



## Woman to Woman – 2020 year in Review

*A Message from Dean Jelena...*



While we have long known that no society thrives when it ignores the skills and talents of women, who make up more than half of the world's population, grappling with a global pandemic has made that even more apparent. In this newsletter, you'll read about how some of our women faculty, students, and staff have met the challenges of COVID-19 head-on – as well as about the many other vital issues they are tackling.

A lack of strong role models is often cited as one of the major barriers to increasing women's involvement in STEM, but that is far from the case at NYU Tandon, and I hope you'll enjoy learning about just a few of these accomplished, inspiring figures here.

I also hope you will continue to keep abreast of the work we are doing to attract more women to the STEM fields and retain them. That work has contributed greatly to our leap an astonishing 40 places in the U.S. News and World rankings in less than a decade – proof that diversity is not tangential to our excellence; it's an integral part of it!

— Dean Jelena Kovačević

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## New Women Faculty at Tandon

The Woman to Woman Newsletter is happy to introduce the new women faculty at Tandon. In this section these accomplished professors share their background, their research, and the courses they teach.



**Jennifer Apell**  
Civil and Urban Engineering

Assistant Professor Jennifer Apell — who holds a doctoral degree in Environmental Chemistry from the Massachusetts Institute of Technology — works within Tandon's Department of Civil and Urban Engineering to research manmade organic pollutants: How many are released into our environment? How quickly are they transported throughout the soil, water, and air? Can their detrimental effects be mitigated?



Environmental engineering is a relatively new field, she explains. It was not until 1969 — when Ohio’s Cuyahoga River became so laden with contaminants that it caught on fire — that the issue of pollution came into focus for many Americans. With mounting evidence of the deleterious effects that humans were having on their environment, congress passed several pieces of landmark legislation, such as the Clean Air Act and Clean Water Act, and created the Environmental Protection Agency (EPA) to oversee their implementation. While we’ve learned a great deal about the dangers of pollutants since then, new hazards continually arise. Apell takes a pragmatic view of the problem. “The pharmaceutical industry, for example, is going to continue to develop new and better drugs in an effort to improve medical treatment, and they certainly shouldn’t stop doing that,” she says. “It’s our job as environmental engineers to realize that there’s a danger those drugs will eventually end up in the water supply or in landfills and try to deal proactively with the problem.” Even seemingly innocuous manufacturing tasks can have unforeseen effects that need to be monitored and addressed. “Consider common machine oil,” she explains. “It has additives and those additives are going to go somewhere.”

Apell’s ultimate goal is to protect human health and the ecosystem. “When the EPA was first established, it was in reaction to obvious risks,” she says. “Things have evolved somewhat since then; we are now trying to avoid risk by predicting in advance how pollutants will spread through the environment, quantifying our exposure to them, and designing effective treatment systems.”



**Reginé Gilbert**  
**Technology Culture and Society**

Industry Assistant Professor Reginé Gilbert is doing her part to make the world a more inclusive and accessible place. As a user experience designer, she has helped such major companies as Ralph Lauren, Colgate, and Vitamin Shoppe ensure that their websites and mobile platforms can be used by all, and she brings that professional sensibility to bear within her Integrated Digital Media (IDM) classes. She has a strong belief in making the world a more accessible place—one that starts and ends with the user. In 2019, Gilbert’s first book, *Inclusive Design for a Digital World: Designing with Accessibility in Mind (Design Thinking)*, was released through Apress Publishing. Gilbert teaches User Experience Design for undergraduate and graduate students. “To me, the user comes first,” she explains. “I tell my students to think about who will be using the systems and products they design. Could someone vision impaired employ an assistive reading device to decipher any text involved or have you included animations and emojis that might make that difficult? If they were hearing impaired or had limited mobility, what provisions have you made for that? We’re living in an era of progress, but it can’t be characterized as truly progressive if not everybody can participate.”

Gilbert, an in-demand presenter at such events as the International User Experience Professional Association conference and the Design and Diversity conference, has taught in semesters past as a visiting professor at Tandon, and this summer, her course called upon Tandon students to build an immersive app for an actual client who is visually impaired. There’s more than academic credit and a grade at stake: at the end of the session, the



client will choose a winning project, which will then be built by Rose Digital, a top-tier firm that has created web-based AR and VR experiences for brands like Adidas.

Her students undoubtedly consider themselves lucky to be instructed by someone with such a wealth of practical industry experience, but in Gilbert's case, it goes even further than that: they can say their professor — very literally — wrote the book. In 2019 she published *Inclusive Design for a Digital World: Designing with Accessibility in Mind*, a comprehensive volume that explores the Web Content Accessibility Guidelines, best practices for web development, and more. "Technology has, overall, increased connection and information equality around the world," she asserts. "If we want to keep that trajectory going, now's the time to make access and usability of new tech a priority, and Tandon's IDM students are going to be well-equipped to do that."

"The world is getting increasingly complex, and engineers and technologists are facing increasing challenges," she says. "My goal is to prepare students to do work that is aligned with the highest ethical principles, even in those challenging situations".



**Alice Reznickova**  
**Technology Culture and Society**

Industry Assistant Professor Alice Reznickova has made many geographic leaps in her life: from her native Czech Republic to Italy, where she embarked upon her studies, and, ultimately, to the U.S. She is now making another, similarly dramatic leap — from Ripon, Wisconsin, a college town with a population of about 8,000 to New York City, with its more than 8 million residents.

An expert in sustainable food systems, Reznickova says, "There is simply no better place to explore issues of food access and security, urban farming, and other topics important in my field than New York, which functions as an enormous living lab." In Fall 2020, she will be teaching two courses: *Urban Food Security* and *Cities and Climate Change*. Both courses focus on big issues facing growing urban areas — students will learn about the causes and consequences of hunger and climate change, explore relevant data, critically evaluate solutions, and connect them to other sustainability issues, including poverty, inequality, health, education and others. She is encouraged by the culture of sustainability that already exists at Tandon, as evidenced by the program in which she'll be teaching: *Sustainable Urban Environment*. "The students here are interested in making cities more equitable and livable, and while I don't want to sound overly idealistic, I really think they will graduate from Tandon with the ability to change the world," she says.

Reznickova explains that while the issue of food deserts (urban areas with little access to affordable, healthy food) has made the news in recent years, and urban farming is now considered buzz-worthy, the serious study of food systems goes well beyond that. "There's a concept called food sovereignty that many people might be unfamiliar with," she says. "It calls for the people most impacted by global poverty and hunger to assert their right to enough healthy and culturally appropriate food to feed their family and for food policies to prioritize people and communities rather than corporations, land grabs, and profits." Reznickova, whose work has appeared in such



publications as the Journal of Community and Applied Social Psychology, the Journal of Food Distribution Research, and Agriculture and Human Values, was excited to see that Tandon has a Vertically Integrated Projects (VIP) program that allows students to delve into a topic over the course of several semesters — and that an urban farm is already one of those projects.

Before joining NYU Tandon, Reznickova served as the Director of Sustainability and faculty member in Environmental Studies at Ripon College, a small liberal arts school where it is unusual to bump into someone you don't know on campus. She is undaunted by her move to a much bigger place. "Everyone in the department has common goals, a holistic approach, and a devotion to teaching and learning," she says. "It's a community that shares my interests and values, so I feel I am home."

To Learn more about all of Tandon's New faculty, and full time women faculty members [click here](#) and [here](#)



## Woman to Woman Spotlights

In each newsletter we aim to shine a light on the womxn and allies doing exceptional work at Tandon. With so many members of our community worthy of recognition we decided to spotlight several, beginning with...



