

# INTERVIEW DE LA COMPANYI DE LA COMPA RIGHT

#### **ABU DHABI'S FIRST CLASS** DON THEIR MORTARBOARDS

In 2010, four freshmen at NYU Abu Dhabi answered a few questions for • this magazine. Four years on, they're proof that a violet-tinged education . is thriving even 6,800 miles east of Washington Square. The 138 students in the class of '14 represent a mélange of nationalities, traditions, religions, and political persuasions, so it's no wonder that, as seniors, our quartet is literally worldlier. They've tweaked their dreams and rerouted their GPSjust as every college kid should.



A MINARET FROM THE SHEIKH KHALIFA MOSQUE RISES NEAR NYU'S CAMPUS IN DOWNTOWN ABU DHABI. A NEW HOME OPENS THIS FALL ON SAADIYAT ISLAND.

#### Musbah Dilsebo Ormago

ADDIS ABABA, ETHIOPIA



Goal: A career in the Ethiopian diplomatic service Languages: Siltigna, Amharic, and English Favorite recent movie: The Hangover (2009) Personal history: "I am the only boy in my family to graduate from high school. They are very proud of me. I carry all the responsibility to change my family's life."



Major: Social Research and Public Policy Favorite song: "Radioactive" by Imagine Dragons. "When I listen to that song I [envision] some kind of political or social change in my country." Favorite film: The Hours (2002). "The main character is a normal person, yet she's excluded from society. I think there are so many people in the world feeling that way. Despite the fact that all of us have some weirdness, we still judge others." New language: Spanish

Lesson learned: "You don't have to expect people to teach you all the time, but you have to be willing to learn, to think for yourself, and to question things."

Next step: Finding a job in the UAE, and then maybe grad school. "I'm interested in strategic philanthropy. How can you invest \$6,000 and make a \$50,000 impact?"

**Dream job:** "Designing policies and strategies for companies to act in a sustainable way. I want to export that idea [of corporate, social, and environmental responsibility] to Ethiopia."

### Layla Al Neyadi ABU DHABI, UAE



Goal: To make art that will influence and educate people, such as Al Gore's An Inconvenient Truth (2006) Languages: Arabic and English Favorite music: Kings of Leon, Muse, the Dandy Warhols, and Oasis What you should know about her: "I was raised by a British mother and an Emerati father. I experienced both the Western and Arab perspective, so I try to really understand other people without judging them."

#### NOW

Major: Psychology

Favorite film: Despicable Me (2010). "I'm an RA and it's my floor theme. We have minions on each door and a huge poster of Gru on mine."



Heroes: My mentor Morag Cromey-Hawke, executive director at Operation Smile UAE, and Linda Mills, founder and executive director of NYU's Center on Violence and Recovery (and also professor of social work, public policy, and law, and vice chancellor for global programs and university life). "They're both strong, hardworking women."

What you should know about her: "I came in as a film major and changed my mind immediately. I have friends who call me their personal therapist; I take that as a compliment." Next step: "Get a job! Get more experience and skills, and then go to a U.S. university for an MA in clinical psychology or an MSW." Dream job: To bring cognitive behavioral therapy to Abu Dhabi as a counselor.

#### Madhav Vaidyanathan

CHENNAI, INDIA



Goal: To be an international business leader in biochemistry and technology Languages: English, Hindi, Tamil, and Sanskrit Favorite music: Hip-hop and electronica What you should know about him: "I'm a very open person, easy to approach. I do whatever I can to earn people's trust."

#### NOW

Maior: Economics

- Greatest achievement in college: Learning discipline. "I was not really a focused [freshman]."
- Favorite films: Black Friday (2004) about the 1993 Bombay blasts: "It captured the atmosphere, the culture of that region, and how tough the lives were for those people." And 12 Angry Men (1957): "There's no music. There's no Bollywood dance. It's just dialogue." Heroes: Recently retired "God of Cricket" Sachin Tendulkar; three-time World Heavyweight Champion boxer Muhammad Ali; and microfinance guru and 2006 Nobel Peace Prize Winner Muhammad Yunus.



