Rhino Rescue

Student Saif Bhatti created a smart device to stop poachers in their tracks. P. 34
Robot Swarms

In nature, individual birds, fish and bees work together to exhibit cohesive behavior in flocks, schools and swarms. Professor Michael Rubenstein is training 100 pint-sized robots to behave similarly in his robotics laboratory. His swarm robots communicate and work together to self-assemble — and then reassemble — into various shapes, all while avoiding collision and traffic jams.

PHOTO: JUSTIN BARBIN
Contents

Prison Education Unlocks Potential
New Northwestern program, founded and directed by philosophy professor Jennifer Lackey, transforms the lives of inmates, students and faculty by creating a community of scholars behind bars. By Monika Wnuk

The Demise of the Dinosaurs
Fossilized seashells show a surge of carbon in the oceans — before the asteroid impact — findings that may help scientists understand the effects of climate change.

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We just wanted to write songs that we would find beautiful — songs that, if we had discovered them out in the world, we would wish we had written them.”
— Danny M. Cohen ’06 MA, ’11 PhD, right in photo, associate professor of instruction in the School of Education and Social Policy and part of the band They Won’t Win

Freak Agent
Alex Saratsis represents some of the NBA’s best, including his fellow countryman — the “Greek Freak,” Giannis Antetokounmpo.

49
Pure Wine Made Simple
Alum James Kornacki created a purification process to remove sulfites from wine.

72
With a Song in His Heart
Alum Alan Tripp might be part of the oldest songwriting team in the world. The 102-year-old achieved a lifelong dream with the release of his debut album, Senior Song Book.
Networking Crucial to Rhino Rescue

After meeting first with his computer science and mechatronics professors, he’s turned to more than a dozen faculty, and students at McCormick School of Engineering, Northwestern Pritzker School of Law and the University’s Global Learning Office for support to get the project off the ground. “I see the value of making connections with people,” Bhatti says. This project started just last April, and he returned to South Africa last December. Now Thornybush wants to do a long-term development program with Renoster.

“Wouldn’t we have been able to get where we are today if all of Northwestern’s help,” Bhatti says.

Stephanie A. Russell

Editor-in-Chief

O ur cover issue features Ami Vitale’s poignant photo of Fatu, one of the last two surviving female northern white rhinos on Earth. The northern white rhino once ranged over parts of Central Africa. But years of widespread poaching and civil war in their home range devastated northern white rhino populations, and they are now extinct in the wild.

Today South Africa is home to nearly 70% of the remaining rhinos left in the world, mainly southern white rhinos and black rhinos, numbering about 24,000. In 2007, 13 rhinos were killed in South Africa. Then demand from China and Vietnam for rhino horn as a cure-all for everything from cancer to hangovers, in the late 1990s, killed more than 8,000 rhinos in South Africa.

-faced with the realization that rhinos could become extinct in his lifetime, McCormick School of Engineering senior Saif Bhatti decided to do something to stop the slaughter. Just a year ago the industrial engineering and philosophy double major created a smart listening device that can detect gunshot on the savanna and send signals to ranger stations to help catch poachers in the act (see page 34).

How Bhatti went from the kernel of this idea to field-testing his Renoster device in Thornybush Game Reserve in South Africa last summer is a tribute to Bhatti’s determination and the power of Northwestern networking.

We want to hear from you:
letters@northwestern.edu / @NorthwesternU / NorthwesternU / @NorthwesternU

150 YEARS OF WOMEN

After 42 years in print journalism, I retired from the Los Angeles Times in 2015 and have been busily freelancing. One of my current assignments is writing about a new California law requiring publicly held companies to add women to their boards of directors. One (extremely lame and outdated) argument against the idea has been that there is not a large enough pool of talent for every public company to appoint a woman. Good grief! Your “150 Years of Women” cover story [fall 2019] is further proof, if any were needed, of the idiocy of that notion!

Thanks for sharing these stories of accomplished women.

Marcia Groves ’73 MS

Los Angeles

Awesome read! Awesome woman! Meg Harbin Berlin, Md.

The fall 2019 Northwestern Magazine arrives. “150 Years of Women,” poet Natasha Trethewey and Todd’s

From the Editor

Karen Tadlock ’16; William Weinbaum ’72, ’93 MS; Susan Flo ’10; Zak Zakroff ’15

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Sophia Le ’22, Jacob Munoz ’21; Dan Roszewicz-Ziff ’21, Emma Yerg ’23

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ADDRESS CHANGES

Mail to: Northwestern News Editor Northwestern Magazine 1813 Onthank Drive Suite 100 Evanston, IL 60208

Email: address-change@northwestern.edu

Web: magazine.northwestern.edu / @NorthwesternU

NORTHWESTERN SPRING 2020

“Claudia Lópe is giving all Colombians an example of how we can change our reality and become a peaceful land.”

— Alberto Guaranda

Also I would like to highlight that behind this amazing woman there is an outstanding politician, Angelica Loranzo. Glad my country is waking up from choosing bad candidates.

Fernando Suarez

London, Ontario

Claudia gives hope to Bogotá, and I’m sure that with a bit of luck and tons of her efforts, all of us could dream that we can dream in four years.

We may not agree on everything, but, as she says, there’s a whole lot more that we have in common than what divides us. We hope for the best, and I’m sure that we’ll see each other’s expectations.

Carol Narunjo
Kaiserslautern, Germany

Claudia is the living and clear example that those of lower and lower social classes can become and important political decisions.

This victory — that of other alternative candidates throughout our country — is undoubtedly a good step on the course that Colombia must take.

Thank you for inspiring us, Claudia.

Julian Henao Buitrago

Bogotá, Colombia

While the health and welfare of the students and alumni are our top priorities, we have extended spring break, which is the start of the spring quarter and requiring nonessential staff to work from home.

Northwestern faculty, students and alumni around the world are doing their part to help stop the spread and cope with the COVID-19. We’ll like to share these stories in Northwestern Magazine. Please share your experiences at bit.ly/NIU-Coronavirus-Stories.

In the meantime, may our spring issue inspire you with these stories about alumni, faculty and students who re represent Northwestern’s can-do spirit.

You and your loved ones are in our thoughts as we all battle the coronavirus pandemic.

We finished our spring issue in late March, just before Gov. J.B. Pritzker ’93 JD ordered Illinois residents to shelter in place. Northwestern had moved quickly to protect the health and welfare of the University community from the coronavirus pandemic by extending spring break, conducting courses remotely for the start of the spring quarter and requiring nonessential staff to work from home.

