comparative Literature, 2008). He has taught at CCNY since 2009.

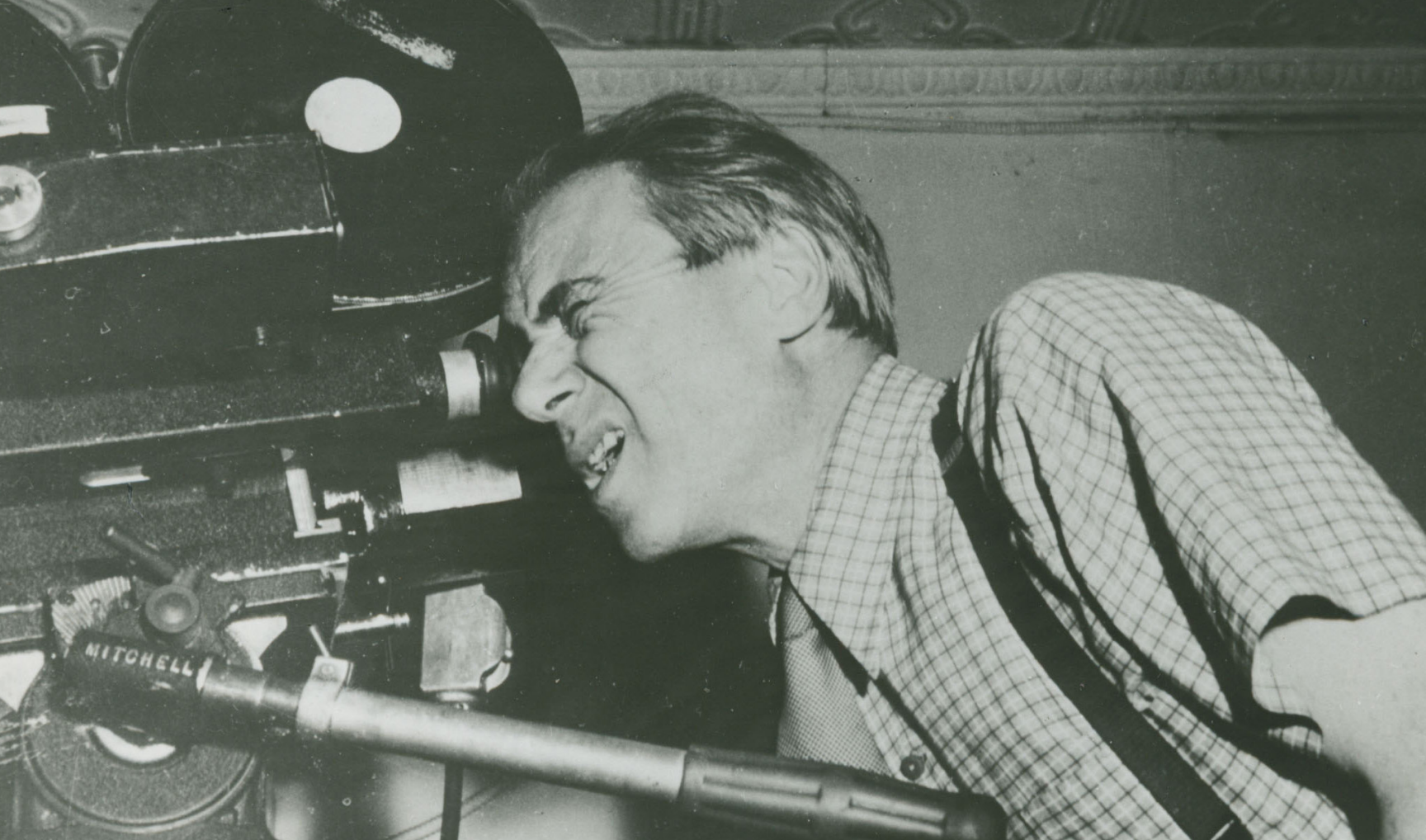
This is the third year running that CCNY faculty members have won an NEH grant; Mikhal Dekel (2017) and Václav Paris (2016) are also recipients.



“My interest in literature was always driven by an interest in history. What I wanted to understand was not just the texts, but also what people made of them...”

András Kiséry
Assistant Professor of English
Division of Humanities & the Arts





FILM PIONEER HANS RICHTER'S LEGACY OF INNOVATIVE FILMMAKING AT CCNY

Hans Richter fled Europe in 1941 to avoid being imprisoned by the Nazis for his anti-fascist ideas. Not long after he arrived in the U.S., he was invited to teach a class in the newly formed Institute of Film Techniques at City College.

Richter was soon named the Director of the Institute—the first college-level film program in the country—a post he would hold for fifteen years. This year we celebrate the 75th anniversary of Hans Richter's taking the helm.

With a reputation as an international artist, educator and outspoken critic of oppression of all forms, Richter's Institute epitomized the mission of City College, giving underrepresented, talented students full access to the best education available.

At the Institute, film students were taught by world-famous professors, many of whom were also refugees. According to Dave Davidson, a professor in the CCNY film department who is an expert on Richter, "City College was an artistic sanctuary—a safe space where faculty and students could use film as a fighting weapon to oppose the powerful Nazi propaganda machine."

Richter was clearly ahead of his time in recognizing that films like "Triumph of the Will," a chilling but artful piece of propaganda which cast Hitler in a heroic light, are what we now call "alternative facts."

In addition to being an anti-fascist, Richter was also a DADAist and a radical theorist/practitioner. After the war, some of the Institute's students went on to become Oscar-winning Hollywood feature filmmakers. Others became noted documentarians.

Many of the Institute's filmmakers were influenced by Richter's belief in film as a unique art form divorced from all theatrical conventions—especially his experimental art films of the 1920s. Inspired by such radical notions, they went on to become the pioneers of the New American Cinema movement of the late 50s and early 60s.

Under Richter, the Institute started as a part-time non-degree program in documentary filmmaking. Within six years of its founding, the school won its first Oscar. By the time Richter left in 1957, the film school was a full-time course of study leading to a BA.

One goal Richter was not able to accomplish was to start a graduate program in film production. In 1997, CUNY finally approved an MFA program—the first such program at an affordable public college in the number one media market in the world.

Today, Richter remains synonymous with Modernism in film and documentary art in America, and continues to influence



Top from right (clockwise) Vivian Rivas, Jiage Tong, Emmanuel Adu Poku and Rituparna Das Datta

generations of emerging filmmakers. His independent spirit lives on in CCNY's production programs where students are encouraged to make thoughtful, visually inventive films on tight budgets.

CCNY's film school is still the only program of its kind, taught by practicing filmmakers of international reputation who receive major grant funding for their own work. These faculty members share their knowledge and expertise with students directly from the field and are passionate about treating them as emerging visual storytellers who make films that matter.

Led by program co-directors Antonio Tibaldi and Andrea Weiss, the film school gives students access to the finest talent, locations, and production facilities of New York City in the hopes they will become the next generation of original voices in independent film. Faculty routinely win awards at film festivals. In 2017, two faculty members had critically acclaimed feature films in theatrical release; another received two Emmys.

CCNY student films have been official selections at Cannes, Sundance, Tribeca, Berlin, and Venice (Biennale) Film Festivals. Students have also won numerous student Oscars (including 2017) and Emmys.

Cityvisions

MFA PROGRAM IN MEDIA ARTS PRODUCTION
FILM & VIDEO SHOWCASE

CITYVISIONS, THE ANNUAL FILM SHOWCASE AT THE DIRECTORS GUILD OF AMERICA THEATER, LAUNCHES STUDENTS' WORK INTO THE FILM FESTIVAL CIRCUIT, TELEVISION BROADCAST, AND NON-THEATRICAL DISTRIBUTION. CCNY STUDENTS HAVE WON NUMEROUS AWARDS, INCLUDING:

Rituparna Das Datta and **Sarah Wemy** each received a New York Women in Film & Television (NYWIFT) Ha Phuong Scholarship. Ritu, Class of 2018, received the scholarship in recognition of her short fiction thesis film "Canvas," and Sarah ('19) will use the scholarship toward the production of her thesis documentary, "Once in a Lifetime."

Cyprien Kodjo ('18) won the Bronze Award for Best Documentary Short at the Independent Short Awards—Los Angeles, with his thesis "Not Rich Yet."

Fatima Matousse ('18) received an Honorable Mention for Best Documentary Short at the Independent Shorts Awards—Los Angeles, for her thesis "Family in Exile."

Emmanuel Adu Poku ('19) and **Rafael Samanez** ('19) are the recipients of this year's British Academy of Film and Television Arts (BAFTA) New York Media Studies Scholarship program. Emmanuel received a BBC America Scholarship; Rafael received a BAFTA New York Documentary Scholarship in Honor of John Grist.

Vivian Rivas ('18) won Best Short Documentary in The Americas Film Festival—New York for "Ebb Tide," her thesis documentary.

Jiage Tong ('18) received a National Board of Review (NBR) Student Grant for her fiction thesis film "Seventy," set in a remote Chinese village. Through the Student Grant Program, the National Board of Review promotes the cinematic future by helping young filmmakers finish their projects.

LEADERSHIP IN THE SERVICE OF DEMOCRACY: SCHOLARSHIP IN ACTION



"Scholarship explains the world. Engaged scholarship changes the world."

John Krinsky
Professor of Political Science
Colin Powell School for Civic and
Global Leadership

If you ask John Krinsky for a definition of engaged scholarship, he'll tell you, "Scholarship explains the world. Engaged scholarship changes the world. It's a mode of inquiry that goes beyond academic concerns to an approach that works with people who want to improve their life circumstances."

Krinsky is a longtime advocate of engaged scholarship. He and his students have worked with community-based organizations for almost a decade, including Picture the Homeless, which investigates the use of community land trusts (CLTs) to help prevent homelessness in the most vulnerable populations.

Engaged scholarship can take many forms. It can be a years-long collaboration with an organization like Picture the Homeless; a one-time visit to a classroom by a community partner to ground students in real-world knowledge of an issue; or a minor in Community Change Studies.

In just its third year at City College, the Community Change Studies minor already has 35 students. Its curriculum includes a community organizing class taught by Susanna Blankley, Coalition Coordinator for the Right to Counsel NYC Coalition, which is made up of more than 100 tenant advocate groups, tenant organizing groups, faith based groups, academics, and legal service providers throughout New York City.

In one of her classes last semester, Blankley asked students if they'd ever been to housing court. As it turned out, one of them had—her family of three had been evicted and ended up having to live

separately for a time because the landlord wanted to add a wall and rent the newly partitioned space for considerably more money to five City College students. Ironic indeed.

Clearly, engaged scholarship is profoundly relevant at City College. Students have an intimate connection with the things they're working on and are able to explore the role research, inquiry, and scholarship can have in the struggle to improve the community for the people who live there now. Not for the next group of people who will move there.

The hands-on minor also offers a research class that connects students with community-based organizations. One group of students is working to identify untapped resources to combat housing insecurity at CCNY and the surrounding community. Another open space advocacy group of students is examining why and how nonprofit and religious institutions are being charged inappropriate property taxes and helping them learn how to recertify their properties as tax exempt.

What's next for engaged scholarship at City College? Krinsky says "We are constantly revisiting, tweaking and trying to build more and deeper relationships with the groups we're working with and refine our own approach to pedagogy. Rather than being oriented by a dream, we're animated by the challenge of continuing to improve how we do what we do. I'd like to see engaged scholarship expand. I'd like to see more resources devoted to this kind of work because it's important and very relevant to our students and their lives."



PREPARING OUR STUDENTS FOR THE NEXT STEP

By the time City College students move from graduation to the world of work and career, the Career and Professional Development Institute has had their backs in a relationship built long before Commencement.

"We build a personal relationship with the students who come to CPDI," says Rhea Faniel, Senior Associate Director for Diversity Recruitment and Employer Relations at City College. "CCNY students are smart and ambitious, but many of them come from different cultures and traditions, and haven't had any experience with American business or corporate etiquette."

In some religious traditions, for example, women and men do not shake hands. Career staff members may coach students on how to react gracefully when a recruiter or interviewer offers a hand in greeting to a Muslim or an Orthodox Jew, without compromising their religious beliefs. Many students don't know what the unspoken dress codes are for interviews and receptions. Although many CCNY students work, few have had experience in writing a résumé that reflects the critical competencies that employers are seeking for even entry-level positions—and very few have practiced for a formal interview.

Faniel concludes, "Most of our students have little experience with the professional culture of a large company, government agency, or non-profit. We want to prepare these students to present themselves professionally and with confidence to the professionals in their chosen field."

CPDI works with students at all levels at CCNY—and the most successful take advantage of the services it offers throughout their college career. The Institutes Explorer Program helps new students

find a major that fits their interests and abilities. The Internship Program places undergrads in internships that help them hone their skills for the careers they chose, and provides the internship experience increasingly required for so many careers. The Senior Recruitment Program helps seniors find the career-focused job opportunities they are seeking when they graduate.

Over the course of the academic year, CPDI offers more than 240 professional development workshops open to all students. Subjects range from writing a winning résumé and a compelling cover letter, to mastering the interview, to managing the graduate school application process and finding funding.

In addition, career fairs offer students and recent alumni the opportunity to meet prospective employers and get their résumés to the people who manage the hiring process. CPDI hosts five career fairs each year: in business and social services, STEM careers, architecture, and education, as well as the Spring Job and Internship Fair in March, open to all. Last year more than 2400 students attended these fairs—which hosted 229 major employers. The Institute also maintains a database of more than 800 screened jobs that CCNY students can apply for online.

In all, last year 3,781 students took advantage of the career coaching services offered by the Career and Professional Development Institute at City College.