**Danya Glabau**  
Director of Science and Technology Studies

Industry Assistant Professor Danya Glabau's introductory Science, Technology, and Society course will present an introduction to the field — which seeks to examine how science and technology impact humanity in ways both beneficial and harmful. Required for anyone majoring in Science and Technology Studies (STS), a program that Glabau directs, the class will cover how the scientific process works, look at the benefits and potential dangers of relatively new technologies like facial recognition and social media apps, delve into case histories involving medical ethics, and more.

Glabau, who previously served as the interim director of STS, has several years of teaching experience, much of it concerned with ethics and morality: she has long stressed the need for those building technology and infrastructure to consider who might be helped and who might be harmed by their innovations. "Tandon students graduate with the skills they need to create all types of cutting-edge tech, from new modes of engineering proteins to treat medical conditions to novel ways of using big data and artificial intelligence," she says. "Those are complex issues with varied ramifications, so it's important that ethics be an integral part of their engineering education."

Glabau has much to look forward to besides her introductory class. She currently has two books under contract (one on cyborg culture and one on food allergy activism), and she will be participating in one of NYU's "Big Ideas" offerings in the spring, which allow students to engage with faculty experts from across the University to explore themes and topics relevant to today's issues. (In her case, the theme will be the interactions between trust, technology, and society: Has technology nourished a growing mistrust in society? If so, can it play a role in restoring those frayed bonds of trust?)

She is excited, as well, about further expanding a new Tandon minor called Feminism and Science, Technology, Engineering and Math (FSTEM), which she spearheaded last year and which aims to give students a critical understanding of the ways that gender, race, nationality, class, and ability, shape — and are shaped — by modern science and technology. "The world is getting increasingly complex, and engineers and technologists are facing increasing challenges," she says. "My goal is to prepare students to do work that is aligned with the highest ethical principles, even in those challenging situations."



## Q&A

### 1. What is your department and role/are your areas of research?

**DG:** Industry Assistant Professor in Technology Culture and Society, Director of the Science and Technology Studies (STS) [program](#). I am a medical anthropologist and feminist STS scholar. My first book project, under contract with the University of Minnesota Press and tentatively titled, *Reproducing Safety: Food Allergy and the Politics of Care*, is an ethnographic study of food allergy activism in the United States. In the book, I argue that these health activists' claims and strategies are shaped by normative ideas about gender and the family. My second book, *Cyborg*, is co-authored with Laura Forlano (Illinois Institute of Technology, Institute of Design) and just went under contract with the MIT Press this summer. It offers an introduction to cyborg theory, an interdisciplinary body of knowledge spanning the social sciences, humanities, and design, with an emphasis on feminist perspectives that prioritize multiple knowledges, social justice, and the liberatory potential of science and technology.

### 2. How long have you been at Tandon?

**DG:** I have been teaching at Tandon since Fall 2017. I was an Adjunct Instructor September 2017-2019, Visiting Industry Assistant Professor in my current department September 2019-now, and begin as Industry Assistant Professor officially on September 1.

### 3. What made you want to build a career in STEM?

**DG:** I grew up on an organic ornamental plant farm in the country in Maine, so I was always surrounded by, and always studying, nature. I got bitten by the science bug early from my surroundings and from hearing my parents talk about the ins and outs of landscaping and gardening. I just never stopped wanting to know more about my surroundings and how the world works.

### 4. When did you start your career in STEM?

**DG:** I began my training as a Biological Sciences major at Cornell University, where I worked in a laboratory doing soil science research with Dr. Charles Mohler and then in science communications at the Museum of the Earth in Ithaca, New York, and after I graduated, I did program and research support at the Northeastern IPM Center, also at Cornell in Ithaca. I became more interested in how ideas about science and technology were communicated and acted on in society through these experiences, and in particular I was interested in how people make sense of complex health data. From there, I did my PhD in Science and Technology Studies at Cornell, after applying to several other schools but finding a great fit at Cornell, where I did the research for my food allergy book project. STS is a social sciences field, but we study, work with, and educate STEM professionals every day. I see myself as a social scientist, but working to support and shape the development of STEM fields and professionals so that STEM delivers on its promise of betterment for all.





5. How has the role of Women in STEM changed since you began your career?

*DG:* It didn't affect me much as an undergrad. Bio was a premed-heavy major at Cornell, and applicants to medical school are now pretty gender balanced. Once I began advanced training, I started to see the differences in the opportunities afforded to men vs. women, not just in STEM but in all research and university career pathways. That was only a decade ago. I don't think much has changed since then. It's an ongoing project not only to get women into STEM fields, but also to make STEM professional expectations more accommodating to pregnancy, child rearing, health and disability issues, and care work. There is also more to do with tackling everyday misogyny in STEM fields. Some of this is on individuals, men and women alike. But a lot of it is on institutions. Institutions still have further to go in hiring women. But they also need to prioritize hiring in fields in which women predominate, to equalize salaries not only between men and women in the same roles but also ACROSS roles in which women are represented at different rates. Finally, institutions need to do more to remove the implicit penalties that go along with child birth, caring for dependents, and different norms of achievement between disciplines and fields.

6. What do you enjoy about teaching/your work at Tandon?

*DG:* I love the students, and I love my colleagues! I've seen students through from their intro classes to graduation, and it's amazing to see what Tandon students can accomplish and how they grow while studying here.

7. What advice would you offer women students?

*DG:* First, prioritize the friendships and bonds with your peers that sustain you and let go of the ones that stress you out. Second, don't be afraid to ask for help or guidance from faculty, of any gender; you don't feel as entitled to help as your men colleagues do, but you are. Faculty are here to make sure you succeed, but we don't always know when or how best to help until we know you need/want it. Third, if you experience something that feels wrong, it might be wrong! Don't doubt your instincts! But also, be judicious in deciding what you will try to change and what you don't have the capacity for at a given moment in time.



**Erin Varga**  
Associate Dean for Development

Erin comes to Tandon from Northwestern University where she served as Regional Director of Development in the New York Regional Office for Three years. Prior to that she spent six years at Arizona State University, most recently as the Director of Development for the Carey School of Business.



## Q&A

1. What is your department and role?

**EV:** I work in development and alumni relations as the associate dean of development. My responsibilities include working with the Dean to determine her philanthropic priorities for the school, helping to manage the Tandon Board, and cultivating and soliciting alumni, friends, foundations and corporations to help raise money for the School.

2. How long have you been at Tandon?

**EV:** I joined NYU Tandon in March of 2020.

3. What made you want to join Tandon?

**EV:** During the interview process, I spent some time with Dean Jelena. She shared her vision for the School, and the statistics about the students studying at Tandon. I was in awe of the fact that Tandon's fall 2019 class boasted 46% female enrollment. It was something I wanted to be a part of.

4. When did you start your career in higher ed?

**EV:** I've been in higher education for nearly 20 years, all in the development and alumni relations function. I started my career working at MIT and took on new opportunities from there. In my most recent role, I was the New York regional director of development for Northwestern University working with alumni and friends of the University.

5. What do you enjoy about your work at Tandon?

**EV:** I really enjoy working with the faculty and staff who I've had the pleasure of meeting. I was able to help raise funds for the Tandon Made Challenge. I'm really looking forward to the new school year, meeting more faculty, staff and students



**Emerald Knox**  
NYU's Center for Cybersecurity

As operations manager for NYU's Center for Cybersecurity, Emerald Knox oversees CSAW (Cybersecurity Awareness Worldwide), fundraising \$350,000 in annual support for the most comprehensive student-run cybersecurity event in the world. Launched in 2003 as a small local competition, CSAW has since grown to an international event that last year attracted some 1,225 teams from 90 countries.