Most amazing adventures: Running the 240-kilometer "Dead2Red" team race in Jordan from the Dead Sea to the Red Sea, and a research trip to Ethiopia and Kenya. Next step: An MA or PhD in economics at an American or British university Ultimate goal: "To make a serious contribution back home in India."

#### Florencia Maria Schlamp

MENDOZA, ARGENTINA



Goal: To become a biologist and conduct research in the oceans and rain forests Hobby: Scuba diving

Languages: Spanish, English, and Portuguese What you should know about her: "I can see myself sharing traditions and exotic customs with friends from all over the world, and calculating how many Argentinean alfajores (cookies) and Brazilian brigadeiros (chocolate pastry) I should cook for them."





#### Major: Biology

New languages: Chinese and a little Arabic Lesson learned: "So many things can be solved by just sitting and talking." What you should know about NYU Abu Dhabi: "That it was a great challenge, and very

rewarding. So many times my freshman year, I Skyped my family in tears-'This is too much! I'm too far away!' Now that I'm almost done, I don't want it to finish, but at the same time I'm ready to try something new."

Next step: PhD in biology at an American or European university

Dream job: "Working for an academic research lab and maybe someday my own lab, and teaching college or graduate students."

#### music composition

### **FILMMAKERS SHOOT, SHE SCORES**

#### A PIANO PRODIGY ADDS THE SILVER SCREEN TO HER REPERTOIRE

#### by Dulcy Israel

t some point in almost every professor's tenure, he or she encounters a wildly gifted student who is also unusually young. Few, however, teach university-level concepts to a fourth grader-as Ronald Sadoff

(STEINHARDT '86) found himself doing three years ago with Emily Bear. "I got a cold call from her mother," remembers Sadoff, chair of the department of music and performing arts professions at the Steinhardt School Culture. Education. of and Human Development. "Emily was interested in a film-scoring workshop we do every summer in tandem with ASCAP [American Society of Composers, Authors, and Publishers]. I assumed she was a minor because her mother was calling, but I don't think I realized she was 9 at the time."

While they spoke, a quick search on the Internet revealed that Emily had won an array of awards, was a favorite guest of The Ellen

DeGeneres Show, had performed at the White House and Carnegie Hall, and had composed pieces for full orchestras. Her musical range was astonishing. "The first thing that struck me was, Wow, this kid's in more than one area," Sadoff says. "It's not just the classical piano. And she's not simply a songwriter. And she doesn't simply improvise."

He recommended waiting on the workshop but asked Emily to come see him the next time she was in New York from Rockford. Illinois.

bowled over, not only by the sheer talent of the friendly girl with long brown hair but also by how utterly

At their first meeting, he was

boardist Alan Swain; and jazz/ pop legend Quincy Jones-who produced Emily's latest album, Diversity, for Concord Records last vear-Emily flies in approximately every six weeks to compose with Sadoff. During a typical session, she'll improvise scoring on a keyboard to a clip they've selected

anything Sadoff has done before, despite his 25 years as an NYU faculty member or the 30 documentaries and short narrative films he's scored, including John Canemaker's Oscar-winning 2005 animated short, The Moon and the Son: An Imagined Conversation. But this uncharted course is less a function of Emily's tender years

> than her unbridled imagination. "She differs from most students because I have to immediately determine which of her often many ideas best suits the film or scene at hand, which should she develop to fruition," he says. "The speed at which we're working is swift and compelling."

As is her schedule. This spring, Emily will headline numerous concerts-some solo, some with an orchestra, some with her jazz trio. She's planning a summer tour and a new album and hopes to take a summer songwriting course at NYU-if time permits. Last June, she finally took the NYU film-scoring workshop that originally led her to Sadoff.

"I think the piece she wrote, as far as the structure and everything else, was put together in an hour and a half," Sadoff says. "And the workshop faculty considered it to be one of the top-five scores. This is Sean Callery, who scored 24 and now Homeland, and Mark Snow, who wrote the X-Files theme. They don't pull punches."