Increasingly, employers in both the private and the public sector know that they need a diverse, inclusive workforce to succeed. They need City College students. The Career and Development Professional Institute is making that connection happen.



SNOW DAYS: REMOTE SENSING IN CARIBOU, MAINE

Snow. Skiers and children love it—big city mayors, emergency managers and commuters, not so much. Two billion people around the world rely on it for drinking water, even as every spring flash flooding from melting snow poses serious threats to communities across America and around globe.

In 2010, The Grove School of Engineering's NOAA Center for Earth System Sciences and Remote Sensing Technologies established the Snow Field Experiment, or CREST SAFE, in remote Caribou, Maine. This million-dollar ground-based instrumentation facility enables innovative research in support of the National Oceanic and Atmospheric Administration's mission of extreme weather forecasting. That it engages not only CCNY's top engineers, scientists and graduate students, particularly from underrepresented minority communities, and provides previously undreamt of opportunities for Native American high school students to see science in action and perhaps pursue careers in STEM disciplines... well, that's what CCNY does.

Reza Khanbilvardi, a water resources engineer who has been the director of NOAA-CREST since its inception, explains that SAFE was designed first and foremost to help meteorologists, emergency managers and government officials in the Northeast to provide early warning of dangerous flooding conditions with a much more finely tuned understanding of snow.

Because snowfields are remote rather than located next to great urban research centers, much of the data is obtained from satellites. Obviously these "eyes" that are anywhere from 500 to 25000 miles up in the sky are critical to our understanding, but they can't tell us everything we need to know, including how much water a given field contains, or just how it will melt—as a gentle spring flow, or dangerous flash floods or river ice jams. Because snow melts from the inside, not from the top, we need to know its depth and density—and how it layers loosely and tightly packed snow and ice. For that we need "eyes" on the ground.

Enter SAFE, a unique mobile ground-based sensing facility in a van located in Presque Isle, near Caribou Maine, where according to NOAA's NowData, the average seasonal snowfall is 109 inches,

with nearly 200 inches in a year not unheard of. The SAFE mobile lab includes dual polarized microwave radiometers, similar to the sensors on the JPSS satellites that help measure and validate the brightness temperature of the snow mass; a Gamma radiation sensor to measure snow-water equivalence; and an infrared thermometer and net radiation sensors to measure the changing temperature at every 5cm of depth, among other equipment.

With this data, SAFE engineers are able to analyze the snow pillow on top, and understand the interactivity of the layers below. Working with the National Weather Service Forecast Office, located in Caribou, SAFE research helps meteorologists, emergency managers and the U.S. Coast Guard provide early warning of dangerous flooding conditions—particularly along the Aroostook River, an important natural resource for the local and Native American residents in Aroostook County.

SAFE's potential is even greater, however. The Maine facility collects important *local* data. But what do measurements from Caribou say, for example, about the snow mass in the Sierra Nevada Mountains? Real-time data and an accurate estimation of the amount and morphology of snowfields are vital to all mountain communities, and to global natural resources management—particularly water management.

Engineers and scientists back at CREST at CCNY are calibrating SAFE's data with the satellite data received from NOAA, working to develop an algorithm that could be broadly applicable to other snowfields. SAFE data is already used in simulations using the multi-layer emission model developed by the Helsinki University of Technology, known as the HUT model, and compared with the data from several satellites. It is bringing scientists one step closer to a Global Snow Product—the ability to accurately estimate the total amount of water world-wide available in the form of snow.

IT TAKES A VILLAGE... AND A DRONE.

Unmanned aerial vehicles—drones—provide a cost and time efficient research technology that produces high-resolution images and maps that complement satellite-based data; they are particularly useful in remote regions like Aroostook County. Drones help the CREST-SAFE team understand snowpack properties in the County, and help explore innovative and cost-effective methods for mapping the snow distribution that can be used for commercial and civilian applications.

One of NOAA-CREST's highest priorities is to train the next generation of STEM scientists, particularly from underrepresented communities, and each year a group of NOAA-CREST funded students participates in the SAFE experiments in Maine as part of their graduate/doctoral research and training. (Many of these students come from tropical Puerto Rico to research the snow!) Students from the University of Maine in Presque Isle also participate. They are given hands-on training on how to operate the drones, and plan and process the rich photogrammetric data that they gather.

Perhaps SAFE's most unique outreach, however, is the partnership it began in 2017 with the Aroostook Band of Micmacs, whose headquarters are also in Presque Isle. Like many Native Americans, Micmac youth face economic hardship and academic disadvantage, and they have rarely been engaged in hands-on science. SAFE is providing a once-in-a-lifetime opportunity to the young people of the Micmac nation, enabling middle and high school students to learn about their environment and sustainable development. Members of the Aroostook Band of Micmacs help with the drone fly-overs that make sure that everything is in working order – after all, even the most sophisticated equipment won't work if a small animal is obscuring its sensors—and this fall and winter they will be able to participate in a range of field experiments.

The NOAA Center for Earth System Sciences & Remote Sensing Technologies—NOAA-CREST—is a multidisciplinary CUNY consortium led by City College and headquartered in the Grove School of Engineering. Established in 2001 by the National Oceanic and Atmospheric Administration, which has provided approximately \$45 million in support to date, NOAA-CREST is one of only four NOAA Cooperative Science Centers in the country and the lead NOAA institute in remote sensing and technology.



MOVING THE NEEDLE:

THE ARTICLE ABOUT RACE AND HEALTH THAT IS CHANGING AMERICA

When Linda Villarosa was a small child growing up in Chicago, long before she went to school, her great aunt May told Linda that she knew the little girl would become a writer. Aunt May taught Linda to read before she entered kindergarten—and what a writer she has become!

On April 15, 2018, the cover of *The New York Times Magazine* was given over to Villarosa’s “Why America’s Black Mothers and Babies Are in a Life-or-Death Crisis,” featuring this painful and surprising question and answer: “Why are black mothers and babies in the United States dying at more than double the rate of white mothers and babies? The answer has everything to do with the lived experience of being a black woman in America.”

“The issues I write about are those that aren’t rising to the surface, but should be.” Villarosa explains, “Actually, I’m a numbers geek—and as I tell my classes—I always start with the numbers. When I see statistics that look wrong or unfair, I look at the research. I look for connections that haven’t been made explicit. And then I look for the people on the ground who are living these numbers, and try to tell their stories. I am at heart a story-teller.”

The product of eight months of concentrated research, Villarosa’s piece is the latest result of her intrepid curiosity on behalf of social justice. It is a rare example of lucid science writing, interwoven with luminous story-telling about the experiences of one woman of color, Simone Landrum, two of her children, one who died, and one who lived, and the doula who helped her.

The racial disparity in infant mortality has been tracked for more than a century and a half. Today black infants in the United States are more than twice as likely to die as white infants. Received wisdom outside of the scientific community usually attributes this terrible fact to some combination of poverty, lack of education, lack of access to health care, and unfairly, a perceived absence of personal responsibility.

Less widely known is the fact that today the United States is the only developed country in the world where the number of women who die in childbirth is rising—a heartbreaking distinction almost completely due to maternal mortality in the African American community, which is three to four times the rate of white mothers. In fact, according to the Centers for Disease Control—and contrary to the easier argument about

class — a black mother with a college degree has a greater risk of dying than a white woman with an eighth grade education. “Why America’s Black Mothers and Babies Are in a Life-or-Death Crisis” is Villarosa’s deep dive into the research that painstakingly and overwhelmingly rebuts the idea that African American women are to blame for the crisis in their health and the health of their children through their actions or inheritance. She explains what Arline Geronimus of the University of Michigan calls “weathering”—at its worst a kind of constant, toxic stress as a consequence of repeated exposure to a climate of discrimination and insults that trigger the premature deterioration of the bodies of African American women, the way that a storm wears down rocks, but also builds a kind of resilience, like a house that weathers a storm. Villarosa lays out what experts in the field now understand: the lived experience of race in America, along with deeply rooted racism in the health care system, dramatically affect who lives and who dies.

The overwhelming power of the story that Villarosa tells is grounded in her warm description of the most painful chapter of Simone Landrum’s life, the loss of her child Harmony, and finally the triumphant birth of Kingston Blessed Landrum—with the extraordinary assistance, knowledge and love of doula Latona Giwa. At every turn, Landrum’s story is the human face of the research that Villarosa explains so well. It is also ultimately a story of hope.

“Why America’s Black Mothers and Babies Are in a Life-or-Death Crisis” was one of the most highly responded to and emailed for the year for the *Times* magazine, receiving 1200 comments and social media amplification by Dan Rather, Senator Cory Booker, gubernatorial candidate Cynthia Nixon and rapper and actor Common.

Citing Villarosa’s article, the *Times* editorial board followed the article five days later with an editorial about the shameful details of how we have failed to protect the lives of black women in pregnancy and childbirth. Shortly after, Governor Andrew Cuomo expanded Medicaid payments to cover doulas to help reduce childbirth related deaths in black women. (In Louisiana, Latona Giwa earned only \$600 for many months of service.) And in early July, Senator Patty Murray secured \$50 million in initiatives to address maternal mortality, citing the disproportionate risk faced by women of color.

This is journalism at its most powerful. It changes things.



“When I see statistics that look wrong or unfair, I look at the research... then I look for the people on the ground who are living these numbers, and try to tell their stories. ”

Linda Villarosa
CCNY Journalism Program Director
Assistant Professor of Media and Communication Arts
Division of Humanities & the Arts
and *New York Times Magazine* contributing writer

A graduate of the University of Colorado, Villarosa spent a year at Harvard University as a journalism fellow, and received her master’s degree in urban journalism/digital storytelling in 2013 from the CUNY Graduate School of Journalism. For several years, she edited the health pages for the *New York Times*, working on health coverage for *Science Times* and for the newspaper at large; she was also the executive editor of *Essence Magazine*. She is the author or co-author of four books, and has won numerous journalism awards. With her mother and sister she owns Villarosa Media, a boutique publishing company of work primarily by and about African Americans and the African Diaspora.

Professors transform the lives of their students, and students transform the lives of their families and children. But so many at CCNY go above and beyond that already critical transaction. Here are just a few stories about the members of the City College family whose work and passions transform our world.

STUDENT ACTIVISTS OPPOSE GUN VIOLENCE



“This is the kind of college we are.”

Haris Khan
President
Undergraduate Student Government

The roots of activism run deep at City College. Over the years, students have protested, marched, held sit-ins, and occupied buildings. They have resisted fascists, racists and elitists who tried to deny them an affordable education.

Today, CCNY remains a hub of activism. Students continue to struggle for their rights and the rights of others. Most recently, they’ve fought hard to hold the line on tuition costs, to support their fellow DACA students, make MTA fares fairer, and to end gun violence.

On Friday, April 20th, in response to the Parkland shooting, an ad-hoc committee of City College students and educators organized a rally to provide a safe space for students to voice their concerns about gun violence and ask community stakeholders to take action.

More than 100 CCNY and local middle school students spoke, cried, sang, and recommended ways forward. Through it all, one message came through loud and clear: no child should be in danger in their community, their home, or in their school.

The event was co-moderated by a student, Haris Khan, President of the Undergraduate Student Government, and an educator, Johanna Garcia, Executive Director of The City College Partnership.

Khan framed the rally as “a good opportunity to learn from a really bad experience—Parkland. To empower other students to raise their voices because they are the ones who are living with this every day—especially in public schools. We also wanted to show PS 161 students this is the kind of college we are. It starts with all of us, the students, the staff, faculty, administration, community stakeholders—working hand in hand to continue to push forward.”

Garcia and other faculty members were determined students’ voices be front and center. “We wanted to hold the space for students to be heard. After all, they might be too young to vote but they’re not too young to die. So we asked adults to do something they rarely do: to sit there and listen. Not to be the first to speak, not be the first to set the tone, to let the students set the tone and consider what they had to say.”

WEATHERING THE STORM: TEACHING AFTER MARIA

Irving Mota was on a Skype call for a class in CCNY’s Teaching English to Speakers of Other Languages (TESOL) program in his home near San Juan, Puerto Rico, when Hurricane Maria hit and changed life for everyone. Mota had moved to the island with his husband in 2015 to teach first grade and pursue his master’s degree as an independent study, working with City College School of Education Professor Tatyana Kleyn.

“The challenges to the entire community were huge,” recalls Mota. “Even though most residents would be without power for months, we all pitched in and managed to get the school up and running on generators. We welcomed back eager students ready to learn and return to their daily routines, offering a break from the reality the island was facing. School became a sort of sanctuary.”

Hurricane Maria was not the first storm that Mota has weathered. Born in Mexico, he grew up in New York’s Hudson Valley, undocumented and with an uncertain future. In 2012, while completing a bachelor’s at City College in bilingual childhood education with cum laude honors, Mota was unsure if he would be able to work as a teacher due to his immigration status.

He spoke to Professor Kleyn, opening up about being undocumented. Kleyn, along with the faculty and

administration at CCNY, worked with Mota to give him confidence. “They told me, ‘You are at the right place. We’ve never dealt with this before but we will find a way, we will figure it out.’ They knew I was passionate about teaching and that I wanted this.”

Fortunately, shortly after graduation, Deferred Action for Childhood Arrivals (DACA) was announced and Mota became a bilingual teacher in Manhattan. He shared his story in Kleyn’s 2012 documentary, “Living Undocumented: High School, College and Beyond.” He also participated in her follow up film, “Still Living Undocumented,” which followed the impact of DACA on young people five years later.