## Q&A

**1. What is your department and role at Tandon?**

**EK:** Operations Manager at NYU Center for Cybersecurity

**2. How long have you been at Tandon?**

**EK:** I have been at Tandon for three years as an employee.

**3. What made you want to build a career in STEM?**

**EK:** I chose to work in STEM because I felt like there was a huge opportunity for this discipline to be more diverse, especially on the administrative side. STEM career opportunities not only exist for the practitioners but also the larger administration.

**4. When did you start your career in STEM?**

**EK:** I started to work in STEM on the events side Three years ago as the project manager for CSAW, the world's largest student led cybersecurity conference.

**5. How has the role of Women in STEM changed since you began your career?**

**EK:** I started as an Event/Project Manager for CSAW and transitioned into the Operations Manager for the Center for Cybersecurity.

**6. What do you enjoy about teaching/your work at Tandon?**

**EK:** I love helping to build a cybersecurity community and I hope to help make the cybersecurity industry more diverse.



**Shruthi Aramandla PE, MSc, LEED AP BD+C**  
**Mechanical Engineering, MS 15**

Shruthi Aramandla, dreamed of being an engineer from the time she was 10 years old growing up in Chennai, India. In May 2015, that dream became a reality after she earned her master's in mechanical engineering from NYU Tandon and began her career working at a top engineering consulting firm designing heating, ventilation and air-conditioning systems for schools, universities, museums and public buildings including renovation of existing systems and new buildings. As a HVAC design engineer, Shruthi is an integral employee in technical work force designs at her firm. Shruthi has also had the opportunity to return to NYU since graduating from Tandon in a professional capacity designing the space for the physics and chemistry departments on NYU's main campus at 726 Broadway, and as part of the design team that worked on the renovation of the 4th floor of Roger's Hall at Tandon



## Q&A

1. What is your professional title and areas of research?

SA: Mechanical engineer.

2. What degree program were you in at Tandon?

SA: I have master's in mechanical engineering, specializing in Fluids.

3. What made you want to build a career in STEM?

SA: I have always been interested in Science and Technology. I found my calling in mechanical engineering because it lets me build concepts I study about. That led to me trying to find a specialization during grad school that was a mix of both design and thermal sciences and HVAC designing offered me that.

4. When did you start your career in STEM?

SA: Started my career 5 years ago, as a mechanical engineer.

5. How has the role of Women in STEM changed since you began your career?

SA: When I did my undergrad, my mechanical engineering program had eight female students and close to 500 male students. In the seven years since I have graduated, the ratio has improved. The women who paved the way for me to be there, and who offered guidance when they had none made a difference to me wanting to finish my degree. I hope that as more women enter the STEM fields women should not have to play a "role" but will be an integral and everyday part of STEM as engineers and scientists without having to challenge the status quo.

6. What do you enjoy about your work?

SA: Seeing the HVAC systems I design get built is an amazing feeling. Months or years long work goes into ensuring the design is built up to code and client standards. Seeing the systems get built from scratch, at multiple stages and the finished product is exhilarating.

7. What advice would you offer women students?

SA: Seek out a mentor either in school or through industry contacts. Some of the most important steps I took to advance in my career and end up in the right company were through the guidance offered by my professors who were my mentors.



**Joel Caminer**  
**Director of Cyber Security Education**

Joel Caminer is the Director of Cyber Security Education at NYU Tandon, and is also Director of the Applied Learning Initiative Stackable Credentials Program as part of Cyber NYC, a \$100 million suite of public-private investments to establish New York City as a global leader in cybersecurity. Joel has 20+ years of experience in Financial Services, IT, and Consulting, and has led many strategic initiatives across the IT Risk and cybersecurity spectrum. He previously served as the Global Head of Technology Risk Management at TD Securities; VP of Information Risk Management and CISO at Goldman Sachs; and Manager at Andersen Consulting (now Accenture). Joel holds a BSE in Electrical Engineering from the University of Michigan and an M.S. in Cyber Security from NYU.

## Q&A

1. **What is your professional title and areas of research?**  
JC: Director of Cyber Security Education, including Co-Director of the MS in Cybersecurity, Risk, and Strategy program (run jointly with Law School)  
<https://www.cybersecurity-strategy-masters.nyu.edu/faculty/joel-caminer/>  
<https://cyber.nyu.edu/profile/joel-caminer/>  
<https://engineering.nyu.edu/research/centers/nyu-center-cybersecurity-ccs/series>
2. **What year of study and program were you in at Tandon?**  
JC: I graduated in 2015 with an MS in Cyber Security. I completed the Tandon Online program, the precursor to today's Cyber Fellows program, while working full-time and raising my son.
3. **What made you want to build a career in STEM?**  
JC: I always excelled at math which opened doors for advanced science and technology courses throughout high school. In college I was always interested in applied hands-on learning which drove me towards Engineering. I received my BSE in Electrical Engineering from the University of Michigan followed many years later by my M.S. in Cyber Security right here at NYU Tandon.
4. **How has the role of Women in STEM changed since you began your career?**  
JC: I could literally count the number of women in my engineering undergrad program on one hand. I became good friends with two of them and witnessed first-hand the challenges they had throughout their college experience. Play that through to my last few corporate roles, where we failed to bring enough women into our cybersecurity teams, both entry-level and advanced, and it's clear we still need to do much more. I'm so impressed and appreciative of the work that Tandon has done to further this mission and am honored to serve on the Developing Male Allies subcommittee.

**JC:** First, there's a recognition that people who identify as male hold a disproportionate amount of power, privilege, and decision-making roles in our fields of study and in society at large. As such it's incumbent on us – not those that are most burdened by this inequality – to rectify this imbalance and create equity between all genders. Allyship can take place at many levels, whether it's a fellow student including a womxn in a study group, or correcting another student who's not acting appropriately, to allies in more senior positions working to break down barriers and historical norms. A male ally actively advocates on behalf of womxn.

**JC:** First I would say learn. Educate yourself about the issue. Join a student organization or committee. Look for and attend events and activities that can push your education to the next level. Each year the Developing Male Allies subcommittee has panel discussions and workshops geared to help students answer that very question, including an event we just had about male allyship and building solidarity in STEM. Second, I would say listen. Speak with fellow classmates and truly listen to their experiences so that you can begin to identify with and relate to their situation. I think you'll be surprised by what they say and how they feel. And then take action, both individually and collectively.



## 2020 Year in Review



From K-12 STEM programs to summer research opportunities, Tandon is ensuring that the next generation of engineers is the strongest it can be by providing young women with the tools for success. Our efforts are paying off — women make up 46% of the Class of 2023, roughly double the average for U.S. engineering schools! As we celebrate this wonderful achievement let's take a moment to remember the honors and awards we've received, the articles written about us, the milestones we surpassed, the times when we stood up to injustice and all of the many ways both large and small Tandon was recognized over the past year.

## Tandon's Honors



### Online and on top

With online learning growing in popularity thanks to its affordability and flexibility, U.S. News & World Report ranked more than 1,600 online degree programs this year, and the results are in! New York University Tandon School of Engineering's online master's programs in Computer Information Technology — encompassing offerings in computer engineering, bioinformatics, and cybersecurity — was ranked #5 in the entire nation, while

its online graduate engineering programs as a whole perched firmly within the top-25, at #23. In addition, U.S. News tabulates information about online programs that best serve military veterans and active-duty service members. U.S. News deemed Tandon's online master's programs in Computer Information Technology #4 in the nation for veterans and the online graduate engineering programs, as a whole, #15 for veterans.