Seventh grade, I would like to thank the outstanding teachers, professional staff at McCormick School of Engineering, who have always been there for me. One of them is the former Northwestern student, Jolene Loetscher’s service to end childhood cancer.

I greatly appreciate Jolene Loetscher’s service to end childhood cancer.

Ramesh Natarajan ’17 MS East Brunswick, N.J.

I commend you on your issue on “150 Years of Women.” And now I want to know, when are you going to do 150 years of men?

Richard Richmond ’70 MMS Waukesha, Ohio

CLAUDIA LÓPEZ, BOGOTA’S NEW MAYOR

As a Colombian woman, Northwestern alum and current student, I couldn’t feel more proud to hear the news about Claudia López [‘80 MS; page 27, fall 2019]. Wishing Claudia success during her tenure as mayor of Bogotá, I am sure the Northwestern community will support her leadership.

Go Wildcat values!

Sandra Wagner ’09 CERT Chicago

Many people woke up the day after the mayoral election to find this fantastic event that filled our hearts with hope. As a fellow researcher, I feel proud that finally someone with a good education has taken the lead of chaotic Bogotá. I am sure she will do a fantastic job, but it will certainly be tough because

she receives the city in very poor conditions.

Levi Solorzano

Sweden

I do think there is a tendency to assume that Colombia and its capital Bogotá are essentially chaotic and ill-governed. Mayor López did say in her inaugural speech that poverty in Bogotá, with close to 8 million inhabitants (10 million in the metropolitan area), has been reduced over time from the high double digits to the current poverty level of close to 10%. She did as well acknowledge the ongoing administration’s job and will, in fact, preserve some of its policies.

It is not accurate to portray Colombia as a lawless, deinstitutionalized country, Claudia, for whom I voted, did state 200 years of democracy had led to her victory. All voters who took their office on Jan. 1 in Colombia’s major cities (80% of the close to 50 million population is urban) were elected on much the same surfe of opinion. Claudia won 62% of the vote on the way out, altogether the country’s long-standing electoral system.

Augusto Figueura Bogotá, Colombia

Claudia is giving all Colombians an example of how we can change our reality and become a peaceful land.

— Alberto Guaranda

“Claudia Lópe is giving all Colombians an example of how we can change our reality and become a peaceful land.”
Social Media Feedback

150 Years of Women/Ashley Nicole Black — Thank you @ashnb1 and @northwesternu, social media team — for these inspirational words! For a black, female, trans alum who has just begun acting (as a second career), this encouraging and hopeful message is incredibly helpful. — @sunna.bee

Feedback

Soul Restoration/Poet Natasha Tientsin — Really loved this issue. I was left away by there being a poet laureate at NU as well as all of the other brilliant things going on at NU. — @ballingpercol

Economic Uncertainty Costs Women Politicians — We have to be strong and continue to challenge gender biases. The more we speak up, the better! It’s only a matter of time until the tables turn. — Lynnette Kruk

A Healthy Start/ Maziza Breast Pump — Congratulations for having a positive impact on the lives of people in vulnerable situations. Keep doing what you do. The world needs more people like you. — Malik Buli

Sound Off: Modern Parenting — However you “parent” you just have to enforce the fact that you’re ALWAYS “got their back”! — Donna L. Cepe

AMEN! Let the kids make mistakes. This how they grow. Parents need to let the kids navigate the challenges on campus and stop hand-holding! — Moureen Conroy

Social Media Feedback

BATTERY-POWERED BREAST PUMP

Much is made of the invention of a battery-powered breast pump in “Alumna’s Startups Create a Healthy Start” [Innovation, News, page 8, fall 2019], with specific references to its use in Africa. This seems to be a misdirected effort, suggesting the use of a pump that requires the purchase of batteries or of recharging in places that often have no electricity.

There are numerous hand-operated breast pumps available. Promoting the use of an electrical pump seems to be similar to the promotion of the use of infant formula in places where there is no clean water. Michael Steinitz ’70 PhD Antigonish, Nova Scotia

DOGS ARE OUR BEST MEDICINE

“Doctor Dogs” [Creation, page 50, fall 2019] is an excellent article about a potentially powerful gift our beloved dogs give us. Looking forward to reading Maria Goodavage’s book, Marianne Otherh ’77 MBA Huntsville, Ala.

I am a retired physician who recently trained with my dog for dog therapy. I make rounds once a week at a local hospital in inpatient and outpatient settings for patients, families and guests. I have observed both acute and chronic medical and psychological issues healed by the love of my dog.

Hospital administrative, professional and support staff also appreciate the visit and return to work with gratitude and smiles that change their thoughts and actions. This further benefits the patients. The reason is that love heals. This is a new frontier of improving health that benefits health care providers and those for whom they care. Alan Goldberg ’88 MBA Chicago

This is a wonderful article about a fantastic phenomenon. There is a player in the National Hockey League, Max Domi, who is a Type 1 diabetic. He plays for the Montreal Canadiens and has a service dog that travels with him to help him detect low blood sugar. It is an incredible story.

Greg Messina ’76 DDS Rockford, Ill.

What Inspires Me

I love when Dr. Nicholas Pearce (“The Authentic Life,” What Inspires Me, Voices, fall 2019) preaches because you can tell that the studies the Bible, and his presentation clearly reveals what the pages are saying. He really breaks it down. I always look forward to hearing him.

Karen Barnes Chicago

Read more letters from readers on our website at magazine.northwestern.edu/talk-back.

More than Meets the Eye in Biometrics

By Matthew B. Kugler

In our increasingly computer-facilitated lives, we are constantly confronted by new threats to our personal privacy. We have learned that our credit cards, electronic home assistants and smartphones are all capable of sharing our personal information with the corporate sponsors. Yet carried with us every day is another thing that risks exposing our personal information: our faces.

Use of biometric identifiers is a growing challenge in the privacy space. People can now be automatically identified by their faces, their fingerprints, their eyes, and even their voices. Cameras in public places can scan crowds, and then both private companies and the government are able to use databases of facial recognition information to identify individuals. On one level, this is nothing new. Whenever you are in public, there is a chance that a person might see and recognize you. Famous people are recognized by strangers all the time, and the rest of us may still be known to those we see regularly: bartenders, salespeople, secretaries and, if we are unlucky, the police. But this is on a completely different scale. The proliferation of cameras, and of long-term storage, vastly increases the chances that people will be seen as they go about their lives. And automated facial recognition may turn a slim possibility of being recognized into a virtual certainty.