In Spring 2018, Mota received his master’s in TESOL from the School of Education, having persevered in the face of governmental challenges and natural disasters. “I love being a part of the education process and contributing to children’s growth—and I’m so glad that I’m here, now, in Puerto Rico. This is what I’m meant to be doing.”

“This is what I’m meant to be doing.”

Irving Mota, MS (TESOL)
2018, Primary School Teacher



WOMEN DETERMINED TO ALTER REAL ESTATE LANDSCAPE



The development and commercial real estate industry remains a tough profession for women to crack: a recent study of top commercial firms by California's Commercial Café found that women held only 14% of the senior executive jobs nationally, and even here in New York City Women make up only 27% of executive level managers, according to the real estate magazine *The Real Deal*.

But City College and the WX New York Women Executives in Real Estate are determined to change that. In June, four female architecture students from The Bernard and Anne Spitzer School of Architecture at City College were recognized for their achievements and potential when they received WX scholarships designed to encourage and support bright and talented young women pursuing careers in real estate and related professions in the New York metropolitan area.

WX, an association of executive-level women actively engaged in the commercial real estate industry in New York, promotes the advancement of women in commercial real estate and enhances public perception about the role of women in the industry. Through educational seminars, breakfasts with industry leaders, mentoring programs, scholarships, and special events, WX provides members with a forum for visibility and exchange, spotlights the accomplishments of individual women in the industry, and paves the way for the next generation of women in the field.

Two-time WX beneficiary Robynne Heymans received a WX Summer Internship Grant last summer to support a landscape architecture internship with the National Park Service at Gateway National Recreation Area, 27,000 acres of national parkland in and around New York City. The award provides eligible students with a financial grant for summer living expenses while working in the New York real estate industry.

"I am thrilled to be a part of such a strong network of successful women working in real estate and architecture in the city. I'm really

"I'm really interested in acquiring an understanding of how the city is impacted and can be improved by the intersection of development, real estate, and landscape architecture."

Robynne Heymans
MLA degree recipient
and two-time WX scholarship honoree

interested in acquiring an understanding of how the city is impacted and can be improved by the intersection of development, real estate, and landscape architecture. This scholarship allows me to pay off a significant portion of the debt incurred during my graduate studies and move forward confidently to pursue my career."

Sarah Toth, who graduated this year with a master's in landscape architecture, was honored to be recognized. "As the first member of my family to graduate from college, I am so grateful for the invaluable opportunity at this stage of my career. I am most looking forward to the WX Scholars Mentoring Program and attending workshops and networking events."

The other Spitzer students who received scholarships were Marina Beatriz Galang Santos, a master's recipient in Architecture, and Jacqueline LeBoutillier, a 2018 graduate with a master's in Landscape Architecture.

NATIONALLY RECOGNIZED MENTOR FOCUSES ON DIVERSIFYING ENGINEERING

On June 25, City College's own dean of engineering, Gilda Barabino, was one of twenty-seven university educators around the country to receive the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring, the nation's highest honor bestowed upon mentors who work to expand talent in STEM.

Barabino, one of only four African American women deans of engineering in the country, is acutely aware of the need for mentoring and its impact on developing the next generation of underrepresented students and faculty in STEM. She's spent the better part of the past three decades helping to launch and sustain a wide variety of initiatives that have encouraged and supported the progression of underrepresented minorities in STEM while also enabling the institutions that serve them. She's used her positions of leadership—as president of the Biomedical Engineering Society; president of the American Institute for Medical and Biological Engineering; founder of the National Institute for Faculty Equity; and, as dean of the Grove School of Engineering—to advocate for equity that primarily focuses on developing and retaining role models and mentors that mirror the diverse individuals who are most in need of mentors.

At the heart of Barabino's motivation is her desire to not lose talent. After all, she says, "The best science is conducted when we have the most inclusive group of people involved. You can't possibly have the best minds at the table if you exclude certain groups." Having had no mentors to help her navigate her path, she wants to change that dynamic for the next generations. "Now, as a mentor to both students and faculty", she explains, "I want to create a sense of community in an educational environment that elicits and values everyone's voice."

It's no surprise Barabino gravitated toward City College for its legacy and long-standing mission of access to excellence. At the Grove School, she and her faculty are developing a new model of STEM education—one that transforms the way these disciplines are taught by making them relevant to a truly diverse student body whose talents and contributions the nation cannot afford to lose. The model addresses the academic disadvantages that some of these students bring to college, but equally important, it builds on the correlation between subject matter and their own lives—and provides opportunities to construct an understanding of what it means, within their lived experience, to be an engineer.

"As a mentor to both students and faculty, I want to create a sense of community in an educational environment that elicits and values everyone's voice."

Dr. Gilda A. Barabino
Dean and Berg Professor
Grove School of Engineering



FROM THE AMAZON TO THE ARCTIC TO ASIA: UNDERSTANDING AND PROTECTING BIODIVERSITY



We share our increasingly fragile planet with approximately ten million species—the legacy of billions of years of evolution. As CCNY biodiversity expert **Ana Carnaval** explains, “Biodiversity provides crucial services to the planet, to all of life, and to humans. Because it is so relevant to the health of our planet and to human societies, science has a crucial role to play in understanding how it is generated, maintained and lost.”

Biodiversity is extraordinarily complex, however. Its distribution patterns and ecosystem services are regulated by processes that operate across multiple hierarchical levels of organization, temporal dimensions, and spatial scales. The diversity of life on Earth is seemingly endless, yet climate change and habitat loss—so much of it driven by anthropogenic activity—presents an existential threat. Scientists working to understand and protect biodiversity are in a race against time.

Grounded in the pioneering work of a core group of six biodiversity scientists at CCNY and their myriad partners on campus and around the world, City College has launched a \$10 million campaign to establish the multidisciplinary CCNY Center for Biodiversity under Environmental Change, devoted to the study of the multiple causal links between biological diversity and environmental changes at the local, regional and global level.

The campaign was kicked off with a generous \$1 million donation from Shirley Katz Cohen, an alumna of Hunter College '46 and New York City math teacher for 35 years. Her strong connection to City College is both longstanding and current: her three brothers, Jerome, Mortimer and Irving Cohen graduated from CCNY in 1934, '40 and '45 respectively, and today her great nephew, Dr. Alvin Cohen, is a respected researcher in the College's physics department. Katz Cohen is passionate about the transformative power of public education, and about the urgent need for biodiversity research.



INNOVATIVE BIODIVERSITY RESEARCH AT THE CITY COLLEGE OF NEW YORK

The City College core team of biodiversity specialists boasts strong and varied disciplinary and interdisciplinary research interests, proven funding success, and a robust track record of training students. Over the past five years, they have brought in more than \$7.15 million in research. Their on going contributions to the field span several labs at CCNY as well as institutions and countries around the world, on every continent but Antarctica. They work at different scales of organization—from a single species, to its ecosystem, to the biosphere—partnering with experts in remote sensing, machine learning, modeling and mathematics. What follows are brief, selected examples of the reach and consequence of their research.

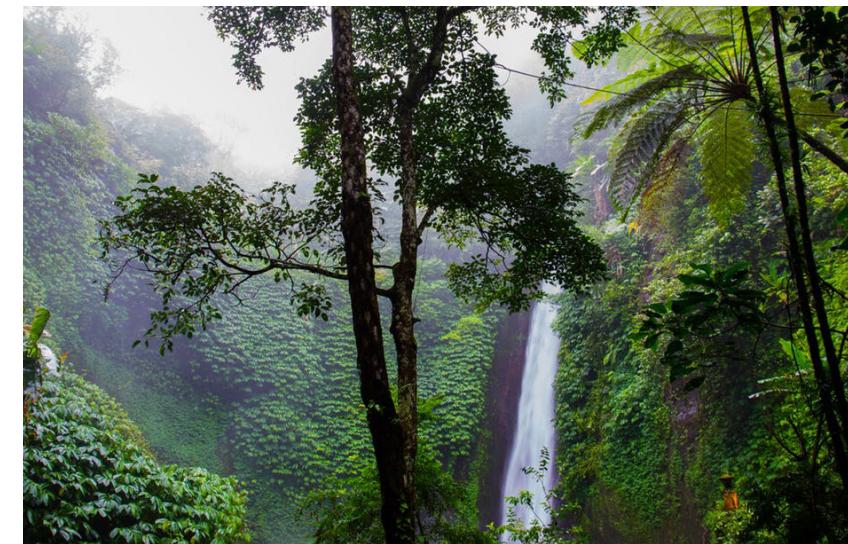
Amazonia—home to the highest species diversity and largest freshwater ecosystem on the planet—plays a critical role in shaping the Earth's atmospheric gasses and oceans and consequently its climate; the loss of plants and trees in the Amazon can contribute to extreme weather events like hurricane Sandy. **Carnaval** and Terry Elkes Professor of Earth and Atmospheric Sciences **Kyle McDonald** are partnering with the American Museum of Natural History to understand Amazonia's evolutionary and ecological history over the last ten million years by integrating systematic biology, population biology, ecosystem structure and function, geology, Earth systems modeling and remote sensing, and paleoenvironmental history. Their research represents the most comprehensive examination of Amazonian biodiversity and its history to date. Together they are establishing a methodological template that can be used by scientists around the world to analyze the history of biotic and environmental change across large, ecologically complex landscapes.

A companion study by **Carnaval** and Professor of Biology **Michael Hickerson** is developing a framework for predicting spatial patterns of biodiversity in the Brazilian Atlantic Forest, reconstructing the historical factors that influence current dimensions of genetic, taxonomic and functional biodiversity. This scientific history will permit scientists to predict the future of biodiversity in the Atlantic forest over a range of climate change scenarios.

The Arctic is warming twice as fast as the rest of the planet. That rate of change is expected to continue and intensify in the future, with increasingly profound implications for human health and safety, whole industries and economies that depend on the ice, and the supply of food and other biologic resources around the world. Associate Professor of Earth and Atmospheric Science **Maria Tzortziou** works closely with other research universities and NASA collaborators to characterize changes in the cycle in which chemical elements and simple substances are transferred between biochemical fluxes and the continuum of Arctic rivers, estuaries and the ocean. Her work will develop new remote

“Earth's biodiversity is essential to our survival and well-being.”

Ana Carnaval
Associate Professor of Biology
Division of Science



sensing algorithms that will improve our ability to monitor Arctic degradation from space.

Tropical forests sequester large amounts of carbon, and the fate of that carbon—whether it will be released into the atmosphere to contribute to global warming or changed into a more climate-neutral form—depends on the fate of those trees. The answer may lie with the primary colonists of moribund wood, saproxylic beetles, poorly known but exceptionally species-rich organisms that initiate the transformation of plant biomass into microbial and animal biomass. In the lowland neotropical forests of Middle America and northern South America, Associate Professor of Biology **Amy Berkov** and her international collaborators study the resilience of these tiny but important actors in the drama of carbon capture and release so critical to our warming environment.

For the past 50 years, Professor of Biology **Robert Rockwell** has spent almost every summer in the Canadian Arctic. Over time, he and his international partners in the Hudson Bay Project have traced the explosive growth of the arctic

population of snow geese and, more recently, one of the fastest rates of climate change in the northern hemisphere. Rockwell examines the interplay of feeding and nutrition levels in this coastal tundra system, primarily to understand control and feedback between the grass-like plants, the snow geese and caribou who consume them, and, at the top of the food chain, the polar bears looking to supplement their diet with snow geese as the ice melts and seal hunting becomes more and more difficult.

Despite the fact that more than 60% of all described species are insects, few if any entomological studies relate insect diversity to climate, ecology and evolution at continental or global scales—primarily because the data are either lacking or published in hundreds of obscure references. Leading a consortium of five global institutions, entomologist and Professor of Biology **David Lohman**'s ButterflyNet aggregates information about the biology and distribution of each species, effectively inferring a “family tree” of all 18,500 butterfly species—resulting in the first large-scale studies of insect macro-ecology and comparative biology.

Yet how can the thousands of scientists and conservationists around the world keep up with the massive amount of research and discovery in the broad field of biodiversity? The WALLACE software developed by Professor of Biology **Robert Anderson** and his collaborators fills a critical gap in technologies designed to meet this challenge. A modular, open source platform for reproducible modeling of species niches and distributions

that provides access to some of the largest public online biodiversity databases, WALLACE is an example of an innovative way to make new scientific methods accessible to a broad audience of researchers, far beyond the specialists of a particular sub-field.

Finally, Professors **Anderson, Carnaval** (the Co-PI) and **Hickerson** are part of an interdisciplinary, multi-university team that received an inaugural National Science Foundation “Growing Convergent Research Award” for their project, RCN: Cross-Scale Processes Impacting Biodiversity. The team is one of only 22 to receive this grant for a new kind of research. “NSF has supported cross-disciplinary collaboration for decades,” according to NSF Director France Córdova. “Convergence is a deeper, more intentional approach to the integration of knowledge, techniques, and expertise from multiple disciplines in order to address the most compelling scientific and societal challenges.”

That's an excellent description of the kind of work that will be done in the new Center for Biodiversity under Environmental Change. By working to understand Earth's gorgeous, fragile biodiversity in all of its subtle and complex connectivity, scientists and others at The City College of New York will help humanity preserve and protect it itself—and its home planet in the balance.



EDUCATING THE NEXT GENERATION OF LEADERS IN URBAN SUSTAINABILITY



According to the United Nations Department of Economic and Social Affairs, more than two-thirds of the world's population will live in cities by 2050, posing unprecedented quality-of-life challenges to the next generation. The CUNY flagship school is not only proudly one of the most environmentally responsible colleges according to “The Princeton Review Guide to 375 Green Colleges,” CCNY is also a recognized leader in educating and training the next generation of innovators in urban sustainability.