NAME	Reno Rafly
SCHOOL	NYU PolyH School of 8
GRADUATION DATE	2011
DEGREE	M.S. in Orgo Behavior
OCCUPATION	HR Project M Parsong Pori
DORM RESIDENT OR COMMUTER?	Commuter
SURVIVAL FOOD	Starbucks L
TERM-PAPER APPROACH	We were pret calling each ot but those we
HOW I PULLED THROUGH	As an adu work-life Ihad a ver friends, mu and boss.
MESSAGE TO WOULD-BE DONORS	Know that yo people's live



STEINHARDT'S RONALD SADOFF IN THE STUDIO WITH HIS PROTÉGÉ EMILY BEAR IN 2011.

unaffected she seemed, in spite of her immense gift.

"They clicked right away," Emily's mother, Andrea, observes. "A relationship was born."

These days, in addition to studying with Mary Sauer, the Chicago Symphony Orchestra's principal keyboardist; Veda Kaplinsky, head of the piano department at Juilliard; jazz keyfrom NYU's vast library of student and commercial films.

"He shows me all this new information and technology I wouldn't have thought of," Emily, now 12, gushes. "It's awesome."

Helping Emily find her "signature, creative voice" while "attaining full technical control of the compositional craft" is unlike

technic Engineering anizational lanager, inckerhoff RENO RAFLY (LEFT) WITH HER FATHER Lots of Starbuckes tty much pulling all-nighters, me and my friends were other whill like one or two o'clock to get it in on time, ere fun days It learner and working mom, managing balance wasn't easy. y good support system coming from family, y professors, as well as from my colleagues our contribution will make a difference in 16 momentum

A Scholarship Campaign for NYU

#### the class

## Where They're Learning: Puebla, Mexico

#### by Eleni N. Gage

abroad" usually brings to mind backpacks and Eurail passes, storied cathedrals and museums. cheap (good) wine and sidewalk cafés. But the students professor Vincent Guilamo-Ramos (SSSW '95, WAG '99, GIPH '12) leads to Puebla, Mexico, each summer eschew many of these entertainments in favor of learning about the people they may soon be serving as social workers. Some 60 percent of New York City's Mexican immigrants originally hail from the central highlands state of Puebla. "If you understand where people are from, and how things [work] *there*, you understand how they access the health and social welfare systems here," reasons Guilamo-Ramos, director of the doctoral program at the Silver School of Social Work.

The eight-week course, Mexican Immigrants & New York City: Understanding Puebla as a Focal

open to graduate students from NYU, as well as those from the Mailman School of Public Health at Columbia University. Participants attend lectures by Guilamo-Ramos, and by professors at the host school, the Universidad Popular Autónoma del Estado de Puebla (UPAEP). Topics explored include the history and causes of the migrants' journey, health care in their home state, the challenges facing Poblanos in New York, and the effects of such a significant exodus on the communities left behind. "It's totally different to think about migration from the Mexican perspective as opposed to how we see it in the U.S.," Guilamo-Ramos says. (The program is also bi-directional, with Mexican students from UPAEP visiting NYU each January, thanks to a grant from the American Embassy in Mexico City.)

Even more important, students live with local families and get to know Poblanos

#### **REEL BACKGROUND**

Before they cross the border, students preview that other side of the immigration bridge with a collection of documentaries curated by Vincent Guilamo-Ramos:

AMERICAN HARVEST (2008) travels from Florida to New York, chronicling the plight of the legal and illegal migrant workers who bring food from our farms to our tables each day.

Social scientist Roy Germano explores why so many people have fled Mexico in **THE OTHER SIDE OF IMMIGRATION** (2009). The film gives voice to more than 700 families left behind when their relatives migrated to the United States.

**WHICH WAY HOME** (2009) tells the harrowing story of unaccompanied children traveling through Mexico en route to the United

themselves. On one field trip, they visit a town where nearly 80 percent of the adult male population has migrated at some point. "We have them interview members of the community," Guilamo-Ramos says. "[They] meet families who have [been reunited, and] learn how men now talk to wives they haven't seen in years."

Guilamo-Ramos also takes a class each summer to the Dominican Republic, home to the argest immigrant States on a freight train called "The Beast." The film garnered an Emmy Award for Outstanding Informational Programming-Long Form and an Oscar nomination for Best Documentary Feature.