Biometric identification can be incredibly useful. Imagine a transit camera observes a mugging and gets a shot of the offender’s face. Or a doorbell camera sees a jogger going by a murder scene and the potential witness. Wouldn’t it be great to be able to put names to the faces? Biometrics also allow police to scan crowds for known bad actors, people with outstanding warrants and celebrity stalkers. On the private side, stores may use facial recognition to track known shoplifters, casinos to ban card counters and airlines to check in customers.

Facial recognition makes all these tasks far easier than they were. But that ease comes at a real privacy cost. Suddenly a face in a picture of a crowd may be almost as good as a name. What do we lose? The ability to protest without everyone knowing that we did, the ability to enter an Alcoholic Anonymous meeting or doctor’s office without being noticed by the camera across the street.

Biometric identification is not flawless. We know that facial recognition tends to be less reliable at identifying nonwhite people, and it is often hard to find out how accurate a particular vendor’s software is. The more we begin to rely on biometric identification, the more we must think critically about our level of certainty.

When something is incredibly useful but also incredibly dangerous, the answer is to set rules for it. Communities have begun to do that. Use of facial recognition by law enforcement has been banned in some municipalities, and private use of biometric information is tightly regulated in states like Illinois, Texas and California.

This is a balancing exercise. My research shows that people respond very differently to uses of biometric technology depending on who is using it and what they are using it for. One study showed, for example, that 59% of people were comfortable with the same store using facial recognition to track shoplifters, but only 26% were comfortable with the same store using it to track customers for advertising. If a bank uses a voiceprint to track known bad actors, people may be more comfortable. If a bank uses biometric information is tightly regulated in states like Illinois, Texas and California.

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In the Eye of the Beholder
What is beauty, and who gets to decide what is beautiful?

Rene Engel, professor of instruction in the Department of Psychology

Most of us long for beauty — in nature, in art, in what we see in the mirror and what we see in romantic partners. Physical beauty captures our attention, whether we want it to or not. One layer of physical beauty is relatively universal. For example, around the world, humans find features like clear, flawless skin visually appealing.

A second layer of physical beauty is determined by historical forces and cultural norms. Some fashions that strike us as ugly now were viewed as beautiful just a few years ago. Physical beauty is evaluated according to ideals, and ideals are, by definition, culture-specific. Some fashions that strike us as ugly now were viewed as beautiful just a few years ago.

Jennifer McGee
Prescher '98, '00 MA, English
professor at
Johannes Kepler University Linz
in Austria and
strength and conditioning coach
for the upper Austrian girls soccer development program

As a fitness instructor for 20 years in America and as a CrossFit athlete, I’ve often heard women say, “I want to be strong, but I don’t want to be big, as in too muscular.”

Women will limit themselves in what they are physically able to do because they’re worried about not looking feminine. That’s really interesting to me because you wouldn’t say, “I don’t want to study anymore because I don’t want to be too smart.” Why are we limiting ourselves in this way?

I coach teenage girls for soccer and I hear them say, “I’m not pretty” or “I want to be attractive to boys.” I told them to forget about that. They’re bombarded with this message of fake beauty by Hollywood. Instead of focusing on the physical, “what I look like,” change that and say “Wow, what can my body do? How strong can I be?” I think it’s a complete reframing of the concept of beauty. This is about being the best possible version of yourself — and that is beautiful.

Janet Dees, Steven and Lisa Munster Tananbaum Curator of Modern and Contemporary Art at the Block Museum of Art

When I think about beauty, I think about this constellation of external qualities that are linked to eliciting positive emotions. I think about the feeling of pleasure, but I also think about what more can beauty do — what work it’s doing.

Beauty can be one of those things creating that pause, that moment for us to take time and pay attention. Artists can use beauty to draw us in and point us to some deeper understanding about our social situation, our history. The end result can be about education or social awareness, and that’s pleasurable in its own right.

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Points of View

Last fall and winter Northwestern hosted several political leaders and social activists who offered insights into the world today.

“My work has centered in recent years on sexual misconduct and on the legal and cultural impediments to accountability for assault and harassment. I feel incredibly fortunate to be in a position where part of my job is to think and write about issues in ways that I hope ultimately can contribute to improving people’s lives.”

Deborah Tuerkheimer, Class of 1940 Research Professor of Law, Northwestern Pritzker School of Law

Deborah Tuerkheimer teaches courses on criminal law, evidence and feminist jurisprudence at the Northwestern Pritzker School of Law. She served as an assistant district attorney in New York County for five years before working as a professor at the University of Maine School of Law and the DePaul University College of Law. She wrote Flawed Convictions: “Shaken Baby Syndrome” and the Inertia of Injustice in 2015 and is at work on a book about credibility in sexual misconduct cases.

“Finding Courage in Resilience
Former prosecutor for victims of domestic violence prepares law students in the “me too” era.

Weinberg College of Arts and Sciences’ 30th annual Richard W. Leopold Lecture

"As Americans, we have the right to determine our leaders, we have the right to voice our opinions ... [and] we have the right to be wrong. But that right is not real if we don’t have free and fair elections.”

Former Georgia gubernatorial candidate Stacey Abrams at a speech hosted by the College Democrats

"As a prosecutor in the federal system for 15 years, as an assistant U.S. attorney and 12 years as U.S. attorney, I think this issue [immigration] is open and shut to me — you don’t get to come into the country illegally.”

Former U.S. Attorney General Jeff Sessions at a speech hosted by the College Republicans

"We need real empathy and understanding of what it looks like to survive. As long as survivors recognize ... that there is power in the fact that you are surviving every day, we can do something with that. We can build movement. We can galvanize folks.”

Tarana Burke, left, founder of the “me too” Movement, as part of Northwestern’s MLK Dream Week and the commemoration of 150 Years of Women

“Artificial intelligence turns out to be terrific at predicting breast cancer in mammograms and lung cancer in tomography scans. And it’s more accurate than radiologists in many cases, according to new studies from Northwestern Medicine and Google.”

Scott McKinney, Google software engineer and study author

The research team developed the AI model to train computers to identify these cancers early.

In breast cancer, the AI model significantly reduced false positives and false negatives.

“Artificial intelligence improves breast, lung cancer diagnostics by reducing false positives and false negatives.”

What Inspires ME

Finding Courage in Resilience
Former prosecutor for victims of domestic violence prepares law students in the “me too” era.

Deborah Tuerkheimer, Class of 1940 Research Professor of Law, Northwestern Pritzker School of Law

“My work has centered in recent years on sexual misconduct and on the legal and cultural impediments to accountability for assault and harassment. I feel incredibly fortunate to be in a position where part of my job is to think and write about issues in ways that I hope ultimately can contribute to improving people’s lives.