With the College's unique strengths in the Grove School of Engineering, the Spitzer School of Architecture, the Division of Sciences and the Colin Powell School, CCNY is perfectly positioned to offer an approach to the challenges of urban sustainability that is as multifaceted and interconnected as cities themselves are. The result: CCNY's Interdisciplinary Sustainability in the Urban Environment graduate program.

CCNY's response to a rapidly urbanizing global community includes expert faculty conducting groundbreaking research and providing modern, interdisciplinary opportunities for students to engage in emerging approaches in architecture, engineering, science and the social sciences. They offer courses on industrial ecology, environmental economics, resilient design, water resource management and renewable energy that address the sustainability challenges of the 21st century.

“Contemplating the growing influence and global authority of cities, how do we rein in humanity's footprint to live within planetary means while ensuring greater social equity?”

Hillary Brown

Director of CCNY's Interdisciplinary Master's Program in Sustainability in the Urban Environment
Spitzer School of Architecture

“Students investigate urban sustainability as a cluster of concerns,” says Hillary Brown, professor of architecture in the Bernard and Anne Spitzer School of Architecture and director of CCNY's Sustainability graduate program. “Contemplating the growing influence and global authority of cities, how do we rein in humanity's footprint to live within planetary means while ensuring greater social equity?”

To that point, Professor Brown worked with students and the Haitian Ministry of Commerce and Industry to spur economic development in a rural seaside town still coping with the influx of people who abandoned Port-au-Prince after the 2010 earthquake. An eco-industrial park is planned for the region which is currently plagued by extreme poverty, absence of critical infrastructure, arid conditions and widespread deforestation that has resulted in flooding, loss of topsoil and the depletion of aquifers. The project offers students the opportunity to witness sustainability in practice and to apply the learnings to larger urban systems in the future.

Similarly, students in advanced architecture studios in the Spitzer School recently received recognition for their work conceiving of modular affordable housing to combat urban sprawl and spatial solutions for refugee populations that consider intangibles such as human dignity and empowerment.

Following a unique immersion in interdisciplinary degree tracks in engineering, architecture and the sciences, graduates of the Sustainability Program put their distinctive learning experiences to work in public, private and civil sector positions that are vigorously addressing the climate-related initiatives of cities and states. Recent graduates now serve in such key roles as Planning and Resilience Officer for the City of Hoboken, Director of Green Infrastructure for the New York City Department of Transportation, and in other positions in the NYC Mayor's Office of Sustainability and at the Port Authority of New York and New Jersey.

“Our rising urbanists become problem-solvers and policy makers,” says Brown. “They are inclined to seek out potential collaborations in pursuit of a much more sustainable future.”



All eight Mini-Medical School health information sessions were well attended and featured health professionals from CSOM, City College and multiple health-related institutions.

OCTOBER
Diet, Physical Activity and Health
Maurizio Trevisan, MD, MS, Dean of the CUNY School of Medicine; Joan Dorn, PhD, Chair Department of Community Health and Social Medicine, CUNY School of Medicine

NOVEMBER
Diabetes and Health: Management and Prevention
Dr. Gilbert Brovar, MD, Division Chief, Management and Prevention: Endocrinology, Department of Medicine, St. Barnabas Health Systems

DECEMBER
Maintaining Mental Health and Wellness: How do I know when I need help?
Deidre Anglin, PhD, Associate Professor of Clinical Psychology, Department of Psychology, The City College of New York

JANUARY
What's On Your Plate?
Ann Meyer, MS, RD, CDN, Clinical Nutrition Manager, NYC Health + Hospitals I Harlem

FEBRUARY
Hypertension Prevention and Management
James Croll, MD and Management Nephrology Division Chief and Medical Director of the Hemodialysis Unit at St. Barnabas Health Systems

MARCH
Cancer Screening Prevention and Control
Lewis Kampel, MD, Medical Oncologist, Memorial Sloan Kettering Cancer Center and Medical Director, Ralph Lauren Center for Cancer Care
Donna D'Alessio, MD, Radiologist, Memorial Sloan Kettering Cancer Center
Arnold Markowitz, MD, Gastroenterologist, Memorial Sloan Kettering Cancer Center

APRIL
Sleep and Health
Mediha Ibrahim, MD, Director of Sleep Medicine Center, Pulmonary and Critical Care Medicine Physician, St. Barnabas Health Systems

MAY
Nutrition and Healthy Aging
Ghada Soliman, MD, PhD, RD, Associate Professor in the Department of Environmental, Occupational, & Geospatial Health Sciences at the CUNY School of Public Health and Health Policy

MINI-MEDICAL SCHOOL:
WORKING TOGETHER FOR A HEALTHIER HARLEM



Where you live, learn, work, and play has a huge impact on your health. If you feel safer inside watching TV and eating fast food than outside getting exercise or shopping for healthy ingredients, you're at higher risk of diabetes, heart disease, mental illness and more. It's as simple as that.

Such social determinants cannot be erased—even with access to the best doctors. But their impact can be reduced.

The CUNY School of Medicine trains future doctors to take an approach to medicine that isn't just community placed but community based. CSOM recruits the best students from underrepresented communities and prepares them to return to practice in those very same areas.

But one CSOM second-year student, Hazeizat Shittu, didn't want to wait until she became a doctor to start having an impact. She wanted to understand and meet the health challenges of the surrounding Harlem community while she was still in school. The best way to do that? Ask members of the community what they needed most.

Shittu explains: "I realized that I don't have to be a doctor yet to start impacting my community's health. CUNY School of Medicine has knowledge and tools that can help people make better health decisions for themselves and their loved ones. Why not share those resources?"

What started as Shittu's school project quickly turned into something bigger. The project goal was to have eyes and ears wide open to serve the Harlem community. Shittu and five other medical school students spent months creating a bilingual (English/Spanish) survey and placing it in multiple Harlem locations—including the YMCA, 2 police precincts, a local restaurant, and the Boys & Girls Club. It asked community members what their main health concerns were and whether they'd like health-related information and advice from CUNY Medical School—for free.

More than 100 members of the Harlem community responded in detail, listing which health topics they'd like information on—as well as when and where they'd like the information to be shared—and even how long these information sessions should last. Shittu was guided throughout by Joan Dorn, Medical Professor and Chair of the Department of Community Health and Social Medicine.

Dorn correctly intuited that substantial strength and resources already existed in the Harlem community. "There are many partners in the community ready to work together to improve the health status of everyone. CSOM is part of that community and we are here to support and serve them."

The first Mini-Medical School was offered October 18, 2017 on the City College of New York's campus. 45 people RSVPd. 54 showed up. The topic of the evening

was the one most requested by the community: Diet, Physical Activity and Health.

President Vincent Boudreau welcomed everyone and Shittu introduced the speakers: CSOM Dean Maurizio Trevisan and Joan Dorn. Trevisan and Dorn led the discussion and helped attendees understand they have the power to proactively take part in their healthcare. A lively Q & A session followed during which a tip sheet was handed out.

After the free health information session (and every session thereafter), attendees were surveyed to make sure the program was meeting their needs. This data also helped inform sessions moving forward.

The Mini-Medical School program has already had a positive impact—on Harlem residents, who have been empowered to manage their own health; on CSOM medical students who have received training that

"I realized that I don't have to be a doctor yet to start impacting my community's health."

Hazeizat Shittu
CUNY School of Medicine student

cannot be taught in a classroom; and on community health professionals from St. Barnabas Health Systems, Memorial Sloan Kettering Cancer Center, the Ralph Lauren Center for Cancer Care and Prevention who have connected more closely with their patients.

Through this student-led, community-based partnership, the CUNY School of Medicine and members of the community are now working together for a healthier Harlem.

NEW BOND CENTER DIRECTOR BUILDS CCNY ROLE IN REVITALIZATION OF HARLEM'S 135TH STREET CORRIDOR

In March, Shawn L. Rickenbacker was named director of the J. Max Bond Center for Urban Futures, City College's research and design center focused on cities. The Bond Center honors the legacy of J. Max Bond, renowned African American architect and former architecture dean at CCNY, and his extraordinary accomplishments of integrating urban innovation with societal and cultural concerns.

As a trained architect, urbanist and systems technologist, Rickenbacker's work has focused on the convergence of physical space and digital systems within the built environment, how we can learn from it and its relationship to the human experience.

The Center, established in 2009, will build on transdisciplinary research and design with world class researchers throughout the City University of New York and beyond as well as strategic public and private partnerships.

A major focus underway for the Bond Center is providing design and actionable strategies based on interdisciplinary research conducted at the Center. Working with associated faculty from the Spitzer School of Architecture and departments from across the CUNY network, the Center is researching and will propose to the community and City agencies a development model for the 135th Street corridor in upper Manhattan that runs west from the J. Max Bond designed Schomburg Center for Research in Black Culture to the City College campus. Working with the Harlem Chamber of Commerce President Lloyd Williams, its membership and other community partners, Rickenbacker and the College are delving into how this important and historical urban corridor can continue to evolve and serve its diverse community.

"Physical structures have an effect on other structures," said Rickenbacker. "Social structures, economic structures, cultural structures. The Harlem community has a sense of ownership, an understanding of the rich history and a vision of what's possible. Providing the community with a sense of agency in the process is absolutely critical."

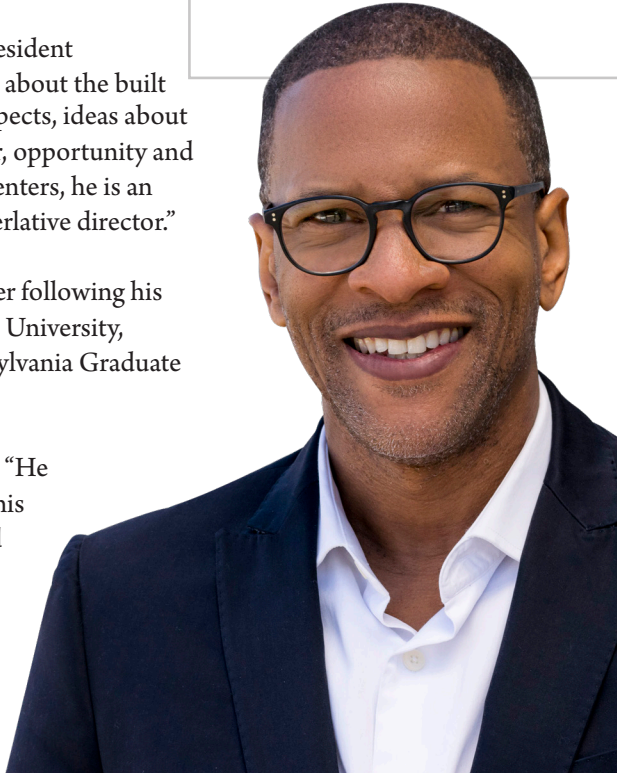
At the time of Rickenbacker's appointment, President Boudreau said, "Professor Rickenbacker thinks about the built environment in terms that engage structural aspects, ideas about technology and social questions of race, gender, opportunity and disparity. In this most public of architectural centers, he is an emphatically public architect and will be a superlative director."

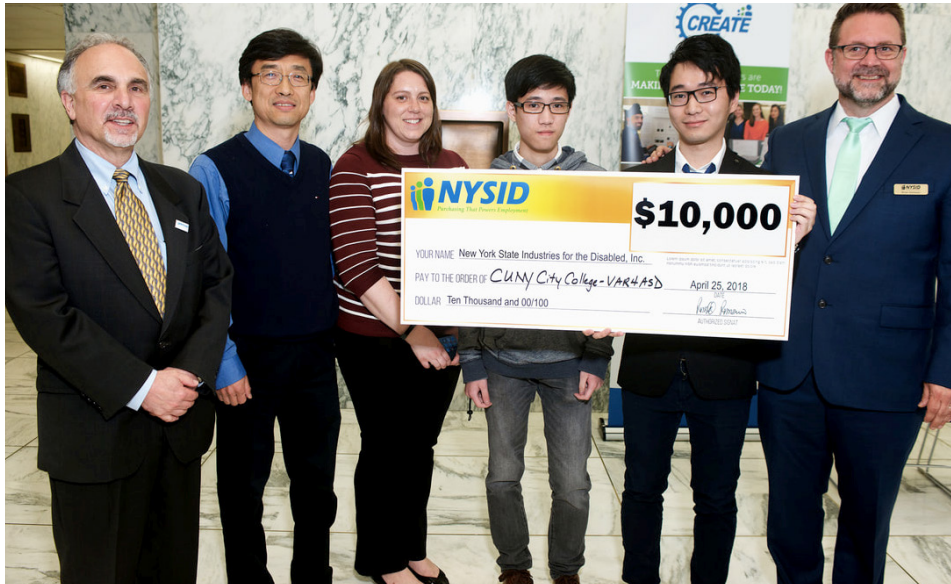
Rickenbacker takes the helm at the Bond Center following his most recent academic appointments at Cornell University, Tulane University, and the University of Pennsylvania Graduate School of Design.

"I owe much to Max Bond," said Rickenbacker. "He was such an inspiration to me and others with his commitment to socially responsible design and the championing of CCNY's intellectual resources as a city-wide asset for improving life in the city through research and design. I am honored to help build upon his legacy."

"The Harlem community has a sense of ownership, an understanding of the rich history and a vision of what's possible. Providing the community with a sense of agency in the process is absolutely critical."