To read this article in its entirety click [this link](#).





## Feminism and Science, Technology, Engineering and Math Minor

Women@Tandon and Woman to Woman are proud to announce the Feminism and Science, Technology, Engineering and Math (FSTEM) minor that trains students to have a critical understanding of the ways that difference and diversity, including gender, race, nationality, class, and ability, shape and are shaped by modern science and technology.

Courses for the minor introduce students to the history of women in STEM, the construction of scientific theories of gender and racial difference, queer theory, designing for diversity, and the relationship between gender and disability. Feminist and other student-centered pedagogies encourage students to connect course content to the real world through in-class activities, independent research, writing assignments, engagement with community organizations, and design briefs.

To read this article in its entirety click [this link](#).



## NYU Tandon honored for bringing more women to STEM

New York University Tandon School of Engineering's Department of Computer Science and Engineering received a National Center for Women and Information Technology Extension Services Transformation (NEXT) Award for excellence in recruiting and retaining women in computing education. The NEXT Awards honor undergraduate academic departments that have increased women's participation in computing education — an

especially vital goal considering that a recent study revealed that while women earned 57 percent of all undergraduate degrees, they earned less than 20 percent of all computer and information sciences undergraduate degrees. NYU Tandon placed second in the nationwide selection process.

To read this article in its entirety click [this link](#).



## Three New York University faculty have been awarded fellowships from the Alfred P. Sloan Foundation.

Three New York University faculty have been awarded fellowships from the Alfred P. Sloan Foundation: Anna Choromanska, an assistant professor at the Tandon School of Engineering; Christine Constantinople, an assistant professor in the Center for Neural Science; and Daniele Panozzo, an assistant professor in the Courant Institute of Mathematical Sciences.

To read this article in its entirety click [this link](#).





## Tandon's Newsmakers

Fall, 2019



### AI's social sciences deficit

*Nature Machine Intelligence*

*August 2019*

(Mona Sloane, co-author, is a research fellow at New York University's Institute for Public Knowledge and an adjunct professor in the NYU Tandon Department of Technology, Society and Culture) To create less harmful technologies and ignite positive social change, AI engineers need to enlist ideas and expertise from a broad range of social science disciplines, including those embracing qualitative methods, say Mona Sloane and Emanuel Moss. Computer scientists are building a vast array of machine learning systems (often called AI) that can perform human tasks reliably, making us believe that AI can be a judge, a shopkeeper, a chauffeur, a financial analyst, a receptionist, a security guard, a doctor or a paralegal. Many of us enjoy the fruits of this labour, from our e-mail folder that is kept clear of spam to the improved chances we have of detecting cancer early. But AI doesn't make everybody's life easier or safer.

To read this article in its entirety click [this link](#).



### 'Creeping crisis of risk aversion' in the public service

*Financial Review*

*8/13/2019*

(Beth Simone Noveck is director of the Governance Lab and a professor in the department of Technology, Culture and Society at NYU Tandon). As Scott Morrison considers the results of a wide-ranging review of the federal public service, two leading experts have urged the government to allow bureaucrats to shake off risk-aversion and become "public entrepreneurs". International expert Beth Noveck - an adviser to Barack Obama, Angela Merkel and David Cameron - and Monash University's Rod Glover have written a new report on the lack of innovation in public service departments, finding a "creeping crisis" from outdated approaches and a belief among current and former bureaucrats that the private sector is increasingly better placed to solve public policy problems.

To read this article in its entirety click [this link](#).

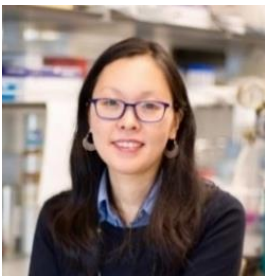


## If Hospitals Made Efforts to Go Green, Health Care Costs Would Go Down

*Fortune*  
9/5/2019

(Co-written by Cassandra Thiel, assistant professor of Civil and Urban Engineering at the NYU Tandon School of Engineering) Here's another reason why health care costs so much—massive amounts of waste and energy use. An example: Flu season is coming up and health care workers are required to get a flu shot, generally by colleagues using single-use gloves. A medical facility with 30,000 employees that requires everyone to be vaccinated using gloves would release over three metric tons of greenhouse gas emissions if landfilled, and six metric tons if incinerated. (Each pair of gloves weighs 33 grams, totaling nearly one metric ton of gloves). If all 18 million health care workers in the U.S. receive a flu vaccine this year, that would be 594 metric tons of garbage, and over 1,800 metric tons of greenhouse gases (if the gloves are landfilled). That's the same amount of greenhouse gases as emitted from 391 passenger vehicles on the road this year. Yet both the Occupational Safety and Health Administration (OSHA) and the Center for Disease Prevention and Control (CDC) do not require using gloves for routine vaccine administration because there is little risk involved.

To read this article in its entirety click [this link](#)



## New Protein Hydrogel to Be the First Biocompatible Thermo-Responsive Drug Delivery Aid

*Tandon News*  
9/20/2019

Imagine a perfectly biocompatible, protein-based drug delivery system durable enough to survive in the body for more than two weeks and capable of providing sustained medication release. An interdisciplinary research team led by Jin Kim Montclare, a professor of biomolecular and chemical engineering at the NYU Tandon School of Engineering, has created the first protein-engineered hydrogel that meets those criteria, advancing an area of biochemistry critical to not only to the future of drug delivery, but tissue engineering and regenerative medicine. Hydrogels are three-dimensional polymer networks that reversibly transition from solution to gel in response to physical or chemical stimuli, such as temperature or acidity. These polymer matrices can encapsulate cargo, such as small molecules, or provide structural scaffolding for tissue engineering applications. Montclare is lead author of a new paper in the journal *Biomacromolecules*, which details the creation of a hydrogel comprised of a single protein domain that exhibits many of the same properties as synthetic hydrogels. Protein hydrogels are more biocompatible than synthetic ones, and do not require potentially toxic chemical crosslinkers.

To read this article in its entirety click [this link](#) Jin Montclare's (pictured) work was also covered in [Science Times](#)



## Adaora Udoji in Q&A at Afrotectopia Festival

*YouTube, (video)*

9/23/2019

*(Interview conducted by Adaora Udoji, adjunct professor at NYU Tandon School of Engineering)*

Stephanie Dinkins presents her work in a fireside chat with Adaora Udoji at the second annual Afrotectopia festival in New York.

Click [this link](#) to view video



## A fairer way forward for AI in health care

*Nature*

9/25/2019

"In some health-care systems, there are very basic things that are being ignored, basic quality of care that people are not receiving," says Kadija Ferryman, an anthropologist at the New York University Tandon School of Engineering who studies the social, cultural and ethical impacts of the use of AI in health care. "Apple, Google, Amazon — they are all making inroads into the health-care space." But because AI algorithms learn from existing data, there is a risk, Ferryman says, that the tools that result from this gold rush could entrench or deepen inequalities — such as the fact that black people in US emergency rooms are 40% less likely to receive pain medication than are white people.

To read this article in its entirety click [this link](#)



## Jelena Kovačević talks tech with Hari Sreenivasan of SciTech Now

*SciTech Now*

10/9/2019

In this episode of SciTech Now, meet the first woman dean of New York University's Tandon School of Engineering.

Click [this link](#) to view video



## Mary Louis, Junior helps close tech gender gap

*Queens Chronicle*

10/19/2019

Junior Myah Mitchell from The Mary Louis Academy in Jamaica Estates, center, found that NYU Tandon School of Engineering offered a unique opportunity for young women to help close the gender gap in tech with the program Girls Who Code. During the seven-week program, Mitchell and her group of students first learned the basics of coding and then used this skill in various projects. They coded websites and apps; they built robots and wrote codes for the robots. For the final project, Mitchell's group created a website called "Ecocloset" that focused on bringing attention to brands that use sweatshops while promoting eco-friendly brands.