“One experience that I took from my time as a prosecutor was watching people who’ve been hurt move forward and demonstrate remarkable resilience. And so as I do my writing, which is very different from work in the trenches, I am informed by those years working directly with people who experienced this kind of violation. That has been seared into me.”

Deborah Tuerkheimer teaches courses on criminal law, evidence and feminist jurisprudence at the Northwestern Pritzker School of Law. She served as an assistant district attorney in New York County for five years before working as a professor at the University of Maine School of Law and the DePaul University College of Law. She wrote Flawed Convictions: “Shaken Baby Syndrome” and the Inertia of Injustice in 2015 and is at work on a book about credibility in sexual misconduct cases.
Breast cancer detection,” says Northwestern study author Mozziyar Etemadi, a research assistant professor of anesthesiology at the Feinberg School of Medicine and of engineering at the McCormick School of Engineering. “Breast cancer is one of the highest causes of cancer mortality in women. Finding cancer earlier means it can be smaller and easier to treat. We hope this will save a lot of lives.”

“This is a huge advance in the potential for early breast cancer detection.” — Mozziyar Etemadi

Breast cancer is the most common type of cancer in women globally, occurring in about one in eight women. Mammography is the most widely used breast cancer screening tool, but diagnosing cancer from these images is a challenge. In one in five cases of breast cancer is missed by radiologists, and according to the American Cancer Society, 50% of all women who undergo screening for a 30-year period will experience a false positive, in which cancer is wrongly suspected.

A false positive can lead to over-treatment with invasive biopsies and unnecessary stress for patients. A false negative can result in delayed detection and treatment. In lung cancer, Northwestern and Google found that AI was able to detect malignant lung nodules on low-dose computed tomography chest scans with a performance meeting or exceeding that of expert radiologists. (Tomography is imaging by sections.) This deep-learning system provides an automated image-evaluation system to enhance the accuracy of early lung cancer diagnosis that could lead to earlier treatment. Deep learning teaches computers to learn by example.

The deep-learning system also produced fewer false positives and fewer false negatives, which could lead to fewer unnecessary follow-up procedures and fewer missed tumors if used in a clinical setting.

“Radiologists generally examine hundreds of two-dimensional images or ‘slices’ in a single CT scan, but this new machine-learning system views the lungs in a huge, single three-dimensional image,” says Etemadi. “AI in 3D is much more sensitive in its ability to detect early lung cancer than the human eye looking at 2D images. This is technically ‘4D’ because it is not only looking at one CT scan but two [the current and prior scan] over time.”

More research is needed before AI can be integrated into clinical practice. “In some examples, the human outperforms the AI. In others, it’s the opposite,” Etemadi says. “The ultimate goal will be to find the best way to combine the two. The magic of the human brain isn’t going anywhere anytime soon.”

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HARNESSING THE POWER OF RIVERS

Colombia

Colin Phillips, center, a postdoctoral researcher in civil and environmental engineering, worked with the Nature Conservancy in the Magdalena River Basin in Colombia to develop water management tools that could be used to preserve river networks around the world. The NatureNet Fellowship recipient is also building valuation models that could help land managers decide how to fund river management.

SUSTAINABLE CHOICES

Scotland

With support from the Institute for Sustainability and Energy at Northwestern, Simonne Laszuk planned to attend the Clinton Global Initiative University meeting in April in Edinburgh. The senior anthropology major is part of the Reducing Inequalities in Sustainable Engagement team, a student-led initiative to empower low-income communities to make environmentally friendly choices.

GLOBAL BEACH

Studying Sustainability Around the World

WATER MANAGEMENT IN THE DESERT

Israel

Deo Mukuralinda visited Israel in September as part of Northwestern’s Global Engineering Trek program. The trip — to a region central to innovation in water management — emphasized the importance of politics, geography and culture in an interdisciplinary understanding of water. Mukuralinda, a sophomore industrial engineering major, says the experience will shape how he thinks about and serves communities in need of improved water management.

SAVING TROPICAL FORESTS

Thailand

Giuseppe Bucarrase, an associate professor of civil and environmental engineering, worked with the World Wildlife Fund to balance development plans with conservation efforts in Southeast Asia. He has used geoenvironmental landscape analytics to determine how a major highway that connects cities in Myanmar and Thailand can be built while preserving the Dawna Tenasserim Landscape.

THE BOTTOM OF THE WORLD

Antarctica

Krissa Skogen, an adjunct professor in the Program in Plant Biology and Conservation, traveled to Antarctica in November and December with Homeward Bound. The trip was the culmination of a yearlong global leadership development program for women in science, technology, engineering, math and medicine who are interested in sustainability and conservation. Skogen saw firsthand the effects of climate change in West Antarctica.

GLOBAL REACH

SUSTAINABLE CHOICES

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WATER MANAGEMENT IN THE DESERT

Israel

Deo Mukuralinda visited Israel in September as part of Northwestern’s Global Engineering Trek program. The trip — to a region central to innovation in water management — emphasized the importance of politics, geography and culture in an interdisciplinary understanding of water. Mukuralinda, a sophomore industrial engineering major, says the experience will shape how he thinks about and serves communities in need of improved water management.

SAVING TROPICAL FORESTS

Thailand

Giuseppe Bucarrase, an associate professor of civil and environmental engineering, worked with the World Wildlife Fund to balance development plans with conservation efforts in Southeast Asia. He has used geoenvironmental landscape analytics to determine how a major highway that connects cities in Myanmar and Thailand can be built while preserving the Dawna Tenasserim Landscape.

THE BOTTOM OF THE WORLD

Antarctica

Krissa Skogen, an adjunct professor in the Program in Plant Biology and Conservation, traveled to Antarctica in November and December with Homeward Bound. The trip was the culmination of a yearlong global leadership development program for women in science, technology, engineering, math and medicine who are interested in sustainability and conservation. Skogen saw firsthand the effects of climate change in West Antarctica.

GLOBAL REACH

SUSTAINABLE CHOICES

Scotland

With support from the Institute for Sustainability and Energy at Northwestern, Simonne Laszuk planned to attend the Clinton Global Initiative University meeting in April in Edinburgh. The senior anthropology major is part of the Reducing Inequalities in Sustainable Engagement team, a student-led initiative to empower low-income communities to make environmentally friendly choices.

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Coping with Coronavirus
Northwestern professors offer expertise on the global pandemic.