Shawn L. Rickenbacker
Director of the
J. Max Bond Center





STUDENTS CREATE NEW WAYS TO ELIMINATE WORKPLACE BARRIERS FOR PEOPLE WITH DISABILITIES

Through the CREATE Competition—developed by the New York State Industries for the Disabled—engineering students at The City College of New York are rising to the challenge to develop innovative technologies that remove workplace barriers. Provided with \$1,000 to prototype their invention, two CCNY teams competed with seven other colleges for prizes of \$15,000, \$10,000 and \$5,000—and the chance to see their inventions adopted.

Both City College teams attracted attention from professionals and NYS policymakers for their innovative solutions, presented at a symposium in the State Capitol in Albany in the spring. Rafael Li Chen, Xinyu Xiong, and Yuxuan Huang, all computer science majors, won the second-place prize of \$10,000 for creating AVR4ASD (Augmented and Virtual Reality for Individuals with Autism Spectrum Disorder), which trains and guides individuals on the autism spectrum to independently travel between home and their workplace.

Computer engineering majors Manjekar Budhai and Vishnu Nair developed a cell phone app, ASSIST, to guide persons who are autistic or visually impaired, helping them safely navigate an indoor location using voice commands. ASSIST is supported by the National Science Foundation, the Department of Homeland Security, Lighthouse Guild and Bentley Systems, Incorporated.

The faculty advisor for both teams, Herbert G. Kayser Professor of Computer Science in the Grove School, Dr. Zhigang Zhu, enthusiastically reports, “Students at City are highly motivated and truly creative entrepreneurs, in technology innovation, research and development!”

NEW YORK DEPARTMENT OF LABOR

NEW YORK’S CURRENT UNEMPLOYMENT RATE CONTINUES TO HOVER BELOW 5 PERCENT. BUT FOR NEW YORK RESIDENTS WITH DISABILITIES THE RATE IS A STAGGERING 70 PERCENT, PARTLY DUE TO THE CHALLENGES THEY FACE IN THE AVERAGE WORKPLACE.



CCNY BRINGS THE JOY OF THEATRE TO HARLEM ELEMENTARY SCHOOL

Launched in 2010, City College’s Graduate Program in Educational Theatre has developed a unique partnership with PS161, a local Harlem public school just blocks away from the College’s campus.

The relationship grew out of necessity on both sides. “PS 161 had no theatre program at that time,” said Ed Theatre program founder and program director Dr. Jennifer Katona, “and we were a brand new program with grad students learning how to be theatre teachers and so it was a great fit. Through the partnership, our candidates received hands on experience and PS 161 gained an afterschool theatre program.”

Katona’s philosophy (based on her experience) is to start small. “It’s okay to have only ten kids performing in T-shirts and jeans. It doesn’t need to be a 2-hour full production musical.” So it makes sense that the PS 161 after-school drama program began with just 15 kids. CCNY graduate candidates ran the initial program and directed the middle school children in a 30-minute staged reading.

In the seven years since the program has been in PS 161, the after-school drama group has grown from 25 kids on stage

“It’s real change through theatre and has become a model for our students to start theatre programs.”

Jennifer Katona
Program Director
School of Education

and 25 people in the audience to a sold out 400-seat theatre and successful annual community potluck dinner. And last year, the Ed Theatre students collaborated with the school on that full production musical, “Annie Jr.”

PS 161 now has a full-time theatre teacher—a graduate of the educational theatre program— and four other dedicated teachers attached to the afterschool drama program. “The program infiltrated and changed the face of a school,” said Katona. “Through this partnership the program is able to model for the graduate students real change through theatre and has become a model to them on how they too can start theatre programs.”

The program’s successes include partnerships with the Roundabout Theatre Company and multiple other New York City cultural organizations. CCNY Ed Theatre students also have begun working with eighth graders to help prepare them for their auditions at select arts high schools in New York City. And every spring, they produce the Harlem Children’s Theatre Festival with free theatre and activities for the community.



INSPIRING YOUNG MINDS IN NICARAGUA

Charles Ramirez is a finance and economics major in the Colin Powell School who has excelled in his studies and was recently accepted into the CASE Summer Internship Institute to learn about the field of development and fundraising.

Clearly Ramirez’ future is bright. But every time he visits his family in Granada, Nicaragua, the contrast between what is possible in the U.S. and what is possible in Nicaragua is stark.

In New York, his education gives him the opportunity to make a better life for himself and his mother. In Nicaragua, families struggle to provide their children with the education they need to get ahead. In grammar schools like Escuela Benito Juarez and Escuela Jose Estrada, the infrastructure is weak and resources scarce. Textbooks are hard to come by—not to mention running water. Students walk on dirt roads to get to school. It’s no wonder a third of all students in the region drop out.

In years past, Ramirez volunteered alongside his aunt to help the needy in the region, bringing toys and clothes. “While the children were always delighted by the gifts, I wanted to do something that would have a more lasting impact,” he said.

He realized that without an education, the children of Granada would never be able to help move themselves and their families forward. Back in New York, he brainstormed with friends on how best to help. The answer: give each child a book bag of their own to make carrying their books and school supplies easier.

Thus InspiraBag was born.

The premise of InspiraBag is simple. Get a community involved that values education—City College. Ask members of that community to donate gently used backpacks for Nicaraguan children 4-16 years old. Distribute them at schools. Document the difference the backpacks make; each backpack gives each child a sense of security that their right to education is valued. Share pictures of the happy children with the donors. Repeat.

The organization, which just celebrated its one-year anniversary, has four volunteer members and has just filed for official 501(c)3 status. New goals have been set: to attract more InspiraBag ambassadors, connect with more community leaders, and increase the number of donation sites.





IF PLASTIC HAD BEEN INVENTED WHEN THE PILGRIMS SAILED FROM PLYMOUTH, ENGLAND, TO NORTH AMERICA—AND THE MAYFLOWER HAD BEEN STOCKED WITH BOTTLED WATER AND PLASTIC-WRAPPED SNACKS—THEIR PLASTIC TRASH WOULD LIKELY STILL BE AROUND, FOUR CENTURIES LATER

TURNING TRASH INTO ENERGY

Plastics have proven to be a great material for many consumer products. However, plastic waste is overwhelmingly going into landfills—the worst option, based on the sustainable waste management hierarchy. In fact, the World Economic Forum predicts that if current production and waste management trends continue, by 2050 there could be more plastic than fish in the ocean. Why is this happening when there are processes and technologies that can effectively recycle, convert to valuable products and extract the imbedded energy from these waste plastics?

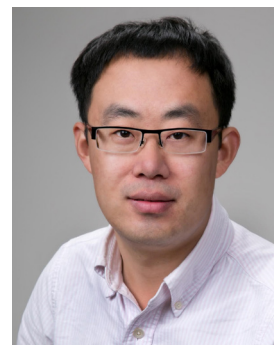
Marco J. Castaldi, Professor of Chemical Engineering, Director of Earth System Science and Environmental Engineering and the Director of the Earth Engineering Center at the Grove School of Engineering, is on a mission to change that by transforming plastic waste to energy and fuels.

A recent study by Castaldi and Associate Director Demetra Tsimis published by the American Chemistry Council shows that the plastic we're throwing away is actually a resource we can use. By adding non-recycled plastics (NRPs) to a chemical recycling technology called gasification, waste is transformed into fuels—actually adding value. Adding NRPs to the gasification process helps reduce greenhouse gas (GHG) emissions while significantly reducing the amount of waste byproduct to landfill—by up to 76 percent!

Today, most of the billions of tons of disposable plastic the world produces end up as trash. Turning that trash into energy and new products may well be critical to the survival of the planet.



EXOSKELETON VIES FOR \$4M MOBILITY CHALLENGE PRIZE



Buoyed by a \$50,000 prize victory in the first round this year, a City College of New York-led team is forging ahead in its development of an Iron Man-like smart exoskeleton to overcome lower-limb paralysis in the multi-year \$4 million Mobility Unlimited Challenge, sponsored by Toyota.

Hao Su, an Assistant Professor in the department of mechanical engineering and director of the Grove School of Engineering's Biomechatronics and Intelligent Robotics Lab, leads the interdisciplinary team that includes researchers from the University of Texas Medical School and TIRR Memorial Hermann—one of America's top rehabilitation centers.

Their entry in the challenge, "Physiology-Adaptive and Computer Vision-Assisted Soft Exoskeletons to Support Independent Living across the Continuum of Rehabilitation," placed in the top 10 among 96 entries globally in the first round. Strapped around the disabled limb, the exoskeleton is described as "lightweight, comfortable, and intelligent and able to support independent living across the continuum of rehabilitation." It can be used for both gait rehabilitation and personal mobility assistance.

"We are also exploring ways to design softer, smarter, and safer assistive devices by leveraging our innovation of high-torque density motors, which significantly reduce the weight of exoskeletons, and enable soft-sensor-based physiologically-adaptive control," said Su.

Su and his collaborators, who include several City College students from undergraduate to PhD level, are now perfecting their device for the second round, which will be announced in January of 2019, and offers a \$500,000 prize. The five finalist teams will then have until September of 2020 to perfect their entries, at which time the winning team will receive a million-dollar prize.

Fingers—and knees—crossed.



TO UNDERSTAND THE INFLUENCE OF FAKE NEWS, CALL A...PHYSICIST?

In early April, Mark Zuckerberg spent two long days on the defensive in his testimony before Congress, trying among other things, to explain how fake news on Facebook might have influenced the Presidential election.

Perhaps Congress should have called Professor of Physics Hernan Makse, whose expertise in the theoretical and computational understanding of complex systems recently led to the publication of an investigation of the influence of fake and traditional, fact-based news outlets on Twitter during the 2016 US presidential election.

Makse used a comprehensive dataset of 171 million tweets covering the five months preceding Election Day, identifying 30 million tweets, sent by 2.2 million users, which were classified as spreading fake and extremely biased news, based on a list of news outlets curated from independent fact-checking organizations, and traditional news from right to left.

Perhaps unsurprisingly, the study demonstrated that contrary to traditional news, where influencers are mainly journalists or news outlets with verified Twitter accounts, e.g. @FoxNews and @CNN, the majority of fake news influencers identified had unverified or deleted accounts.

But then there was this: The study shows that not only were fake news sources mentioned as frequently as traditional outlets, but fake or biased news moved in significantly different directions, depending on the political slant. Two different news-spreading mechanisms were revealed. The influencers spreading traditional center and left leaning news largely determined the opinion of the Clinton supporters. But to the researchers' surprise, they found that right-wing voters tended to influence the output of people producing fake news tweets, not the other way around.



HOW DO PLANTS AND BACTERIA DO IT?

One of nature's most spectacular molecular architectures is found in the highly efficient solar light harvesting apparatus of photosynthetic plants and bacteria. While they have been studied extensively, the origin of their tremendous energy transport efficiency has remained a mystery. The problem is challenging. The light harvesting complex's structure is not rigid, and the molecular components are continually moving. The role that this motion plays in facilitating (or impeding) energy transport is unclear.

With support from the National Science Foundation, Associate Professor of Chemistry Dorthe Eisele is synthesizing and investigating bio-inspired nanomaterials that mimic the interesting features of natural light harvesting complexes. She and her team aim to watch the flow of energy through those new molecular assemblies using super high-resolution microscopy, with the goal of understanding how structural fluctuations affect energy transport.

With her project, Eisele won an NSF Faculty Early Career Development (NSF CAREER) Award. According to the Foundation, this program "offers NSF's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization." The NSF thinks Dorthe Eisele is definitely one to watch. We agree.

DR. EISELE IS ONE OF THREE JUNIOR FACULTY AT CCNY TO RECEIVE PRESTIGIOUS RESEARCH AWARDS THIS YEAR. CHEMICAL ENGINEER ELIZABETH BIDDINGER AND CIVIL ENGINEER NARESH DEVINENI EACH RECEIVED AN EARLY CAREER AWARD FROM THE U.S. DEPARTMENT OF ENERGY.



CCNY LEADS INTERNATIONAL COMPLEX FLUIDS PROJECT

Funded research at City College is so often international in scope and consequence, as well as a boon to scores of our students. Look no further than the energy project, "PIRE: Multi-scale, Multi-phase Phenomena in Complex Fluids for the Energy Industries."