To read this article in its entirety click [this link](#).



## Forbes' future really is female

*Tandon News*

10/29/2019

*(The third Forbes Idea Incubator challenged female Tandon students to address the transportation shift towards alternative mobility options) Six teams of NYU Tandon students gathered in a ballroom to talk transportation on October 19, 2019. In partnership with NYU Tandon, Audi of America sponsored a challenge to propose*

solutions that acknowledge the transformation from traditional car ownership to alternative mobility options like ride-sharing or subscription models. Presented by Forbes, the third Idea Incubator called for a transportation solution from the position of the City, but it inherently took on another perspective — that of women.

To read this article in its entirety click [this link](#)



## 24/7: A wake-up call for our non-stop world review – in search of lost time

*The Guardian*

11/10/2019

*(Tega Brain is an Assistant Industry professor in the Department of Technology, Culture and Society at NYU Tandon.) ... An installation by Esmeralda Kosmatopoulos shows 15 pairs of hands, cast in white plaster, all texting on invisible phones like mute white birds. But we still speak on those phones, and nor has the written letter died out. One young artist, who spent six months without the internet at Somerset House, received many beautifully written letters from friends. And a very entertaining installation by Tega Brain and Surya Mattu, titled Unfit Bits, offers devices to thwart those insurance companies who insist on digital data: metronomes, adapted wheels and executive toys that swing your Fitbit to simulate the motion of walking.*

To read this article in its entirety click [this link](#)



## The rise of CarbonTech - CO<sub>2</sub> finds market value

*Forbes*

11/12/2019

*(Written by Pat Sapinsley, Managing Director of Cleantech Initiatives at NYU Tandon Urban Future Labs.) Exciting things are happening in the world of carbon capture. A new category of companies is coming to market that are using technological innovation to turn excess CO<sub>2</sub> into useful, marketable products. They are calling themselves "CarbonTech" or "Carbon to*

Value" and proposing that carbon waste can be turned into products of real value.

To read this article in its entirety click [this link](#)





## Tandon students dazzled on and off stage in "Legally Blonde"

*Tandon News*

11/18/2019

First-year Fiona Selep and Perzya Lily Zephyrin were the only two Tandon students involved in Tisch New Theatre (TNT)'s production, "Legally Blonde: The Musical" this past fall. Zephyrin acted in various roles such as D.A. Joyce Riley, Whitney and as part of the ensemble, while Selep worked behind-the-scenes as a lighting production assistant. Despite their different roles, both students experienced the hustle and bustle synonymous with performance preparation.

To read this article in its entirety click [this link](#).



## Two regional scholarship winners emerge from a single NYU Tandon lab

*Tandon News*

1/14/2020

When Fiona Dunn, a third-year Ph.D. candidate in NYU Tandon's Department of Civil and Urban Engineering, arrived at a holiday gathering organized by the New York Water Environment Association (NYWEA) to receive a scholarship she had been awarded by the group, she was happily surprised to see a familiar face. There, in his best professional attire, was fellow Civil and Urban Engineering student Ahmed Shaheen, who had also garnered the NYWEA scholarship, bestowed upon exceptional students planning careers involving water quality...but Dunn and Shaheen share not only an institution of higher learning but a single faculty lab: both count Assistant Professor Andrea Silverman as teacher and mentor.

To read this article in its entirety click [this link](#).

## Spring, 2020



## A changing microbiome

*Tandon News*

1/31/2020

It might seem like the first chapter of a dystopian novel: climate change causes sea levels to rise. High-intensity storms pummel the city. Drainage systems are overwhelmed and sewage floods streets and homes, carrying with it an assortment of disease-causing bacteria and viruses. Dystopian scenarios aside, of the myriad impacts predicted to accompany climate change, flooding is, in fact, expected to have an outsized influence on public health and infrastructure in urban areas. Urban flood water does, indeed, contain a diverse array of contaminants, including industrial and household chemicals, fuels, and pathogen-ridden sewage — all of which can be deposited on flooded surfaces, presenting exposure risks even after flood waters have receded. A group of NYU Tandon researchers is now studying how urban flooding changes the microbial community of urban surfaces, investigating the ways in which the resulting microbial fingerprint evolves over time after a flood event, and determining how long it takes for the



community to return to a pre-flood profile. With cities now home to more than half of the world's population — an estimated four billion people — and that number only increasing, their research has enormous significance.

To read this article in its entirety click [this link](#).



## The first female dean of NYU's engineering school shares her best career advice

NBCNEWS.com

2/11/2020

"It's important for young women, young men and young kids to see that a scientist or an engineer or a successful person or a dean doesn't have to look a certain way," says

Kovačević. Jelena Kovačević is the first female dean of New York University's Tandon School of Engineering. Being from Yugoslavia, Kovačević said she didn't notice the female student deficit at the University of Belgrade, which is where she got her bachelor's degree. But the gender gap really stuck out to Kovačević when she started her Ph.D. program in the United States at Columbia University, where she graduated in 1991. Now, at NYU, she's intent on supporting female students as they apply and make their way through the program.

To read this article in its entirety click [this link](#).



## Kadija Ferryman ...Helping students understand ethical dilemmas they could face as engineers

Tandon News

3/2/2020

Assistant Professor in the Department of Technology, Culture and Society Kadija Ferryman teaches a course in ethics and technology and traces her interest in the topic back to her graduate school days, when excitement was building about the Human Genome Project and the possibility of identifying and mapping every gene. There were, she realized, ethical pitfalls in having that type of data, given its potential for misinterpretation or misuse. Although her research focuses specifically on health information technologies, she explains that developing and using any type of tech requires careful consideration of the moral dilemmas it may pose and the ways it may negatively affect marginalized groups.

To read this article in its entirety click [this link](#).



## 2020 Women in STEM Summit

Tandon News

3/12/2020

The theme of this year's Women in STEM Summit was "Reflecting on Our Past, and Transforming Our Future." The powerful theme encouraged an atmosphere that was equal parts contemplative and tenacious – traits emblematic of the spirit of NYU

Tandon itself. Attendees celebrated the Tandon community's dedicated, and effective, efforts towards inclusion and equity; while emphasizing the importance of engaging in critical conversations about how to further that





progress. Tandon has a history of pushing the boundaries of what is possible and, as evidenced by the empowered community that gathered at the Summit, it shows no sign of letting up the pressure. It was thrilling to kick off March with an array of events geared to getting Tandon's women-identified students (and their allies) out and engaging with one another.

To read this article in its entirety click [this link](#).



### A call for action

Medium

3/16/2020

*(Co-signers include Stefaan G. Verhulst, Co-Founder, The GovLab at NYU Tandon, and Julia Stoyanovich, Assistant Professor, Computer Science and Engineering at NYU Tandon)* The spread of COVID-19 is a human tragedy and a worldwide crisis. The social and economic costs are huge, and they are contributing to a global slowdown. Despite the amount of data collected daily, we have not been able to leverage them to accelerate our understanding and action to counter COVID-19. As a result, we have entered a global state of profound uncertainty and anxiety. The current pandemic has not only shown vulnerabilities in our public health systems but has also made visible our failure to re-use data between the public and private sectors — what we call data collaboratives — to inform decision makers how to fight dynamic threats like the novel Coronavirus.

To read this article in its entirety click [this link](#).