NORTHWESTERN LEADERSHIP

Shankman ‘97 explained hoarding behavior. Expert Judith Moskovitz, professor of medical social sciences at the Feinberg School, encouraged habits to overcome stress, fear and anxiety in a time of isolation.

In a Buffett Institute for Global Affairs webinar, Adia Benton, associate professor of anthropology, discussed how emergency declarations provide opportunities for authoritarianism to expand and explained how social distancing practices increase inequality. “We have people for whom the disease is the least of their worries,” Benton said.

Finally, in a Chicago Tribune op-ed, Northwestern President Morton Schapiro reflected on the early days of the pandemic. “Are there lessons to be learned? I think so. When you are in a crisis, you need to model resilience and empathy. We will all be remembered for how we handled adversity, and sought to protect others.”

WOMEN’S BASKETBALL

Led by junior guard Lindsey Pulliam, one of the country’s leading scorers, Northwestern women’s basketball (26-3, 16-2) won the Big Ten regular season title for the first time in 30 years. Pulliam’s 31-point night against Michigan State in February propelled her past 1,500 career points. She is the fastest player in Wildcats history to accomplish that feat.

SPRING 2020 NORTHWESTERN NEWS

Lindsey Pulliam averaged nearly 20 points per game while leading the Wildcats to the Big Ten regular season title.

A group of American Indians interrupted Project Survival to protest “pollution of Indian, lands, religion and minds.”

MEDICAL MISSION

Hearing Aides
Team of audiology doctoral students provide care in rural Guatemala.

Last August, Northwestern audiology graduate students made the trek to Nuevo Progress in western Guatemala to provide comprehensive care for the local residents. Over the course of four more-than-12-hour days, eight students worked alongside four professional audiologists. They performed diagnostic testing and hearing-aid fittings. Some patients walked 10 hours overnight to start lining up for care at 6 a.m. at Hospital de la Familia.

The Northwestern team partnered with the nonprofit Entheos Audiology Cooperative. For doctoral students Sarah Rosen and Andrew Burleson, their goal was to provide the specialized care that many of their patients lack. Burleson helped fit a 17-year-old Guatemalan woman with a hearing aid. She later found him on Facebook and told him that because of his care, she planned to pursue higher education. She could now hear well enough to understand academic lectures. “It’s one thing to read about the experience of providing care in a textbook,” Burleson says. “But it’s a whole other thing to actually do the work.”

For both Burleson and Rosen, this global experience influenced their career aspirations. Rosen hopes to continue to do audiology humanitarian work, while Burleson’s goal is to use the experience to found a startup or make humanitarian work part of his day-to-day routine.

In the future, both want to help students interested in providing global health care to afford the trip, which can cost $2,500 or more. Rosen and Burleson hope to encourage alumni of the trip to fundraise for students to go the following year.
Climate Change and the Demise of Dinos

Fossilized seashells show signs of ocean acidification before the asteroid impact that caused mass extinction.

New evidence gleaned from Antarctic seashells suggests that the Earth was unstable before the asteroid impact that wiped out the dinosaurs.

Northwestern-led research on preserved clam and snail shells offers evidence of climate change occurring before the Cretaceous-Paleogene mass extinction event. The researchers found that the shells’ calcium isotope composition shifted in response to a surge of carbon in the oceans — findings that may help scientists better understand the effects of today’s human-made climate disruption.

This carbon influx was likely due to long-term eruptions from the Deccan Traps, a 200,000-square-mile volcanic province located in modern India — a land area roughly equivalent to the states of Illinois, Indiana, Wisconsin and Iowa combined. Eruptions spewed large amounts of carbon dioxide into the atmosphere, which led to ocean acidification, directly affecting the organisms living there.

“The Earth was under stress before the major mass extinction event,” says Andrew D. Jacobson, professor of Earth and planetary sciences. “The asteroid impact coincided with preexisting carbon cycle instability. Our findings support the hypothesis that the combined effects of Deccan volcanism and the Chicxulub impact were necessary to drive the extinction.”

Jacobson was senior author of a study published in the January issue of Geology. The study’s first author, Benjamin Linzmeyer, was a postdoctoral researcher with the Ubben Program for Climate and Carbon Science at the Institute for Sustainability and Energy at Northwestern when the research was conducted. He is now a postdoctoral fellow at the University of Wisconsin–Madison in the Department of Geoscience.

Researchers studied shells taken from Seymour Island, Antarctica. “Shells grow quickly and change with water chemistry.” says Linzmeyer. “Because clams and snails live for such a short period of time, each shell is a short, preserved snapshot of the ocean’s chemistry.”

Seashells mostly comprise calcium carbonate, the same mineral found in chalk, limestone and some antacid tablets. Because carbon dioxide in water affects the formation and stability of calcium carbonate, researchers could determine how increasing levels of the compound in the water affected shell formation over time.

They analyzed the shells’ calcium isotope compositions using a state-of-the-art technique employed in Jacobson’s laboratory at Northwestern. The method involves dissolving shell samples to separate calcium from various other elements, followed by analysis with a mass spectrometer.

“We can measure calcium isotope abundance variations with high precision,” Jacobson says. “And those variations are like fingerprints to help us understand what happened.”

While the paper does not assert that climate change during the age of the dinosaurs directly contributed to their demise, it provides compelling information that could inform future research into the Cretaceous-Paleogene mass extinction. The study also offers a way to anticipate potential changes caused by the current climate crisis.

“Our results confirm what scientists expect, that increases in atmospheric CO2, as a consequence of anthropogenic emissions, will cause ocean acidification,” Jacobson says. “In a way, we’re using the rock record as an analog to gain insight into what might happen in the future.”

“The Earth system is sensitive to large and rapid additions of CO2. Current emissions will have environmental consequences.”

In the absence of injury, people who play sports have healthier brains than those who do not. Athletes have an enhanced ability to tamp down the brain’s background electrical noise to better process external sounds, says Nina Kraus, director of Northwestern’s Auditory Neuroscience Laboratory. “Think of background electrical noise in the brain like static on the radio,” Kraus says. “There are two ways to hear the DJ better: minimize the static or boost the DJ’s voice. We found that athletes brains minimize the background ‘static’ to hear the DJ’s better.”

The timing of knee replacement surgery is critical to optimizing its benefit, says Hassan Ghomrawi, associate professor of surgery. But most patients are getting the procedure at the wrong time. Ninety percent of patients who would benefit from the surgery undergo it too late, while 25% of patients who don’t need it are having surgery prematurely. The ideal timing for knee replacement surgery is based on an algorithm that factors in age, pain, joint function and radiographic assessment.
Innovation

Pharmacy in a Box

Student startup MedKit Solutions provides over-the-counter medications and other personal products in a dorm vending machine.