Mexican actor Gael García Bernal shot **THE INVISIBLES** (2010), a series of short documentaries, to help Amnesty International expose the many dangers-including rape and murder-that Central American immigrants negotiate on their journey north to the United States.

In 2008, an Ecuadorean immigrant named Marcelo Lucero was targeted and killed by a gang of high school kids in Patchogue, New York. The PBS film **NOT IN OUR TOWN: LIGHT IN THE DARKNESS** (2011) recounts his murder, the teens' trials, and community efforts to stem antiimmigrant violence.

group in New York City. When students return from either destination, they're not just more confident with their Spanish, they're also broader thinkers. Guilamo-Ramos says that most students simply want to understand how to be the best social worker possible: "They're working quite hard on what that means on their side of that bridge, but they don't know what it's like on the other side."



**interactivity** 

# THE ACCIDENTAL HUMANITARIAN

#### A MOTOR CITY KID FINDS HIS CALLING IN NYC-AN APP TO HELP LOST CHILDREN EVERYWHERE

#### by Kate Meyers

hat's the trajectory for a teen who decorates the venetian blinds in his suburban Detroit bedroom with strips of Violent Femmes and A

Tribe Called Quest band posters? For Jorge Just (TSOA '10), there was that internship with *This American Life*, then a stint as social media marketing gonzo for the indie band OK Go, and copywriting for Warner Bros. Records. But

his most inspired work started in 2009 as a grad student in the Tisch School of the Arts' Interactive Telecommunications Program.

Taught by Clay Shirky, the Design for UNICEF course has groups of students examine challenges the fund faces, then brainstorm solutions, which they present to the organization at the end of the semester.

Just's group became interested in how aid workers document displaced people. Together, they



AN AID WORKER IN UGANDA USES THE RAPIDFTR APP TO REUNITE DISPLACED CONGOLESE CHILDREN WITH THEIR FAMILIES.

masterminded an app they named RapidFTR—the initials stand for Family Tracing and Reunification—and it's a game changer. The smartphone-based cataloging system can cut down from more than six weeks to mere hours the time it takes emergency workers in war- or disaster-ravaged zones to reunite lost children with their families.

What followed was three whirlwind years of devotion. It became Just's thesis, and UNICEF helped underwrite development of the prototype. The London office of global software company ThoughtWorks not only donated its programming skills but also rallied hundreds of volunteers for coding jam sessions. And Just visited Africa four times, meeting with UNICEF workers to help unwring kinks as they came up during real-world use.

RapidFTR officially debuted in February 2013, reconnecting Congolese refugees at a settlement camp in Uganda. It came to the rescue again last fall after Typhoon Haiyan in the Philippines, and so far has assisted more than a thousand children worldwide.

The app enables each child's information and photo to be saved and immediately shared. The new system eliminates the need for hard-copy forms, which previously, after being filled out, had to be physically walked across a camp, a city, or an entire region. "We would go around with a list of names and ask people if they knew these children," Fatuma Arinaitwe, a child protection officer with Save the Children, told UNICEF of the days before RapidFTR.

Just himself has experienced something of a homecoming, returning to assist Shirky as an adjunct professor of the class that started it all.

"It wasn't my goal to become a humanitarian," Just says. "But there was a point where, if everything went well, we could help children and families in unimaginable circumstances...and it just felt like, well, there's an obligation to do that then." physics

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# DRAWN TO THE LIGHT

#### THE AGE OF TRACTOR BEAMS IS HERE

by Matthew Hutson



'd like to teleport a cow like the Gary Larson cartoon," physicist David Grier confesses. He may be wishing for the impossible, but he's already accomplished what many thought couldn't be done. His group at the Center for Soft Matter Research within NYU's department of physics was the first to construct a working tractor beam—a ray of light that pulls objects toward the source. Grier and one of his graduate students, David Ruffner (GSAS '16), reported their latest version last year in Physical Review Letters: a tractor beam

they call an "optical conveyor." The beam starts out as a sim-

ple laser and bounces off a tiny TV projector, which reshapes the waves to form a hologram. Grier and Ruffner program the hologram to resemble a rod of light extending outward with stripes of brightness and darkness. Tiny particles—on the order of a few microns, or millionths of a meter-are polarized by the light and drawn to the bright spots. By smoothly changing the hologram, the bright spots move upstream and drag the target particles with them, much like a conveyor belt.