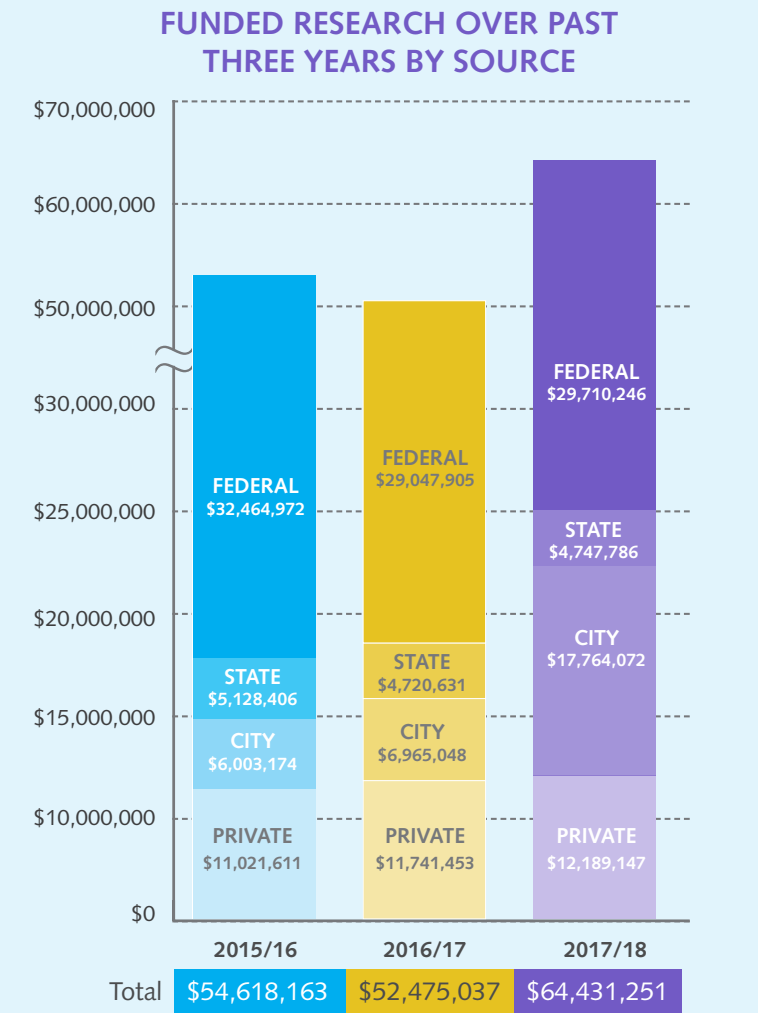
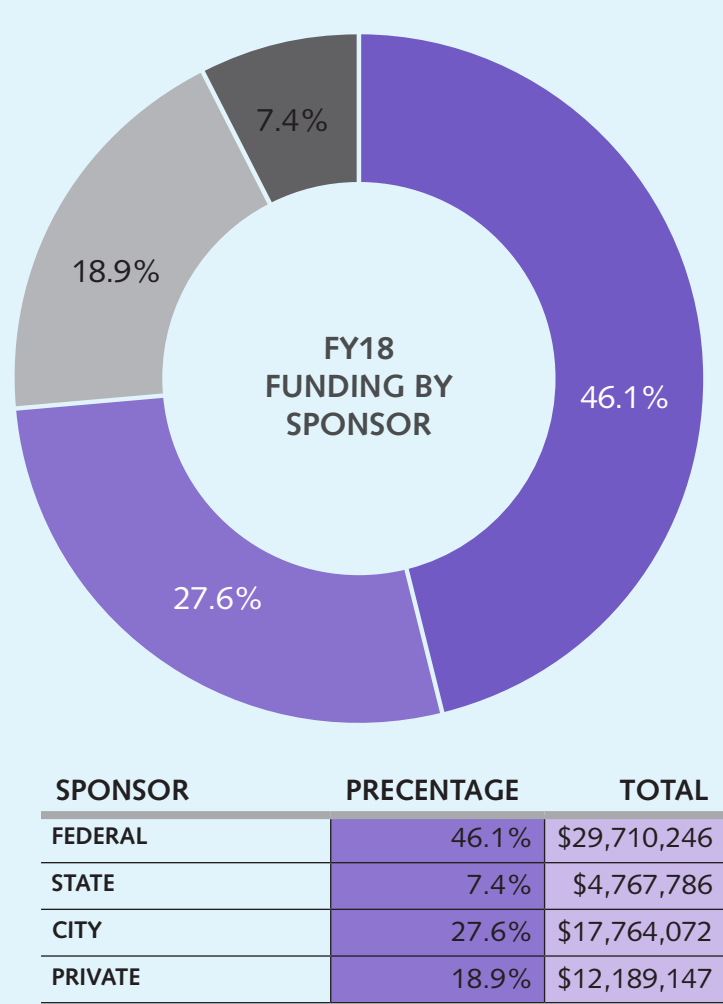
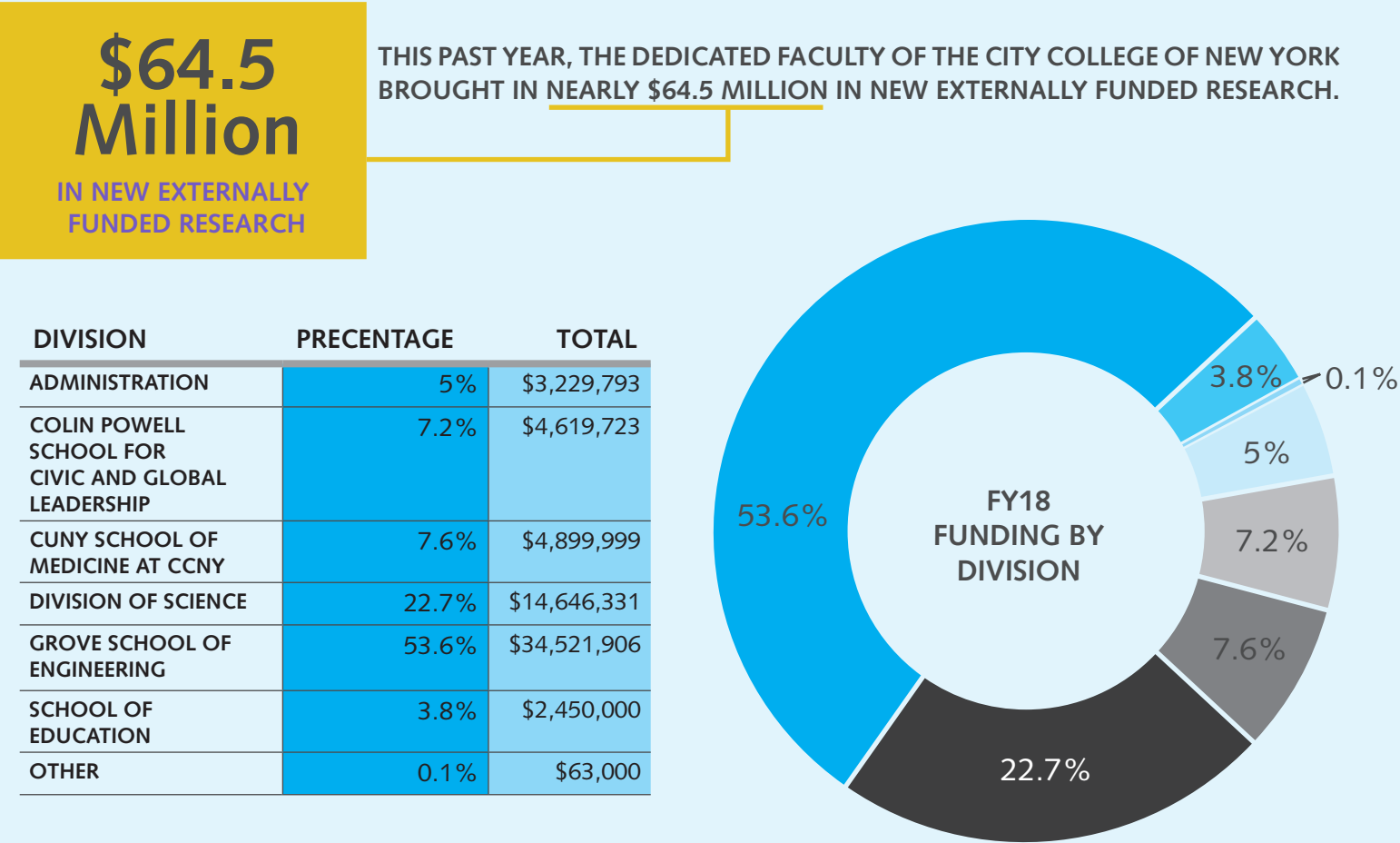
A five-year research project on complex fluids with potential for transformative scientific discoveries in industries from petro-chemical to cosmetics is underway at The City College of New York's Grove School of Engineering. Funded by a \$5.2 million National Science Foundation grant, the initiative includes 11 partner institutions in France, Germany and Norway.

Leading the high-tech research, under the aegis of the NSF's Partnerships for International Research and Education (PIRE) program, is Masahiro Kawaji, Professor of Mechanical Engineering and Associate Director of the CCNY-based CUNY Energy Institute.

Summing up the potential of the expansive project, Kawaji explains that it could well lead to improvements in energy and process efficiency in industrial systems on a global scale, including the development of lubricants that enable more efficient undersea drilling of oil and gas; improved processes for freezing and solidifying gas for the refrigeration industry; and more efficient manufacturing processes for cosmetics.

At CCNY, 30 students will get hands-on experience in international collaborative research at the highest level. The tally includes seven PhD candidates, three postdoctoral fellows, 10 graduates and 10 undergraduates over the five years. Every summer, two undergrads will have the opportunity to engage in research at one of PIRE's European partner institutions. Other foreign research experience includes attendance at annual review meetings in New York City, Norway, France and Germany, and a six-month internship for all seven PhD students at institutions in Europe.

BY THE NUMBERS: RESEARCH OVERVIEW



FACULTY		AMOUNT
JOHN FILOS Professor of Civil Engineering / Director of Institute for Municipal Waste	A renewal grant over five years to continue research and development projects to optimize the waste water treatment plants	\$10,002,561
MICHAEL BOBKER Director of the CUNY Building Performance Lab	Supports programs to develop and extend sustainability education and workforce training at the Building Performance Lab	\$3,471,521
MAROM BIKSON Professor of Bioengineering	Supports basic and applied research to explore the effectiveness and possible new uses for neural stimulation, including Transcranial Direct Stimulation (tDCS) and high-frequency spinal cord stimulation	\$3,114,871
REZA KHANBILVARDI Professor of Civil Engineering / NOAA-CREST Director	Support for NOAA-CREST at CCNY, as well as assistance to establish four NOAA-CREST centers at other minority serving institutions	\$3,069,263
JORGE GONZALEZ Professor of Mechanical Engineering / NOAA-CREST Professor	Support to promote academic success in STEM (CiPASS), particularly among underrepresented minorities, and support to develop the Hispanic professoriate in environmental science and engineering, as well as studies in urban climate and resiliency	\$3,069,263
JOHN MARTIN Medical Professor	Supports research into various aspects of spinal cord injury and repair	\$1,925,236
MASAHIRO KAWAJI Professor of Mechanical Engineering / Assistant Director of the CUNY Energy Institute	Supports undergraduate scholarships and graduate fellowships in nuclear research, and PIRE (See page 27)	\$1,474,008
CAMILLE KAMGA Associate Professor of Civil Engineering / Director of the University Transportation Research Center at City College	Supports the UTRC programs and research, including the development of virtual transportation management strategies and technologies for smart cities	\$1,473,419
LUCAS PARRA Professor of Biomedical Engineering	Supports research to assess student attentional engagement from brain activity during stem instruction, and studies the effects of direct-current stimulation on synaptic plasticity as well as neuro-adaptive speech enhancement and targeted transcranial electrotherapy for stroke rehabilitation	\$1,294,466
MARIA TAMARGO Professor of Chemistry / Director of the CREST Center for Interface Design and Engineered Assembly of Low-dimensional Systems	Supports the work of the new Center, as well as research into epitaxial superconductor-semiconductor materials systems for quantum computation	\$1,276,194
MARCO CASTALDI Professor of Chemical Engineering	Supports sustainability research at the New York City Center for Materials reuse and understanding and predicting temperature in municipal solid waste landfills	\$1,109,517
DORIS CINTRON-NABI Senior Associate Provost and Associate Professor of Education	Supports CSTEP, designed to mentor and prepare talented, underrepresented minorities in the STEM health-related disciplines, and CCNY's Gateway to Higher Education program	\$1,000,000
MARY DRISCOLL Dean of the School of Education	Supports the New York City Teaching Fellows Program, as well as the development of online leadership courses	\$921,449
RAMONA HERNÁNDEZ Professor of Sociology / Director of the CUNY Dominican Studies Institute at City College	Supports the libraries and archives of the Dominican Studies Institute	\$970,000
ZIMEI BU Professor of Chemistry	Studies cell signaling proteins in the context of hormonal regulation of NHERF1 in bone, as well as nanoscale dynamics and molecular recognition kinetics of a disordered protein	\$786,965
MARK PEZZANO Associate Professor of Biology / Deputy Director of the Research Center in Minority Institutions at City College	Supports research into the cellular/molecular basis of development at the Center	\$755,163

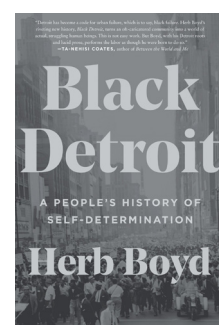
Please note that many grants are multi-year grants—i.e., an award of \$15.5 million over a five year period. The total dollar amount of a multi-year grant is attributed to the reporting year in which it was rewarded, rather than distributed over its duration. This means that many of our faculty not listed here are working on large multi-year grants listed in previous years. In addition, most of these totals represent multiple grants under one PI.

SELECTED FACULTY BOOKS / FILMS / PERFORMANCES / EXHIBITIONS

2017

BEASTS HEAD FOR HOME: A NOVEL

This novel of identity, belonging, and the vagaries of human behavior from an exceptional modern Japanese author, Abe Kōbō, is translated by **Richard Calichman**, Professor of Japanese Studies.

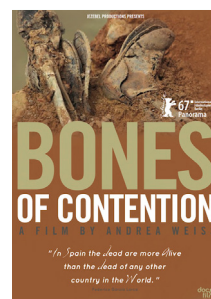


BLACK DETROIT: A PEOPLE'S HISTORY OF SELF-DETERMINATION

Herb Boyd, lecturer in the Black Studies Program, wrote this personal and universal history, lauded by *Publisher's Weekly* for “breathing new life into the history of Detroit through stories of its Black residents from its earliest days to the present.”

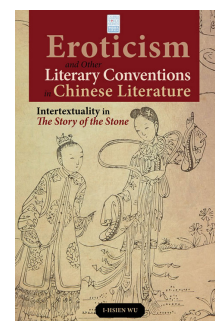
BONES OF CONTENTION

New York City premiere of a documentary that focuses on the brutal Franco dictatorship, during whose reign up to 120,000 opponents of fascism were buried in unmarked graves, by Emmy Award-winning filmmaker and Professor of Film **Andrea Weiss**.