### Blinded by disbelief: COVID-19's devastation is a mirror for climate change

Forbes

3/26/2020

*(Pat Sapinsley of the Urban Future Lab authors)* After describing the dead lying in the halls of Wuhan hospitals and the coffins stacking up on church pews, Donald G. McNeil Jr. remarked on the New York Times podcast The Daily: "I've been looking at the [coronavirus] since late January, early February. I'm frightened by it. The visions are nightmarish. That's what we're headed for and I don't see anyone taking it seriously." He was describing the inadequacy of the U.S. Federal government's response to COVID-19, but he may just as well have been describing our cluelessness and lack of attention to the impending climate crisis, which will be far more devastating. Imagine the worst of COVID-19. Now magnify that by an order of magnitude. COVID-19 is one virus. Just one. Climate change impacts will bring many new illnesses, as we have seen from the spread of the Zika virus. There are possibly viruses lying dormant in the melting permafrost, now.

To read this article in its entirety click [this link](#).



## New York researchers rush to capture 3-D data map of COVID-19 'surface vectors'

*MedicalXpress*  
4/1/2020

New York University researchers are in the field capturing highly detailed three-dimensional data on human movements and behaviors—particularly around medical facilities, public transportation systems, and essential services—to document the complex landscape of "surface vectors" and thus opportunities for COVID-19 transmission. Working under a National Science Foundation Rapid Response Research (RAPID) grant for proposals with severe urgency, the team from the NYU Tandon School of Engineering and the NYU School of Global Health is advancing epidemiological analysis beyond the two-dimensional concept that has been in use since 1854, when John Snow first mapped cholera cases to identify specific contaminated wells as the infection sources of a severe local outbreak in London. Rapid, repeated documentation and mapping of current conditions around medical and transport facilities will make it possible to investigate the implementation of social distancing regulations and predict patterns of exposure and transmission moving forward, explained the professors. The lead investigator for the project is Debra Laefer, a professor of civil and urban engineering at NYU Tandon who also serves as a professor of urban informatics and director of citizen science at its Center for Urban Science and Progress (CUSP), and the co-leader for the project is Thomas Kirchner, director of the NYU mobile health lab and an assistant professor of social and behavioral sciences at the School of Global Public Health.

To read this article in its entirety click [this link](#).

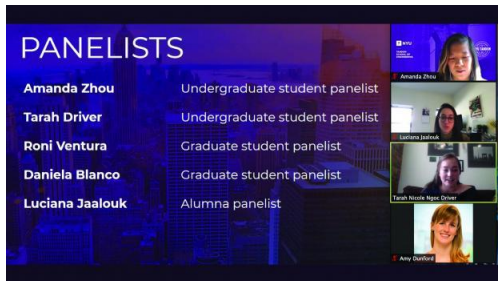


## Tandon COVID-19 research response is certifiably RAPID

*Tandon News*  
4/21/2020

S. Farokh Atashzar (Electrical and Computer Engineering, Mechanical and Aerospace Engineering, and NYU WIRELESS) and (pictured here) Yao Wang (Electrical and Computer Engineering, Biomedical Engineering, and NYU WIRELESS) COVID-19 has caused a severe shock to the world's healthcare systems. Continued spikes have been occurring, accompanied by serious outbreaks of pneumonia associated with the infection. Assistant Professor S. Farokh Atashzar and Professor Yao Wang realized the pressing need for smart and scalable wearable technologies that can be produced rapidly to assist in monitoring patients. A recent NSF RAPID Response grant is supporting their development of a wireless smart IoMT (Internet of Medical Things) necklace containing sensors that can accurately, objectively, and continuously track multiple vital symptoms of respiratory malfunction and infection, thus covering a large spectrum of COVID19 symptoms, and predicting the probability of health anomalies through machine intelligence and data modeling.

To read this article in its entirety click [this link](#).

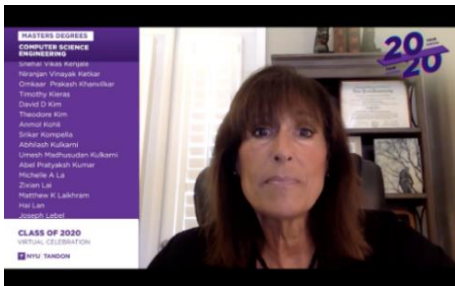


## Women makers encourage incoming NYU Tandon students to join their ranks

*Tandon News*  
4/27/2020

Women have been creating and making at Tandon, and on April 22, several of them took part in a virtual event for admitted students, focused on making women feel welcome, explaining the supportive environment they would be entering, and extolling the wonders of the 10,000-square-foot MakerSpace at Tandon.

To read this article in its entirety click [this link](#)



## Barrier-breaking meteorologist Joan Von Ahn (School of Engineering, '76) addressed the Class of 2020 during the virtual celebration

*Tandon News*  
May, 2020

Among the speakers at the Class of 2020's virtual celebration was alum Joan

Von Ahn Joan Von Ahn, who graduated from the School of Engineering in 1976 and went on to break barriers and glass ceilings as one of the first women with a degree in meteorology to present the weather on television as a meteorologist at the National Oceanic and Atmospheric Administration and the National Weather Service.

To read Ms. Von Ahn's Alumni profile click [this link](#), and click [this link](#) to view Tandon's Virtual Commencement 2020.



## NYU Alumni on the frontlines

*NYU Alumni News*  
May, 2020

Gabriella Cammarata, a 2018 master's graduate of the Integrated Digital Media program, has been working with NYU Langone medical staff and faculty to produce replacement hood clips for powered air purifying respirators. These clips break easily and it can be difficult to acquire replacement clips from the manufacturer in a timely manner, so Cammarata has been working to create accurate 3D models which can then be used to print the needed replacements.

To read this article in its entirety click [this link](#)



## NYU Alumni on the frontlines

*NYU Alumni News*  
May 2020

(Christina Coscia-Turturro Tandon ('01, '04) "Pandemics are one thing that Poly did not have a course on back in my day," Christina Coscia-Turturro says, "but I knew there must be a way to put my tech skills to work and help my family and neighbors during this challenging time.

Coscia-Turturro, who hails from a traditional Italian family, hit upon a course of action by combining her tech skills



with another passion: food. "Living in New York at the epicenter of the crisis and sheltering in place, we are at the mercy (and blessing) of food delivery services," she says. "I realized that there were probably many older people who had never set up an Instacart or Fresh Direct account and who wouldn't have any idea of where to start. Once I showed my aunt what to do with Instacart the first time, she was able to do it herself the next time."

To read this article in its entirety click [this link](#)



## How Congress can improve productivity by looking to the rest of the world

THE HILL

5/15/2020

(Written by Beth Simone Noveck and Dane Gambrell, Opinion Contributors to THE HILL)

Professor Beth Simone Noveck, director of NYU Tandon's The Governance Lab (The GovLab) The House is set to vote on Resolution 965. Introduced by House Rules Committee

Democrats, HR-965 would provide authorization for remote committee proceedings and voting by proxy - meaning that members can delegate a colleague on the floor to vote on their behalf — during the pandemic.

To read this article in its entirety click [this link](#)



## Juliana Freire, Dennis Shasha honored by the Association for Computing Machinery

Tandon News

5/29/2020

The Association for Computing Machinery (ACM) has honored Juliana Freire (pictured, Computer Science and Engineering), and Dennis Shasha (NYU WIRELESS), with the Special Interest Group on Management of Data (SIGMOD) 2020 Contributions Award.