Unfortunately, the size of the objects the tractor beam can pick up is limited by the wavelength of the laser to about 10 microns. And so far, the beam reaches out only about 70 microns, but Grier thinks that they might get to a millimeter within a year. In principle, the range is unlimited, and NASA has provided funding toward the work.

"What's nice about this [research] is that it doesn't contradict anything that people have said over the entire 150 years of optics," Grier says. "What it does say is that, in that theory, hidden, was a surprise."

While Grier's optical conveyor is still too weak to transport Captain Kirk, here are four ways that tractor beams may soon change our lives:

#### **1** ENVIRONMENT

Anytime you want to sample particles from a safe distance, a tractor beam's your tool. It would let you measure pollution from smokestacks or the properties of dust from volcanic vents or a nuclear meltdown. Shine a beam of light from a mile away, and the particles come to vou.

#### **Z**ASTRONOMY

NASA is particularly interested in collecting material from the tails of comets for study. The space agency has done this once before, but it required flying a craft directly into the tail, exposing it to flying debris. A tractor beam would stay clear, and it also lacks mechanical joints, which are prone to failure. One piece of grit in a joint can scuttle a billion-dollar mission.

#### **3** ELECTRONICS

A tractor beam could precisely arrange delicate components on a chip. It could also pull tiny samples out of an assembly line for quality assurance, automatically and noninvasively.

#### 4 MEDICINE

A cell, at about 10 microns, and its nucleus, at about 1 micron, are the perfect size for tractor beam manipulation. Scientists could probe poisonous or infectious samples through a sealed window. Doctors could perform in vitro fertilization without the danger of damaging an embryo through rough handling. Blood-typing could be reduced from a 10-minute procedure to a 10-second procedure, saving thousands of lives.

## IN BRIEF

#### by Anais Vaillant / SCPS '13

#### NO MORE VICE Dennis Di Lorenzo proves the old adage "the student becomes the master." He arrived at NYU as a grad student two decades ago and is now dean of the School of Continuing and Professional Studies. How'd he win the top mantle? While vice dean and interim dean, Di Lorenzo increased graduate enrollment, launched a new career development office, and managed the \$60 million renovation of the school's new headquarters on East 12th Street.

ARTIFICIAL GETS REAL

Facebook already grasps our col-

lective fondness for all things fe-

line; now it's tapped Courant Institute of Mathematical Sciences

computer scientist Yann LeCun to

help its servers become prescient.

A pioneer in the growing field

of deep learning-described as

"something of a celebrity scientist"

by TechCrunch—LeCun will direct the social media giant's new Astor

Place-based Artificial Intelligence

lab (note: he's keeping his day job

at least part-time for now). Mark

Zuckerberg's outfit hopes to ap-

ply the mechanisms of the human

mind to machine learning-there-

by predicting more accurately

(if not eerily) what users want in

their newsfeeds, as well as to help

sort the best vids of Web sensation

We may have come a long way,

baby, but as underscored during

the 2013 Women's Economic

Empowerment Summit-orga-

nized by NYU's Global Aca-

demic Center in Washington,

D.C.-we're not there yet. Ten-

nis icon Billie Jean King, Glam-

our's Editor-in-Chief Cindi Leive,

Maru attacking a paper bag.

WOMEN'S ECON POWWOW

STAMP OF APPROVAL Now *this* earns bragging rights:



#### Spry Tech

MSNBC host Karen Finney, and 20 other über-successful women from companies including Google, Nickelodeon, Goldman Sachs, and the Center for American Progress discussed, among other issues, universal pre-K, paid family and medical leave, and the enduring gender pay gap. Host and U.S. Senator Kirsten Gillibrand (D-NY) actually missed the day's events as she was called away on business. A woman's work? Never done.