DOMESTIC ECONOMIES, WOMEN, WORK AND THE AMERICAN DREAM IN LOS ANGELES

Susanna Rosenbaum, Assistant Professor of Anthropology, examines how two groups of women—Mexican and Central American domestic workers and the predominantly white, middle class women who employ them—seek to achieve the “American Dream.”



EROTICISM AND OTHER LITERARY CONVENTIONS IN CHINESE LITERATURE: INTERTEXTUALITY IN THE STORY OF THE STONE

I-Hsien Wu, Associate Professor of Asian Studies, examines how one of the most beloved and celebrated works of prose fiction in China’s literature dramatizes human experience by responding to previous literature.

HISTORICAL DICTIONARY OF UNITED STATES-CARIBBEAN RELATIONS

Co-authored by **Jacqueline Anne Braveboy-Wagner**, Professor of Political Science, the book examines the often troubled, sometimes supportive economic, political and security relationships between the world’s largest superpower and the small nations of the Caribbean.

LATINOS IN NEW YORK: COMMUNITIES IN TRANSITION (2ND EDITION)

Co-edited by professors of political science **Sherrie Bayer**, **Gabriel Haslip-Viera** (Emeritus), and the late **Angelo Falcón**, co-founder of the National Institute for Latino Policy, this follows up on the comprehensive study of the city’s Latino population published in 1996, capturing the most significant continuities and changes of the last two decades.

MISSING PERSONS, ANIMALS, AND ARTISTS, BY ROBERTO RANSOM

Daniel Shapiro, Distinguished Lecturer, translates the elegant prose and imaginative ironies of this compelling collection of short stories by Mexican author Roberto Ransom.

QUÉBEC N'EXISTE PAS

This colorful reflection by **Maxime Blanchard**, Associate Professor of French, the Division of Humanities & the Arts, examines the historical, cultural and linguistic sources of Quebec’s uneasy place in Canada.

REZA ABDOH: RADICAL VISIONS

Museum of Modern Art’s PS1 major retrospective of the late Iranian-American theatre director/playwright **Reza Abdo** included work by his brother, Professor of English **Salar Abdo**, who co-authored his brother Reza’s last play, and had several pieces of his own in the exhibition.

THY FATHER'S CHAIR

New York City premier of a film directed by **Antonio Tibaldi**, co-director of the Master’s Program in Film and former MFA student **Alex Lora**. The film focuses on siblings **Abraham** and **Scraga**, who lived a secluded existence and stopped throwing out things after the death of their parents.



A YEAR OF WRITING DANGEROUSLY: A SCHOLARLY DETECTIVE STORY OF THE LOST GENERATION

Keith Gandal, Professor of English, presents an unsparingly funny and poignant exploration of the sometimes surprising connections between people, documents, and ideas that define the creative process.

2018

THE BEHAVIORAL SCIENCES AND HEALTH CARE (4TH EDITION)

Co-editor **João Nunes**, Medical Professor, provides trainees in every area of health care with foundational concepts of behavioral science as applied to individual and population health and disease.

BROADWAY: A HISTORY OF NEW YORK CITY IN THIRTEEN MILES

The New York Times calls this book by **Fran Leadon**, Associate Professor of Architecture, “meticulously researched...an invigorating stroll along the 13 miles that are the thoroughfare’s Manhattan portion,” and deems **Leadon** “graced with a wry wit.”



BUGSPLAT: THE POLITICS OF COLLATERAL DAMAGE IN WESTERN ARMED CONFLICTS

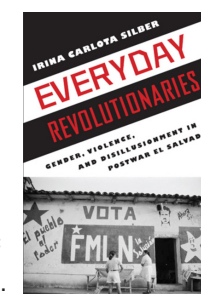
Bruce Cronin, Professor of Political Science, gives us an in-depth examination of five conflicts fought by the Western powers since 1989 and their civilian casualties, and offers a new theory about why this “collateral damage” occurs in such large numbers.

DON'T LET GO

Mike Holoher, musician and Associate Professor of Jazz Composition and Performance, wrote this jazz octet for his group, **Mike Holoher and Balancing Act**, commissioned by Chamber Music America New Jazz Works. It received its New York City premiere at Symphony Space.

EVERYDAY REVOLUTIONARIES: GENDER, VIOLENCE, AND DISILLUSIONMENT IN POSTWAR EL SALVADOR

The 2013 work by **Irina Carlota Silber**, Professor of Anthropology, received the Latino Book Award for Best First Work of Nonfiction for its searing recent history of El Salvador. It is now published in Spanish.

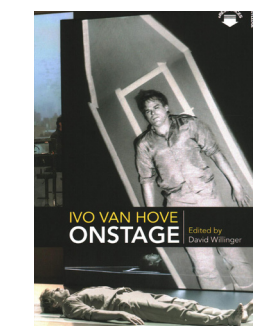


THE FUTURE OF HUMANITY

“It’s about our exciting destiny in space, about colonizing Mars, the solar system, and eventually the stars,” says well-known physicist **Michio Kaku**, Henry Semat Professor of Physics.

WOMEN AND MOBILITY ON SHAKESPEARE'S STAGE: MIGRANT MOTHERS AND BROKEN HOMES

Elizabeth Mazzola, Professor of English, investigates the ways Shakespeare’s plays link female characters’ agency with their mobility and thus represent women’s ties to the household as less important than their connections to the larger world outside.



IVO VAN HOVE ONSTAGE

Editor **David Willinger**, Professor of Theater and Speech presents this prominent iconoclast’s extraordinary work, including key productions, design innovations and his revolutionary approach to text and ambience.

THE LONG WET GRASS

The film adaptation of Center for Worker Education librarian **Seamus Scalon**’s award winning play of the same title is a wickedly funny and ultimately terrifying story set during Ireland’s “Troubles.”



NUEVA YORK WINS THREE EMMYS AT ANNUAL NEW YORK EMMY AWARDS CEREMONY

This CUNY-TV Spanish-language cultural series is created and produced by CCNY Professor of Film **Jerry Carlson**—and wins these awards year after year.

REVIEW: LITERATURE AND ARTS OF THE AMERICAS

The major U.S. forum for contemporary Latin American and Caribbean writing in English and English translation, the *Review* is now edited by **Daniel Shapiro**, Distinguished Lecturer in the Department of Classical and Modern Languages and Literatures.

WHAT GOES UP: THE RIGHT AND WRONGS TO THE CITY

Urbanist and critic **Michael Sorkin**, Distinguished Professor of Architecture, takes to task the public officials, developers, “civic” organizations, and other heroes of big money, who have made of his beloved New York a city of glittering towers and increasing inequality.



A CALENDAR OF SELECTED PUBLIC EVENTS

Over the past year, City College has hosted hundreds of public events that celebrate our rich cultural heritage and address some of the greatest challenges facing us today. Here are just a few.

**Bench to Bedside
Part II: Accelerating
the Medical
Innovation
Conversation**
A panel of inventors and innovators highlights challenges to and opportunities for building medical device technologies in the New York City technology community.

The Americas Poetry Festival of New York 2017
The fourth multilingual poetry festival and writers' conference organized by poets and professors Carlos Aguasaco, Yrene Santos and Carlos Velasquez Torres of CWE features sixty poets representing twenty-two countries and five languages.

State of Disaster: Puerto Rico and U.S. Relations in the Aftermath of Hurricanes
An interdisciplinary panel provides a critical look at the historical relationship between Puerto Rico and the United States and examines the social, economic and political conditions as the island struggles to survive and move past the devastation.

Thinking Plural, a Talk By Siri Hustvedt
Hustvedt, author of six novels as well as several books of essays and works of non-fiction (*The Blazing World* was long-listed for the 2014 Man Booker Prize) addresses the intersections among philosophy, psychoanalysis, and neuroscience.

@BIC Lecture #NotFakeNews
Michael Marinello, SVP of Strategic Communications at Turner, and Frank Washkuch, News Editor at PRWeek, discuss why media ethics and best practices are more important than ever in this hyperpolitical environment.

Poetry Reading With Kimiko Hahn
Hahn, poet and Distinguished Professor of English at Queens College and winner of an American Book Award, a Guggenheim Fellowship and a Theodore Roethke Award, presents the 2017 MFA Program's Kowald Reading.

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

2017

George Lois Archive Exhibition Kick-off
Lois and the renowned photographer Platon discuss the importance of their pioneering work addressing civil rights, war, feminism and the role of art — at the crossroads of creativity, commerce and morality.

4th Annual Sternberg Family Lecture in Public Scholarship: Democratizing the Outdoors
John D. Judge, President and CEO of America's oldest conservation organization, the Appalachian Mountain Club, discusses efforts to get more people active outdoors and in conservation stewardship.

Mojados: Portraits of Immigrants
An exhibition of portraits in the enduring tradition of Robert Frank that speak to the humanity of immigrants that racist and xenophobic assaults seek to deny them.

The 2017 Nobel Prize in Physics: The Observation of Gravitational Waves
Professor Alexios Polychronakos explains the science behind the 2017 Nobel Prize in Physics “for decisive contributions to the LIGO detector and the observation of gravitational waves.”

The Puzzle That Spawned 100 Philosophy Papers
Peter Winkler of Dartmouth College explains the philosophical puzzle proposed 17 years ago: “Sleeping Beauty” seems to be a simple question about probability. Is it? If so, why does it incite such passion?

Declaring Independence: Resisting Policies and Practices of Discrimination
Civil Rights lawyer and former executive director of the New York Civil Liberties Union Norman Siegel discusses how we can challenge the discriminatory policies and practice of the Trump administration.

“I Even Spotted One Woman Wearing a Hat”: The Natural History of Rape
Ariella Azoulay of Brown University talks about why—despite numerous publications from the last decade about the end of the Second World War in Europe, when more than one million German women were raped by allied soldiers — none of them have mentioned mass rape.

Sciame Lecture Series: Carl Fredrik Svenstedt
In the first of 15 annual architecture lectures sponsored by alumnus Frank Sciame, Svenstedt discusses his studio's experiment with process, habitat typology and construction techniques.

The 2017 Cosloy Lecture: A Brief History of Environmental Successes
Dr. Susan Solomon of MIT reveals how combinations of science, public policy, industry participation, and citizen engagement help us manage today's environmental problems, including climate change.

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER

After the Hurricane: A Puerto Rico Syllabus Teach-In
CCNY Professors Maria Fernandez, Kaliris Salas-Ramirez and Vanessa K. Valdés discuss Puerto Rico after the hurricane, including disaster relief efforts, the privatization of schools, and what we can do moving forward.

Salzberg Chemistry Seminar: Nanoscience Initiative
Dr. H. Christopher Fry of the Argonne National Laboratory discusses biomechanical materials as energetic assemblies for light harvesting, electron transfer and catalysis.

Knowledge For All, the 2018 Robert Kahn and Patrice Lyons Lecture
Facebook CSO Alex Stamos talks about designing the online infrastructure that ensures the safety and privacy of personal information while bringing more openness and collaboration to the security community.

Watching Without Seeing
Professor, author and activist Thomas Keenan of Bard College leads a discussion about police violence, eyewitness video, and justice.

Celebrating the Scholarship of Dell Upton
Award-winning historian of architecture, cultural landscapes and cities Dell Upton discusses his pioneering career linking social and architectural history, and his interest in the history of African American architecture and material culture.

African Voices! #DACA
Local advocates and activists focus on the crossroads of DACA, Black Lives Matter and other issues affecting immigrant populations from the perspective of Africa and African Americans.

10th Annual ReelAbilities Film Festival
Viewing of *Defiant Lives*, which weaves together never-before-seen archival footage about the rise of the disability rights movement with reflective interviews and the personal stories of men and women with disabilities.

The City as Primary Document: The Case of Dakar
Professor Barbara Syrrakos talks about how historians use primary source material and presents her own work about colonialism, independence, and constitutions in West Africa using primary sources.

The Concert for Ravi Shankar
Music Librarian Michael Crowley briefly showcases unreleased digitizations of Shankar's CCNY lecture recordings, and sitarist Ikhlq Hussain, who studied privately with Shankar, performs.

Photography & Evidence
Susan Meiselas, one of the world's leading photojournalists and Margaret Morton, a documentary photographer whose work addresses homeless individuals and communities in New York City, share their perspectives.

CCNY's 46th Annual Poetry Festival
Readings by elementary, junior high and high school students from New York City, plus featured guest poet Nicole Cooley.

Voices of Trauma
CCNY Professor of English and Director of the Rifkind Center for the Humanities and the Arts, Mikhal Dekel, whose book *Tehran Children* recounts the long and circuitous journey of Polish-Jewish child refugees through Central Asia and the Middle East, hosts a conference about trauma in literature.

Comparing Songs Without Listening: From Mathematics, Statistics, and Computer Science to Music and Back Again
Experts discuss the multidisciplinary field of Music Information Retrieval (MIR), which uses algorithms to make these musical comparisons in the same manner that a human being would, but on a much larger scale.