When a student gets sick on campus, Mom’s chicken soup is far away and sometimes the pharmacy is just not close enough.

To help provide students with easy access to medication and other personal care items, a team of students created MedKit Solutions, transforming a dorm vending machine into a pharmacy in a box.

Pre-med seniors Matthew Urban and Chris Holland, both neuroscience majors, developed the concept with Feinberg School of Medicine first-year student Ashorne Mahenthiran ’19. The startup provides easy, on-campus access to medication, hygiene items and sexual health products. The group’s first machine, introduced in fall 2019, offers name-brand products. The co-founders conducted an online survey of more than 330 students. It revealed that about 40% of students felt sick at least once a week, and more than 80% were deterred by the long walk to Evanston-area pharmacies. As a result nearly 65% of students reportedly did not treat their symptoms due to the inconvenience of traveling for medicine.

The founders say MedKit fulfills a need. While campus locations such as Norris University Center and Lisa’s Cafe offer health and wellness products, only 3% of students said they purchased medicine at the University.

Urban and Holland are part of the Residency Program at Northwestern’s The Garage, a hub for student entrepreneurs, and plan to work on MedKit further during a post-graduation gap year. They intend to eventually hand off their creation and ideas — including expansion to other universities — to a new set of students.

Holland and Urban credit Northwestern’s Residential Services, Canteen vending, and student marketing, entrepreneurship and business groups with helping to guide the project and keep it afloat as it grew from conception to reality.

Urban says the project has helped him bridge the gap between his interests in medicine and entrepreneurship.

“Coming into college as pre-meds, we knew it would be difficult to immerse ourselves in entrepreneurship and business courses despite our interest,” Urban says. “MedKit was our way to take our passions beyond the classroom to the entire Northwestern community, and in doing so we have gained crucial entrepreneurial and medical experience.”

It takes 20 seconds of hand-washing to effectively kill germs. Most people wash their hands for 8 seconds or less. Industrial engineering major Ibraheem Alinur and his startup City Health Tech have created a device to monitor hand-washing habits with the hope of reducing illness and improving attendance rates.

When a hand is placed under the device, it measures hand-washing time and, through a mechanism, moves the leg in place. When the guitar touches the bottom of the guitar, it releases magnets that hold the leg in place. When the guitar is picked up, the spring-activated magnets move back down to catch the leg and keep it closed.

Morgan Lewis ‘18 MS wanted to create a storage solution to keep her guitar safe during “rest mode” — between gigs or at breaks during gigs. For her Engineering Design Innovation final project, she created Auxilia, an attachable stand that stays out of the way while the guitarist is playing and deploys automatically when she sets the guitar down. It won the Farley Center for Entrepreneurship and Innovation’s 2019 Creative Tech Showcase. Lewis created a prototype that she is refining and engineering for manufacturing. The singer also recently designed a shoe that celebrates women in country music as part of the Nike By You x Cultivator campaign.
Trienens Performance Center Transforms Team Practices

A cutting-edge facility on Central Street is changing how basketball, volleyball, baseball and softball players prepare to compete.

The recently renovated, bright, open space — which houses three indoor practice courts, team meeting rooms, an expanded performance nutrition hub and more — profoundly enhances Northwestern's student-athlete experience. Junior Lindsey Pulliam, who earned First Team All-Big Ten and Academic All-Big Ten honors as a sophomore on the women's basketball team, shared her fellow student-athletes' excitement to have everything they need under one roof. "This is the latest amazing place where my teammates and so many other Wildcats will have the chance to grow," she said.

In addition to two basketball courts and one volleyball court, the new facility features a large turf field and hitting and pitching pavilion for the baseball and softball teams in the Mogentale Training Facility, which is named for lead donors Eric '94 and Cindy Mogentale '94.

During the dedication, Trienens recalled how far the space has come since it was first constructed more than two decades ago, when it was "a big barn with a green carpet and two goal posts." Now it’s a “gorgeous facility,” he said.

Trienens received a bachelor's degree in business administration from Northwestern's School of Commerce (now the Kellogg School of Management) in 1945 and a JD from Northwestern’s Pritzker School of Law in 1949. He is a member of the School of Management (now the Kellogg School of Management) and three of his grandchildren also are Northwestern alumni.

"This is the latest amazing place where my teammates and so many other Wildcats will have the chance to grow." — Lindsey Pulliam

In 2017 Trienens gave $20 million to transform Trienens Hall, the indoor turf field he helped fund with a leadership gift in 1996, into a world-class developmental facility for Wildcats volleyball, baseball, softball, and men's and women's basketball teams. "When the moment arrived to dramatically reinvent the space, Howard stepped up again — as he has time after time after time, year after year after year — for the University that means so much to his family," said Jim Phillips, the Combe Family Vice President for Athletics and Recreation, during the dedication.

"Members of the women's volleyball team practice on their new court at the Trienens Performance Center."

The Northwestern golf community celebrated the generosity of University Trustee Eric Gleacher '62 and his wife, Paula, at the November 2019 dedication of the newly renovated Gleacher Golf Center — a premier player development facility for student-athletes.

"Providing a world-class experience to our student-athletes academically, socially and athletically is the core of our daily mission, and the complete renovation of the Gleacher Golf Center will help us deliver on this commitment," said Jim Phillips, the Combe Family Vice President for Athletics and Recreation.

Reflecting on the golf program’s success and looking toward the future, Gleacher told dedication attendees, "Northwestern’s stature in intercollegiate golf has been significantly enhanced, as is indicated by the results our coaches and student-athletes have earned. I have no doubt that our achievements over the next 20 years will be even more outstanding." Two decades ago, also with Gleacher’s support, Northwestern built the first-ever collegiate golf indoor training center, which helped take the men’s and women’s teams to new heights — including 50 tournament victories, seven Big Ten Conference titles and 10 Top 20 finishes at the NCAA Championships.

Gleacher attended Northwestern on a golf scholarship and earned a bachelor’s degree in history from the Weinberg College of Arts and Sciences. After graduating, he served as a lieutenant in the U.S. Marine Corps. He has continued to golf competitively and has won 25 club championships over the years. Gleacher began his career at Lehman Brothers in 1968 and retired as chairman of Gleacher & Co. in 2013. He is a platinum member of NU Loyal — with 40 consecutive years of giving to Athletics, the Bienen School of Music and other areas — and received the Northwestern Alumni Medal in 2004. Two of his six children, Sarah Gleacher ’91 and Patricia Pitcairn ’12, are alumni. The Gleacher Golf Center is located within Patten Gymnasium, which also has undergone a renovation and is the world-class home to Northwestern fencing.