Mechanical, chemical, and biological engineering professor Aristides Patrinos has been immortalized in a postage stamp. The International Foundation for Greece bestowed the accolade as part of its annual recognition of select Greek expatriates. Patrinos is this year's science honoree, and the stamp bearing his likeness will remain in circulation until September. Before joining NYU as deputy director for research at the Center for Urban Science and Progress, Patrinos spent nearly two decades at the U.S. Department of Energy, where he

contributed to the Human Genome Project, mapping DNA. Coincidentally, Patrinos's stamp requires a bit of genetic materialit's classic lick-and-stick postage.



Each fall when the NYU Polytechnic School of Engineering's gymnasium at Brooklyn's MetroTech Center becomes littered with snaking Ethernet cables and countless cans of energy drinks, it can mean only one thing: hack time. During the 10th-annual Cyber Security Awareness Week (CSAW), hundreds of students and professionals from around the world gathered to test their programming skills in challenges. There's the U.S. Department of Homeland Security (DHS) Quiz, as well as a forensics competition, in which high schoolers race to solve a digital murder whodunit. But the signature event is the CSAW Capture the Flag Competition, a 36-hour-straight software-hacking competition where bleary-eyed students forgo sleep (aside from the occasional over-the-laptop nod) in hopes of sweet victory. Were it not for the complimentary midnight pizzas, plugged-in competitors would probably lose all sense of time.

CSAW also entails a research conference, guest speakers, and a career fair to help students depart with a heavy foot in the door. Participants can meet with recruiters from organizations such as Facebook and the DHS, and network with the panel of judges from Google, FireEye, and FIS Global, among others. "It's the perfect interview," explains Julian Cohen (POLY '13), who's helped organize the event for the past four years. "The expert judges designed these challenges based on what they're seeingreal-world attacks and security design issues"-skills that NYU and CSAW believe are best learned through a little friendly competition.

# CUTTING-EDGE RESEARCH

#### marketing

### **Do Look Back**

he best predictor of the future is usually the past. Noted astrophysicist J. Richard Gott realized this when he formalized a method for predicting how long something-human civilization, the Berlin Wall, a Broadway show-would last. Lacking any special knowledge, assume you're at the midpoint of its lifespan: If it's been here a spell, you can bet it'll be around a while longer. Hal E. Hershfield, an assistant professor of marketing in the Leonard N. Stern School of Business, suggests we unconsciously apply this principle to the age of our country, and that it affects how we treat the environment.

For a recent paper published in *Psychological Science*, he and two collaborators looked at the environmental performance of countries around the world and found that the oldest nations had cleaner air and water, and a healthier ecosystem, even after they accounted for government stability and gross domestic product. Presumably, people in countries with longer histories looked further ahead and were willing to make important trade-offs to protect that future.

In a companion experiment, the researchers showed people timelines comparing the founding of the United States to either the beginning of the Roman Empire (making the U.S. seem young) or Columbus leaving Spain in 1492 (making it seem old). Participants cued to think of the United States as old were willing to donate more of their study payment to an environmental cause.

"The running paradigm in climate-change communication has been to tell people about these doomsday, end-of-world scenarios," Hershfield says. This research suggests that a more subtle and effective way to encourage environmental stewardship is "to get people to appreciate the richness of their past, and to use that to project forward into the future." –Matthew Hutson



#### public policy

## OPEN UP AND SAY "AYE"

by John Bringardner / GSAS '03 / and Matthew Hutson

f you want the federal government to build a Death Star, you have to do more than simply suggest it. A petition on the White House's We the People website has 34,435 signatures urging the creation of this hybrid space station/super weapon, but even an entire nation of supporters wouldn't be enough, according to Beth Noveck, the Jacob K. Javits visiting professor at NYU's Robert F. Wagner Graduate School of Public Service. "Even if the government wanted to build a Death Star," she says, "a petition provides no practical, implementable guidance about how to do so."

As the country's first deputy chief technology officer under President Obama and the mind behind We the People, Noveck was responsible for vetting those petitions. The Death Star idea was officially rejected for reasons including that "the Administration does not support blowing up planets," but many other proposals, from reducing gun violence to protecting Internet freedoms, have traveled this online avenue directly to the president's ear.