To read this article in its entirety click [this link](#)

## Summer, 2020



## Reducing the nation's waste line

New York Academy of Sciences

June, 2020

(Bertha Jimenez '16 Ph.D., Technology Management and Innovation) Bertha Jimenez wasn't a beer drinker when she came across spent grain for the first time. A mechanical engineer by training and now the CEO of Rise Products, Jimenez recounted her tour of Brooklyn Brewery, a craft beer brewery located in the Williamsburg section of Brooklyn, N.Y. "I'm interested in

how waste from one industrial activity is usable in another," she said. "So, as we walked around the plant, I wanted to know what happened to the source grains after the beer was made." Within a year, Jimenez founded Rise, a start-up that converts spent grain into specialty flours sold directly to bakeries.

To read this article in its entirety click [this link](#) more on Ms. Jimenez [here](#)





## The best cell-phone signal boosters, according to experts

New York Magazine

6/4/2020

(Elza Erkip, Electrical and Computer Engineering speaks about cell phone boosters) Elza Erkip, an institute professor at NYU's Tandon School of Engineering says, "The way a cell phone works is that it receives signals from and sends signals to a base station. Typically, the base station has a wide coverage area. But sometimes the coverage also has 'holes,' which are certain regions where the reception is weak." Those holes in your connection could be caused by being in a remote location or even the material used to construct the building you're in. A cell-phone signal booster "is helpful in patching up the coverage holes,"

To read this article in its entirety click [this link](#)



## A global citizen pays tribute to New York and NYU

Tandon News

6/15/2020

(Tandon alum Jade Lu '20) Lu has long been a board member of the Hebei Joint Education-Aid Fund, which helped teenagers in rural China access quality education, and the concept of pulling together to help communities in need was important to her. When she learned that medical personnel at NYU Langone and other city hospitals were facing shortages of

personal protective equipment during the early days of the pandemic, she sprang into action, reaching out to contacts in China, sourcing the needed items, figuring out ways to navigate export restrictions, and purchasing \$100,000 worth of supplies to send to Langone. "It was a joint effort on the part of many people," she modestly asserted. "It couldn't have been done without my friends in China."

To read this article in its entirety click [this link](#)



## Data science in the time of COVID-19 | IEEE TechEthics virtual panel

IEEE.tv

6/18/2020

(Julia Stoyanovich, Computer Science and Engineering participated in this virtual panel) This panel discusses several COVID-19-related data aggregations and visualization projects currently underway, as well as the social and ethical considerations that come with these efforts.

Click [this link](#) to view the discussion



## Leidos presents STEM scholarship at Surface Navy's Annual Anchor Scholarship award ceremony

*Leidos.com*

6/22/2020

Leidos (NYSE: LDOS), a FORTUNE® 500 science and technology leader, awarded the fifth annual Leidos STEM Scholarship, under the Surface Navy's Anchor Scholarship program, to Mary Nicole Lyons of Chesapeake, Va. Nicole is a rising junior at New York University's

Tandon School of Engineering where she maintains a 3.90 GPA in chemical and biomolecular engineering, and is a leader on the NYU Robotic Design Team.

To read this article in its entirety click [this link](#)



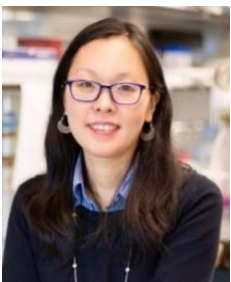
## *NYU Tandon professor Anne Laure-Fayard helps devise a way to efficiently incorporate AI into the workplace*

*Tandon News*

6/23/2020

Anne Laure-Fayard, associate professor of technology management and innovation, is the co-author of a new report in the *Harvard Business Review* that takes a sharp look at challenges to implementing AI systems in the workforce. The report enumerates key methods of successfully achieving the task, which requires technologists and administrators to think deeply about the relationship — and potentially antagonistic reactions — employees may have to machine learning-based systems.

To read this article in its entirety click [this link](#)



## A dual-purpose at-home test for COVID-19

*NYU Tandon Newsroom*

6/30/2020

According to the World Health Organization, "Diagnostic testing for COVID-19 is critical to tracking the virus, understanding epidemiology, informing case management, and to suppressing transmission." So, what if there were a quick at-home test for the virus that was as easy and affordable as an at-home pregnancy test? NYU Tandon Professor of Chemical and Biomolecular Engineering Jin Montclare is close to making that scenario a reality. Montclare, widely recognized for her work in protein engineering, explains that while detecting infection is crucial, identifying immunity is equally important to keeping outbreaks in check, especially as businesses reopen. To that end, she is helping create a test strip requiring just a drop of blood from a simple finger prick; the strip — coated with proteins specially engineered to grab onto significant targets will recognize either the virus or particular antibodies that are mounted by an individual's immune response, making this a uniquely dual-purpose test.

To read this article in its entirety click [this link](#)





## What Biodesign means to me: Elizabeth Henaff

*Biodesign*

July, 2020

(Written by Elizabeth Hénaff, Assistant Professor Technology, Culture and Society) I was formally trained in the sciences—computer science, plant biology, cancer genomics, and then metagenomics. For the 15 years that it took to earn the label of “scientist,” the scientific method was the way I knew the world around me. This method of knowing is designed to remove the human from the equation. Indeed, the language in scientific papers removes the subject: “the reaction was performed” not “I performed the reaction.”

To read this article in its entirety click [this link](#)



## Covid in waste water

*NYU Tandon Newsroom*

7/1/2020

The virus that causes COVID-19 – SARS-CoV-2 – passes through the body and ends up in sewage. Therefore, cities across the nation already have facilities that could help officials track the spread of the disease locally: sewage treatment plants. Monitoring the concentration of the virus in wastewater has the potential to be more comprehensive than individual testing, and can signal when a hotspot is developing. However, deploying sewage surveillance programs for SARS-CoV-2 is complex in practice, requiring not only wastewater sampling and analysis, but also data interpretation and communication of results to public health officials who can act on it. Researchers at the New York University Tandon School of Engineering, the University of Wisconsin-Milwaukee, Stanford University and the University of Notre Dame are collaborating to create a “startup blueprint” for municipalities that plan to implement SARS-CoV-2 sewage surveillance. It would address dual challenges: implementation of best practices for sample collection, analysis, and interpretation, and speedy and appropriate translation and communication of results to public health decision-makers.

To read this article in its entirety click [this link](#).

Andrea Silverman is also quoted in [Science the Wire's](#) “Tests to Detect the Novel Coronavirus on Surfaces Show Mixed Results”



## The engine of the economy of the future is 5G

*La Repubblica, Italia*

7/7/2020

(By Antoonia Maria Tulino Research Professor NYU Wireless and Alessandra Sala) From reading only the technical characteristic, 5G may not have the evocative power of keywords such as Artificial Intelligence (AI), advanced robotics, etc. Yet 5G with its unique and disruptive transformation potential is the backbone, dare I say the enabler of these and many other technologies of the future: Machine Learning (ML), autonomous driving, wearable electronics just to name the most common 5G, therefore, cannot be interpreted only as the evolutionary stage of a path, that of digitization (of society), which



began in the early nineties: it would be extremely reductive. Rather, it is a reversal of the traditional “one size fits all” approach, which envisaged the adoption of a single technology that would improve – even significantly as in the case of 4G- the quality of services previously offered to users or/and expanded its range.

To read this article in its entirety click [this link](#).