Gleacher Features

• 5,400-square-foot short-game and putting area
• Training area with three bays that include a golf simulator and a dedicated video instruction bay
• 1,200-square-foot lounge with a study area, kitchen and sports performance hub
Hollywood Producer Expands Dramatic Writing Program

A $2 million gift from alumnus Greg Berlanti and Robbie Rogers will endow a new professorship at the School of Communication.

**Greg Berlanti is a writer, producer and director who has worked on many popular TV series — including Dawson’s Creek, Brothers & Sisters and The Flash — as well as Love, Simon, the first gay teen romance to be made into a major Hollywood movie.**

Northwestern supporters have established new endowed professorships or chairs.

“My mom was a lifelong champion of the arts and my greatest advocate and patron,” Berlanti says. “She placed an old typewriter in front of me at 10 years old and told me to start writing all the stories that were in my head — instead of just talking her ear off — and I haven’t stopped since. Our family is so proud to have a professorship in her name dedicated to helping Northwestern continue its great legacy of fostering the next generation of humane, diverse, courageous and bold storytellers.” (Learn about other inspirational women at northwestern.edu/150-years-of-women.)

The endowed professorship will increase the School of Communication’s teaching capacity and bolster a curriculum that prepares students to work across media and genres. It also will encourage students to engage and create work by and for diverse, global audiences. The professorship will be housed in the Department of Radio/Television/Film.

“Thanks to Greg, Robbie and the Berlanti Family Foundation, the new Barbara Berlanti Professorship will play a major role in helping us attract leading artist-educators to our faculty — who can, in turn, recruit and nurture students from underrepresented and undersupported groups and help transform the creative industries,” says Barbara O’Keefe, dean of the School of Communication.
PRISON EDUCATION UNLOCKS POTENTIAL

New Northwestern program transforms the lives of inmates, students and faculty.

STORY AND PHOTOS BY MONIKA WNUK

Andrea d’Aquino ’20 PhD reviews chemistry concepts with student William Peeples during study hall at Stateville Correctional Center.
CORZELL COLE IS WORKING ON HIS REDEMPTION STORY.

During the 17 years he’s been behind bars, Cole has actively tried to make positive change for his community, his family and himself. “The reality is that I wake up in prison every day, but that doesn’t mean I don’t have goals,” he says.

Cole is a 36-year-old man with a gregarious demeanor and perfectly maintained hair that he learned to trim while working as a barber at his cousin’s barbershop in Joliet, Ill. In conversation, he’ll take any opportunity to bring up his kids — three sons who are 21, 20 and 17 years old. “I’m parenting from the penitentiary,” says Cole. “My father wasn’t around when I was growing up, and I want to make sure that my sons won’t make the same mistakes I made.”

When Cole was 19, he was arrested on first-degree murder and attempted murder charges for his role as the driver in a shooting that killed a man and injured his teenage daughter. Cole was convicted and sentenced to 50 years in prison. He is contesting the conviction.

Almost two decades later, Cole is one of 42 men enrolled in the Northwestern Prison Education Program (NPEP) inside Stateville Correctional Center, a maximum-security prison for men in Crest Hill, Ill., located about an hour southwest of Chicago.

NPEP is a partnership between Northwestern and the Illinois Department of Corrections that grants college credit through the University’s School of Professional Studies and in collaboration with Oakton Community College. Upon fulfillment of course requirements, NPEP students are eligible to earn an associate degree in general studies from Oakton. The program, founded and directed by Northwestern philosophy professor Jennifer Lackey, is the first in the state to offer a full liberal arts curriculum.

“The men in this program are phenomenal writers, they’re aspiring lawyers, and they want to start businesses to promote economic development in their home communities,” says Lackey, the Wayne and Elizabeth Jones Professor of Philosophy in Northwestern’s Weinberg College of Arts and Sciences.

“They’re the same kinds of intellectually curious students we admit to Northwestern every year.” Northwestern volunteers, both faculty and students, play a vital role in every aspect of NPEP. At Stateville, Northwestern faculty teach in the program, and doctoral students also design and teach courses, while undergraduates serve as peer tutors at weekly study halls. On the Evanston campus, students organize extracurricular workshops and guest lectures to take place in the prison, raise funds for classroom supplies for Stateville students and run NPEP’s social media channels.

“Hearing from our professors, students and volunteers, it’s clear that NPEP has had a positive impact on the entire Northwestern community,” says Lackey.

Lackey has cared about prison populations since she was 12 years old. To fulfill a community service requirement for school, she asked to volunteer at Cook County Jail. Once her request was approved, Lackey spent time visiting with women at the jail and hearing their stories. “I was raised by a single mother and I recognized — even as a child — just how many people end up incarcerated in this country due to circumstances outside of their control, and how incarceration can upend their entire lives,” says Lackey.

The U.S. has the highest number of incarcerated people — roughly 2.2 million — of any country in the world, with incarceration rates four to eight times higher than other democracies. Additionally, a recent study by the Bureau of Justice Statistics showed that 77% of people released from state prisons return within five years.

Civil rights attorney Sheila Bedi has dedicated her career to ending mass incarceration. “The men at Stateville — and many men and women who are imprisoned in this country — have experienced systemic state disinvestment in their home communities, as well as the realities of mass incarceration and overpolicing,” says Bedi, a clinical professor at Northwestern Pritzker School of Law. At Stateville she teaches Violence Reduction and Transformational Change in Justice Systems to a class made up of 10 incarcerated students and 10 law students.

One of her incarcerated students is William Peeples. At 55, Peeples is among the oldest students enrolled in the course and has spent almost all of his adult life in prison.

“The first time I went to prison was for something I wasn’t guilty of,” says Peeples. “I was 18 and thrown into a predatory environment, surrounded by hardened criminals. It didn’t give me much faith in the judicial system.”

While Peeples is grateful to learn more about the law himself — Stateville inmates are often well-versed in the legal details surrounding their cases — he also sees his involvement in NPEP as an opportunity to make a difference in the lives of others navigating the legal system.