Noveck is part of a new breed of technocrats devoted to exposing the public to the mechanics of governance in order to make it

more effective and innovative; this is one way she has helped to put

into practice the principles she advocated in her 2009 book, Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful (Brookings Institution). For the past

decade, her multifaceted projects have centered on the idea of learning from the private sector to create public solutions and how to use technology to engage communities in solving problems.

After brainstorming with a network of 45 other like-minded luminaries—including Joi Ito of MIT's Media Lab, Jennifer Pahlka of Code for America, and fellow NYU professor Clay Shirky— Noveck founded the Governance Lab at NYU in 2012. "I'm not trained as a technologist," Noveck says. "I'm a law professor with a background in political theory.

> GovLab is an action and research initiative that looks at what's working and why. Because we're situated in a university and are not simply private-sector technologists, we have the ability and the

mission to develop tools for the public good."

Two examples of GovLab's theories in action: PulsePoint, an app that lets 911 operators alert trained CPR users in a caller's area, and a project to help the World Bank's water-development division redesign its procurement process to deliver clean water to the poorest people in the world. "It's not simply about a technology platform or a piece of software—should we use Salesforce or Google?—this is a question of, what are the policies that might impede getting at good ideas faster," Noveck says.

GovLab encourages the public to consider whether there are ways to reimagine the term *democracy* in light of scientific and technological advances. "If we can transform the nature of citizenship into something active and engaged," Noveck says, "where governments collaborate with people by tapping their intelligence and expertise, we can forge new democratic institutions that are both more effective and more legitimate."



SQ≝UARE

# CANE AND ABLE

n the past few decades, tools for the visually impaired have vastly improved. Braille displays are ubiquitous, and computers that interpret voice commands are the rule rather than the exception. But the walking cane, arguably the most crucial implement for those with sight issues, has not changed since the 1940s. "From a mobility standpoint, we're stuck in the World War II era," says John-Ross Rizzo (CAS '04), an assistant professor of rehabilitation medicine at NYU Langone Medical Center. "It's about time we start disrupting things.' Rizzo has invented a new walking aid, the CumbaCane (render-

medicine

ing pictured), that

is poised to do some disrupting on a global level.

The device has two arms at the end that splay open and hold small wheels. Instead of swinging a stick back and forth as users walk, missing huge swaths of the path, one pushes the CumbaCane straight ahead. The wheels pick up on cracks and curbs—two of the greatest dangers to the visually impaired—and a horizontal bar between them hits lowlying obstacles.

Rizzo became interested in reduced vision as a teenager, in part due to his own deteriorating retinas. He later started sketching designs for a cane and then building prototypes; he had one intern buy half a dozen old drum stands from a music store so they could play around with the folding legs. A friend tried an early version and made it around the block with zero training. That same friend then used Rizzo's traditional cane for comparison and fell off a curb. "Once that happened, I knew we had something," Rizzo says.

In the United States alone, more than 4 million people are legally blind, and this group suffers a two- to threefold increase in falls. Furthermore, due in part to their lack of mobility, they're at approximately twice the risk of obesity, diabetes, and stroke. What's more, poor eyesight "tends to want to turn you into a recluse," as Rizzo has learned from personal experience. "Why do I want to trip one more time?" Available later this year through his company, Tactile Navigation Tools, for less than \$100, the CumbaCane will undoubtedly alleviate some of these problems.

Rizzo is also developing what he calls an EYEronman system. It sends data from ultrasound, infrared, and other sensors on a vest to a grid of vibrating polymers on an undergarment. Together they create a tactile map of the outside world on the wearer's chest and back. The device is meant for the visually impaired, as well as firefighters and soldiers. To give people a "sixth sense" with this type of technology and thereby