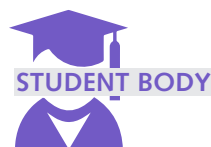
FEBRUARY

MARCH

APRIL

MAY

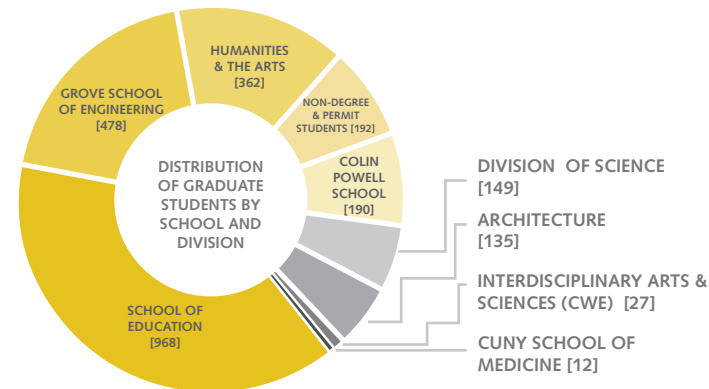
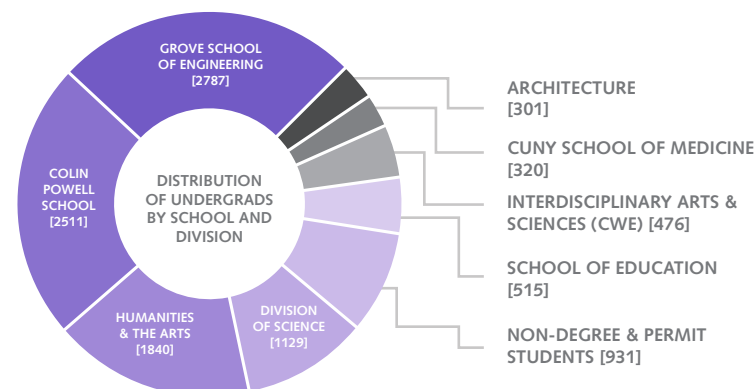
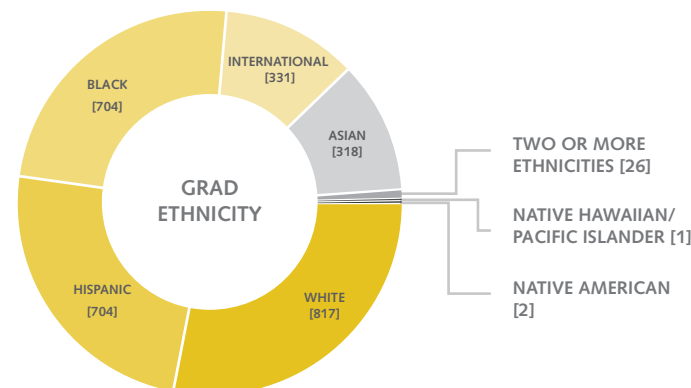
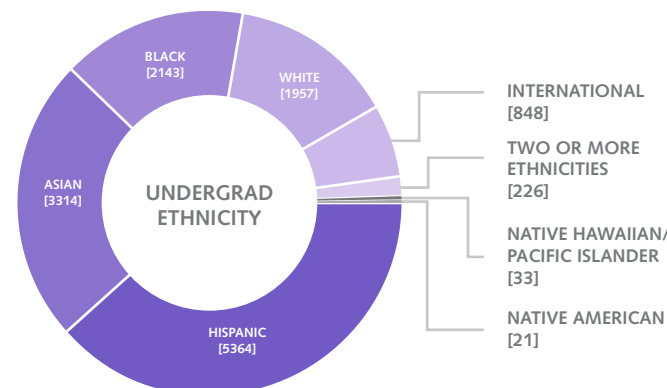
2018



TOTAL # STUDENTS **16,516**
(AS OF OCTOBER 15, 2017)

UNDERGRAD
13,906

GRAD 2,610 } MASTERS : 2,530
PHD : 80



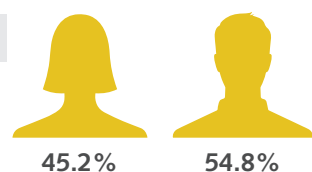
THERE ARE 195 COUNTRIES IN THE WORLD. CCNY STUDENTS AND THEIR FAMILIES COME FROM 93% OF THEM.

78%
GRADUATING DEBT FREE

NEARLY **70%**
STUDENTS ATTENDING TUITION-FREE



FACULTY



575
FULL-TIME FACULTY

1294
ADJUNCT FACULTY

21
NEW HIRES IN FY18

1:5
FACULTY TO STUDENT RATIO



SOCIAL MOBILITY

HIGHEST PERCENTAGE OF GRADUATES WHO MOVE TWO OR MORE QUINTILES UP THE INCOME LADDER

36%
OF CCNY STUDENTS WHO COME FROM FAMILIES WHOSE INCOME IS IN THE BOTTOM FIFTH RISE TO THE TOP FIFTH AS ADULTS

12%
OF CCNY STUDENTS WHO COME FROM LOW INCOME FAMILIES BUT MOVE TO THE TOP INCOME QUINTILE



NATIONAL / GLOBAL RANKINGS



U.S. NEWS & WORLD REPORT
Among top 100 Best Regional Universities in the North [2018]
One of the Nation's Most Diverse Institutions [2016, 2017, 2018]



THE PRINCETON REVIEW
Among the nation's Best Colleges [2013, 2014, 2015, 2016, 2017]
One of the Best "colleges that pay you back"

Among the country's greenest colleges [2016 & 2018]



FORBES
One of Top Colleges [2013, 2014, 2015, 2016, 2018]



MILITARY FRIENDLY
Ranked No. 6 in the nation by Victory Media [2018]



WE'RE #1 IN "OVERALL MOBILITY INDEX: THIS MEASURE REFLECTS BOTH ACCESS AND OUTCOMES, REPRESENTING THE LIKELIHOOD THAT A STUDENT AT THE CITY COLLEGE OF NEW YORK MOVED UP TWO OR MORE INCOME QUINTILES." "1ST OUT OF 369 SELECTIVE PUBLIC COLLEGES."



MOXIE FOUNDATION GIFT INVESTS IN THE SPIRIT OF CREATIVITY AND CHANGE AT CCNY

Just how do you prepare for success in a world where the pace of change is rapidly evolving and your future jobs don't yet exist? As necessary as it is to master the accumulated subject matter of a given discipline, now more than ever, all students need to gain a mindset and skills set for change-making.

On May 10 President Boudreau announced a major gift from the Moxie Foundation that will strengthen the College's capacity to prepare students for creative problem solving in the 21st century. The \$2.73 million gift launches the Moxie Initiative, designed to support out-of-the box thinking, experiential learning, and academic innovation throughout every discipline at the College. The gift's vision is that every student in every major will realize her or his capability to create significant, positive change in the world.

One of President Boudreau's fondest ambitions is for City College to become more fully and deeply engaged with, and responsive to the needs of our society, particularly those needs within our local Harlem community. His vision is that this experience would resonate with every CCNY student. "The Moxie Initiative provides us with the resources and encouragement to take some big steps in this direction," he says, adding that the Moxie Foundation's vision for higher education is utterly progressive, deeply humanistic, and entirely in tune with the historic mission of City College.

The Moxie Initiative will support faculty, staff, and students with several new programs designed to promote engaged, cross-disciplinary approaches to teaching and research; and to enable new courses within every major that utilize hands-on, problem-based learning to teach critical competencies for effective change-making.

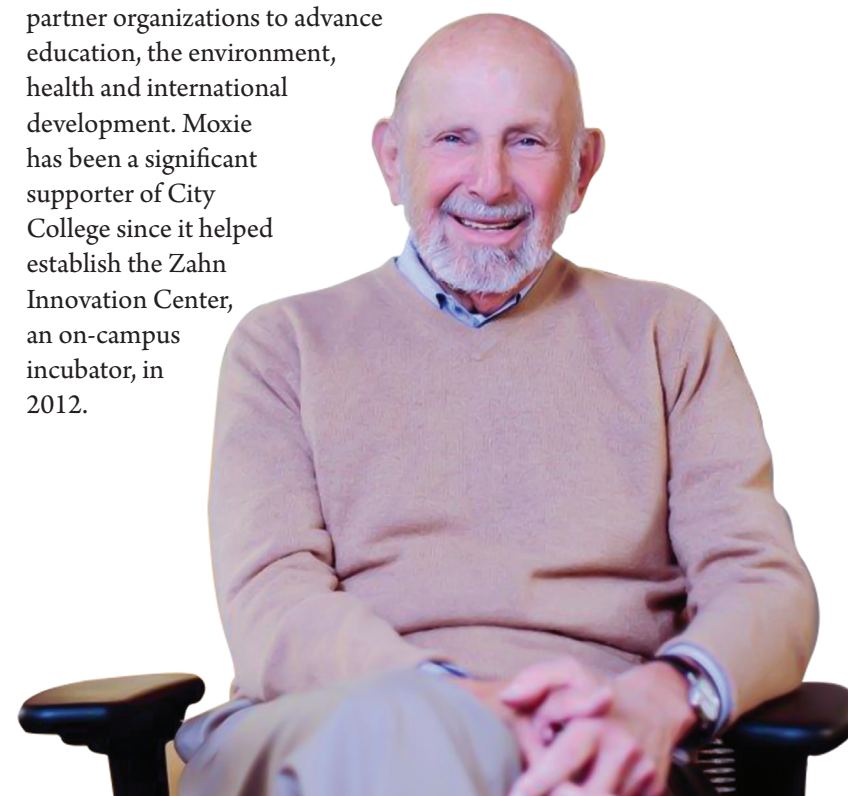
"The world is changing rapidly. City College students must be prepared to lead change in an economy of jobs that don't yet exist. It is critical that everyone understand they possess a level of creativity and ingenuity—an entrepreneurial spirit that they can tap into to succeed in any endeavor, career or industry," added Irwin Zahn, the

"The world is changing rapidly. City College students must be prepared to lead change in an economy of jobs that don't yet exist..."

Irwin Zahn '48 ME
Chairman and CEO of the Moxie Foundation

Moxie Foundation Founder and a 1948 CCNY alumnus. "We believe deeply in the power of collaboration and innovation, and we are delighted to support President Boudreau's vision for the future of this incredible institution."

The Moxie Foundation, a family foundation based in San Diego, California, is dedicated to enriching communities and empowering change-makers across the world through the spirit of innovation. It works closely with partner organizations to advance education, the environment, health and international development. Moxie has been a significant supporter of City College since it helped establish the Zahn Innovation Center, an on-campus incubator, in 2012.



BUILDING A SINGLE FOUNDATION TO OVERSEE PHILANTHROPY AT CCNY



Fundraising—impelled by a mission-driven, overarching strategy and coordinated effort to serve our students and live up to our best promise—has never been more important to City College. President Vince Boudreau was pleased to announce in January of 2018 that the 21st Century Foundation and the City College Fund have agreed to consolidate and form a new entity—temporarily named The Foundation for The City College of New York—to advance the shared vision for the College’s future prosperity.

The new Foundation will build on the historic legacies of both organizations, each of which have worked for decades to strengthen and advance the mission of the City College of New York. Both organizations are led by CCNY alumni with strong

track records of supporting the College. Both manage vast resources that have supported student scholarships, endowed named professorships, underwritten academic and co-curricular programs, and in many other ways ensured that CCNY is able to offer the very best educational opportunities to our students and a strong foundation of research support for our faculty, as well as support for the staff programs that enhance our mission. Their leadership has enabled City College to remain a vital institution.

Both boards agreed that a single entity would be more nimble, efficient, powerful, and capable of executing a strategic growth and development plan than either foundation could achieve operating on its own. The new Foundation will preserve and cherish the legacy of generosity that marked the foundations’ previous work, and advance that work in new and robust ways.

Accomplishing this merger of course requires time and work, as the College combines the databases as well as the financial infrastructure of the two foundations, establishes an investment strategy, assures that every donation has a clear and complete set of records, and organizes those records into a single database. In addition, CCNY must apply for approval from the New York State Attorney General’s office, and then we must seek IRS approval as well.

The new Foundation is a work in progress, but the progress is good, and we are confident that the work is well worth it. The new Foundation will elevate the City College of New York in ways only dreamt of before. Everyone who works with the College does so for one reason—because the historic mission of CCNY is vital to our students, our city and to our nation. That ethos, embraced by the men and women of the City College Fund and the 21st Century Foundation, is certain to invigorate the activity of the new Foundation. Supported by the combined strengths of both boards, we have every faith that the Foundation for The City College of New York will help to guide future years of dynamic and stable growth at the College.

THE COMBINED FOUNDATIONS FOR CITY COLLEGE

MARTIN COHEN '70
CO-CHAIR

DAVE R. WALL '97
CO-CHAIR

ROBERT W. ADLER '58

LINDA POWELL

EDWARD BLANK '57

NATALE RICCIARDI '72

VINCENT BOUDREAU
PRESIDENT, THE CITY COLLEGE OF NEW YORK

ALLEN J. ROTHMAN '68

HOWARD V. CAMPBELL '67

FRANK J. SCIAME, JR. '74

VIVIEN R. CLARK

EMANUEL JAMES STERGIOU '71

GABRIELLA DE BEER '56

SEYMOUR STERNBERG '65

JOHN M. DIONISIO '71

LEV A. SVIRIDOV '05

FULVIO V. DOBRICH '70

KIM WALES

JACK FEINSTEIN '65

ROBERT B. WELNER '71

HOWARD LEE MORGAN '65

JOSH S. WESTON '50

GEN. COLIN L. POWELL (RET.) '58

RICHARD VON ZERNECK '66 & '68



FOR INFORMATION ON HOMECOMING WEEK AND ALL OF OUR EVENTS, PLEASE VISIT: WWW.CCNY.CUNY.EDU

#CCNYLFW2018 # CCNYHOMECOMING2018

DON'T WAIT ANOTHER YEAR TO FIND OUT WHAT'S GOING ON AT CCNY! Keep up with the news, faculty and student achievements, new programs, and upcoming events at The City College of New York as they break.

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