## Black and Latinx Girls Inc. of NYC high school girls to learn cybersecurity skills at NYU Tandon

*Tandon News*

7/13/2020

Girls Inc. of New York City to support several students’ participation in annual, K-12 summer program at (virtually) the NYU Tandon School of Engineering. New York City students and teachers from diverse backgrounds and all five boroughs are gathering virtually this summer for the eighth annual initiative by NYU Tandon’s Center for K12 STEM Education, one of the largest and most comprehensive university-based programs of free STEM summer workshops, classes, and labs in the region. As part of its focus on diversity and serving students underrepresented in STEM fields, the Center is partnering with Girls, Inc. of New York City (GINYC), an independent affiliate of the national education and mentoring organization (Girls Inc.) to support the participation of additional Black and Latinx high school girls from Girls Inc. NYC programs in one of the Center’s most popular programs, Computer Science for Cyber Security (CS4CS).

To read this article in its entirety click [this link](#).



## An activist at both home and work

*Tandon News*

7/24/2020

...Despite the large number of participants, Knox recognized that CSAW, like much in the STEM world, could benefit from greater diversity. Organizers had, for several years, encouraged women students to enter, and in 2019, two all-girl high school teams — from Poolesville High School, in Maryland, and Niwot High School, in Colorado — made the finals. Still, Knox wanted to see more members of every underrepresented group at the finals in Brooklyn and she wanted to see them not only participate but triumph.

To read this article in its entirety click [this link](#).



## Researchers find novel way to “Etch-a-Sketch” critical p-n nano-junctions for 2D Semiconductor diodes

*Tandon News*

7/27/2020

(Elisa Riedo, Chemical and Biomolecular Engineering led this research) Fascinating opportunities are emerging from a new class of materials named two-dimensional (2D) semiconductors, which are only one atom thick. 2D materials are poised to have a bright future in the electronics and optoelectronics industry, as well as in



Internet of Things devices. Any cell phone, computer, electronic device, and even solar cells, are all composed of the same basic electronic building block, the *diode*. Unfortunately, a major obstacle for the wide application of 2D materials in industry is the unsolved challenge of the scalable and robust nanofabrication of the core element of a *diode*, which is a "*p-n junction*".

Elisa Riedo, professor at the New York University (NYU) Tandon school of Engineering led an international team of investigators who demonstrated a novel approach based on thermal scanning probe lithography (t-SPL) to fabricate state-of-the-art "*p-n junctions*" on a single atomic layer of molybdenum disulfide (MoS<sub>2</sub>) a transition metal dichalcogenide. The work, "Spatial defects nanoengineering for bipolar conductivity in MoS<sub>2</sub>," appears in *Nature Communications*.

To read this article in its entirety click [this link](#).



## Cybersecurity research podcast

Buzzsprout

8/6/2020

(Podcast features an interview with Rachel Greenstadt, Computer Science and Engineering) In this interview, you'll hear about how she got started in this area, some her thoughts on working with students in research, what it's like to take cryptography classes from famous MIT cryptographers, and a deep dive on her recently published paper on "Pod People"

To read this article in its entirety click [this link](#).

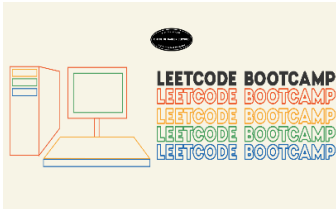


## Upcoming Events at Tandon



### First Year Cohort Recruiting

Establish a community within Tandon!  
If you're interested in joining Tandon's Undergrad Student Council's fill out this [30 sec Google form](#)



### NYU Tandon Fall 2020 LeetCode Bootcamp!

2 hour sessions organized twice weekly  
Delivered by instructors to help and guide students through LeetCode problems in anticipation of coding/technical interviews. [REGISTER HERE](#)  
SECTION 1 on October 5, 12, 19, 26 from 1-3pm  
SECTION 2 on October 1, 8, 15, 22, 29 from 11:30am-1pm



### The 2nd Annual Public Summit of the Action Collaborative on Preventing Sexual Harassment in Higher Education

The Public Summit of the National Academies' Action Collaborative on Preventing Sexual Harassment in Higher Education is an open forum for those in the higher education ecosystem to collaboratively identify, discuss, and elevate innovative and effective approaches for addressing and preventing sexual harassment. This annual event brings together a diverse group, including members of the Action Collaborative, the broader higher education community, sexual violence and harassment researchers, sexual harassment response practitioners, grassroots and nonprofit organizations, public and private foundations, and federal and state policy makers. This day-and-a-half event will feature a combination of panel discussions, expert presentations, brainstorming discussions with attendees, and a poster session through which attendees can share research and novel ideas and practice currently being explored or implemented.

We welcome you to [join us](#) virtually October 19-20, 2020 through an interactive webcast. Additional information, including registration and the agenda for the Summit, will be made available in September 2020.



### STUDENT LIFE, WORKSHOP

Tandon Teaches: Rapid Website Design  
10/20  
Tuesday, 4:00 PM



### Virtual Student Town Hall Series/ Chat and Chew

Mocktail Game Hour

10/29

Thursday, 1-2pm

A raffle will be given away at this month's event.

To register Click: [October Chat and Chew](#)



### New \$500 Scholarship for New York University

Tandon School of Engineering

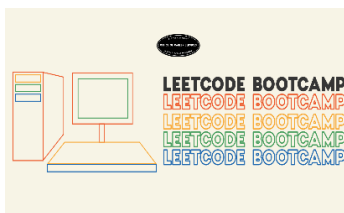
**Scholarship Name:** WiseGeek Life Isn't Easy Scholarship

**Eligibility:** Students who have experienced significant adversity or hardship in their lives and shown resiliency. Students must be US citizens or permanent legal residents. All GPAs will be considered.

**Amount:** \$500

**Link:** <https://www.wisegeek.com/easy-scholarships.htm#wisegeek-life-isnt-easy-scholarship>

**Application Deadline:** 10/31/20



### NYU Tandon Fall 2020 LeetCode Bootcamp!

2 hour sessions organized twice weekly

Delivered by instructors to help and guide students through LeetCode problems in anticipation of coding/technical interviews. [REGISTER HERE](#)

SECTION 1 on November 2, 9 from 1-3pm

SECTION 2 on November 5, 12 from 11:30am-1pm



### Virtual Student Town Hall Series/ Chat and Chew

Fishbowl conversations

12/3

Thursday, 1-2pm

A raffle will be given away at this month's event.

For more information about the events listed here, and the most up to date list of upcoming events, be sure to visit [Tandon's Event Page](#)





## Resources

Find information about:

Scholarships/ Funding, Affiliated Organizations, Professional Associations, Professional Development/Conferences/Events, Faculty and Administrator leadership Opportunities , and Advocacy here  
<https://engineering.nyu.edu/about/diversity-inclusion/women-tandon/resources>

### Health and Wellness

We're your Student Health Center (SHC)! We offer medical, counseling, health promotion, and pharmacy services and provide accessibility accommodations to students with disabilities.  
<https://www.nyu.edu/students/health-and-wellness.html>

### Women at Tandon Committee

The Women at Tandon committee at the School of Engineering consists of administrators and faculty members committed to the advancement of women in STEM  
<https://engineering.nyu.edu/about/diversity-inclusion/women-tandon/committee>

Learn more about K-12 outreach, Black Girls CODE, Tandon-WEST(Women in Engineering, Science, and Technology), WoMentorship and all of our programs and initiatives by clicking  
<https://engineering.nyu.edu/about/diversity-inclusion/women-tandon/programs-and-initiatives>

### Previous and archived Women in STEM Newsletters

<https://engineering.nyu.edu/about/diversity-inclusion/women-tandon/women-stem-newsletters>

For more information regarding Women at Tandon (W@T), please contact Nicole Johnson, Assistant Dean for Opportunity Programs at [nicole.johnson@nyu.edu](mailto:nicole.johnson@nyu.edu).