increase their independence, Rizzo says, "is really my ultimate utopia." —*M.H.* 

NAME	Nicole Perold	
CLASS OF	2004	State of the local division of the local div
DEGREE	joint MA in French studies + journalism	A REAL PROPERTY AND
CURRENT OCCUPATION	executive editor at this magazine	
WHY NYU?	Because it's at the center of the universe!	
FAVORITE OFF-CAMPUS HAUNT	He Cooper Union Library - it was always desolate	
MY SOUNDTRACK	The beat of baskitballs & shricke mon the court ontside ,	r
SURVIVAL BEVERAGE	Earl Grey - milk, no sugar	• •
WHAT I LOVED ABOUT GRAD SCHOOL	Having the time to rea and go deep on one su	
WITHOUT MY SCHOLARSHIP I'D BE	Some place warmer but much le	
MESSAGE TO DONORS	I was making pennies at a dead really just wasted to study From journalism - not so buciative. My grad school without getting crush Merci mille fors !	1



#### food studies

# Green (.07) Acres

by Erin Wylie / CAS '03

#### We all know that a tree can grow in Brooklyn, but can nine varieties of heirloom tomatoes flourish next to Houston Street's six-lane thoroughfare? Yes, as

proven by NYU's Urban Farm Lab, a 115'-x-25' plot located behind Silver Towers and accessible to anyone in the NYU fold. This newcomer community space is

essentially an outdoor classroom designed to give faculty, Silver Towers residents, and students of all levels-from University Plaza Nursery School kindergarteners to doctoral candidates-hands-on agrarian learning opportunities previously not available in Greenwich Village.

Although communal gardens in the Big Apple date back to 1973, Urban Farm Lab is groundbreaking for many reasons, says Jennifer Berg (STEIN-HARDT '96, '06), who is directing the initiative along with fellow food studies associate professor Amy Bentley. "It's the first academic agriculture project in New York City on a landmarked site-with Landmarks Preservation Commission approval!' Berg notes proudly. While plenty of college campuses

have gardens, Berg points out that most of them don't have to contend with the scale and visibility of NYU. "A farm like this does not exist in a university of our size," she says. "The types of conversations I'd have with people while I was working out here were just

green project to get the green light: It was first proposed in 2010 by Daniel Bowman Simon (STERN '01, WAG '13, STEIN-HARDT '16) and Christina Ciambriello (STEINHARDT '13), both enrolled in the Steinhardt School of Culture, Education, and

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incredible. Passersby would ask me, 'Does NYU know you're out here?' I'd say, 'Yeah, NYU paid for it.' They were floored." It did take a few years for this

Human Development's food studies program, who envisioned the farm as a way of reconnecting with NYU's lost legacy of educational agriculture. (In the early 1900s, the university was the first to host a department of school gardens under the watch of Chancellor Elmer Ellsworth Brown.) The endeavor stalled until two years later when Berg, who served as an adviser on

Bentley, along with a small group of stu-

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dents, began transforming the unmanicured backyard of Silver Towers into a farm with 18 raised beds made fertile with composted organic matter from NYU dorms---"so, like, Weinstein garbage," Berg says wryly. (Next season, the farm will begin composting its own waste along with

> scraps from Steinhardt's teaching kitchens.) Despite what Berg calls a "tragically late" start by planting in June, the farm's organic, pesticide-free bounty included those aforementioned tomatoes along with arugula, bell peppers, carrots, eggplant, lettuce, okra, radishes, strawberries, watermelon, and herbs such as basil, chives, rosemary, sage, and lemon verbena. The produce was used by food studies students, shared with Silver Towers residents. and cooked into a feast for a September harvest festival, but it's important to remember that the project is not about growing prize-winning edibles. "We want to generate agricultural knowl-

edge-that's where the lab part comes in," Berg says. "In food studies, you can theorize about environmental conservation and about connection to food on communal and societal levels. This is the experiential way that our students are actually learning it."



THOSE WITH TINY GREEN THUMBS TOUR STEINHARDT'S URBAN FARM LAB, A 2.800-SQUARE-FOOT GARDEN AT THE FOOT OF SILVER TOWERS.

the initial proposal, was told that there was interest in an agriculture project at the site. After winning funding, thanks to a Green Grant from NYU's Office of Sustainability, the farm was finally approved early last year.

On May 31, 2013, Berg and

NYU / SPRING 2014 / 19