“The opportunity to share my perspective with these young lawyers who are going to be defense attorneys, state’s attorneys and judges who might even end up on the U.S. Supreme Court is invaluable and could really make a difference,” says Peeples. (Read his essay, “When You Know Better, You Do Better,” page 32.)
The discourse between the two populations was a big reason that Bedi decided on the 50-50 format enrollment for her class at Stateville. "Very few students — whether women or men knew Chicago and brought their experiences to class," says Pattillo, who is one of more than 40 Northwestern professors signed up to teach in the prison education program. "What they didn’t have was up-to-date information about the city," she says. Pattillo didn’t know how a single mother and I recognized — even as a child — just how many people end up incarcerated in this country due to circumstances outside of their control, and how incarceration can upend their entire lives." — Jennifer Lackey

Mary Pattillo didn’t know how a reading about foie gras would go over with her Stateville students. Teaching the same first-year sociology course at Stateville and in Evanston meant that she used the same syllabus for both cohorts, with identical readings and writing assignments. One of the readings was about the 2006 foie gras ban approved by the Chicago City Council after members decided it was inhumane to force-feed the birds. "Very few students — whether from Evanston or Stateville — knew that foie gras is duck or goose liver," says Pattillo, the Harold Washington Professor of Sociology and African American Studies. "But we had the most fascinating discussion about the limits of government control, and the Stateville students chimed in about their own lack of control over their meals in prison.

This was not the first or last time that discussion topics produced different responses on both campuses. The class, which examines Chicago using sociological methods, included readings about various neighborhoods known for cultural diversity. While Pattillo’s Evanston students were from all over the country, her Stateville students — many of whom grew up in the Chicago area — knew the city. They were also much older than the Evanston undergraduates. Some had children who were about the same age as their Evanston peers.

"Where Evanston students were green about sociology and to Chicago, the Stateville men knew Chicago and brought their experiences to class," says Pattillo, who is one of more than 40 Northwestern professors signed up to teach in the program. "What they didn’t have was up-to-date information about the city, and because they were without internet access, I often had to go to the library and pull articles they requested for their research papers." Correll Cole is one of the students who took Pattillo’s course. Cole grew up just a few minutes from Stateville, in neighboring Joliet, and recounts an early exposure to drug deals and shootings. When he was 8, Cole was hit in the arm by a stray bullet that ricocheted through his body, causing his lungs to collapse. "That’s when I decided I wanted to be a cop," says Cole. He remembers taking care of his brother, studying law and going to college, two, sometimes three, jobs to support the family. Cole’s father, who had battled addiction after losing a steady job, did not play a consistent role in his life. "Taking Professor Pattillo’s sociology class allowed me to gain a deeper

Magda Boutros ’16 MA not only teaches sociology, she also shows her students at Chicago’s Cook County Jail the ways in which education can lead to career possibilities. One of more than a dozen minicourses taught by Northwestern graduate students, Boutros’ class serves as an introduction to an area of study at a critical juncture in her students’ lives.

“The courses give people in jail an opportunity to get a taste of college at a time when most of them have few if any educational opportunities,” says Boutros, who is also a coordinator of the program. Since the Northwestern Prison Education Program (NPEP) partnership with Cook County Jail began in 2018, more than 100 certificates have been awarded to students who have completed courses in subject areas including biology, philosophy, poetry, writing, statistics and more. Each course runs four to six weeks, and the curriculum is developed entirely by Northwestern graduate students who submit applications to the NPEP coordinators for consideration.

Boutros is a seventh-year doctoral student in sociology who studies police violence in France. Born to Egyptian parents, Boutros grew up in both Egypt and France. After graduating from college in France, she moved to Egypt, where she worked as an advocate for criminal justice reform during the 2011 Egyptian revolution. In 2013 she moved from Egypt to Evanston to pursue a doctoral degree. When she heard about the opportunity to volunteer with NPEP, she was excited to work with incarcerated people again.

“It’s been really inspiring to see the demand — from both sides for these classes,” says Boutros. “The jail students want more courses, and we have an increasing number of Northwestern students who are submitting proposals for courses they want to teach. Seeing this and teaching in the program myself have reinforced my belief in the transformative role that education can have within a prison setting.” — M.W.
sociology, chemistry and math, there is enrolled in core subjects including spirit — which is what learning is to me, says Neveu. “What I have seen firsthand is just how much talent is locked up for life. I would much champion, “ she says. “What I have seen firsthand is just how much talent is locked up for life. I would

Mary Pattillo teaches Sociology of Chicago at Stateville. Pattillo, whose research focuses on sociology and African American history, has written about incarceration. “The Air Force teaches you that you have a responsibility to your unit, “ says Ruark. On a Thursday night last fall, Andrea d’Aquino ’20 PhD, who would defend her doctoral thesis in front of the chemistry department, her friends and her family — including her grandmother — would defend her biology doctoral thesis a month later. Andrea’s defense was followed by a short celebration that wrapped up just before midnight. The next morning, the d’Aquino sisters woke up at 5 a.m. to make the trip to Stateville, Anne had been tutoring at the prison all quarter — and teaching a biology minicourse in a Cook County Jail program (which she co-coordinates) — while preparing to teach biology at Stateville the following quarter. (See “NPEP at Cook County Jail,” page 29.) Andreena had been coming weekly to teach chemistry with her co-teacher Steven Swick ’20 PhD, who would also defend his chemistry doctoral thesis in the fall.

so hard to make NPEP work — became my unit at Northwestern.”

This spring Ruark, who received a Purple Prize Award at the 2019 Wildcat Excellence Awards for her work with UPEP, will graduate from Northwestern and become an officer in the Air Force. In the fall she will commission and begin serving as an aviator, becoming the first woman in her detachment in at least five years to do so.

NPEP tends to attract high-achieving Northwestern students like Ruark. On a Thursday night last fall, Andrea d’Aquino ’20 PhD defended her doctoral thesis in front of the chemistry department, her friends and her family — including her grandmother — would defend her biology doctoral thesis a month later. Andrea’s defense was followed by a short celebration that wrapped up just before midnight. The next morning, the d’Aquino sisters woke up at 5 a.m. to make the trip to Stateville, Anne had been tutoring at the prison all quarter — and teaching a biology minicourse in a Cook County Jail program (which she co-coordinates) — while preparing to teach biology at Stateville the following quarter. (See “NPEP at Cook County Jail,” page 29.) Andreena had been coming weekly to teach chemistry with her co-teacher Steven Swick ’20 PhD, who would also defend his chemistry doctoral thesis in the fall.

Some of the students who didn’t take chemistry in a very long time, says Ruark, “so Steven and I worked together to design a course that made chemistry approachable. In their final papers, the students took a creative approach — explaining the chemistry of the world around them in letters addressed to their mothers, cousins and kids.”

The d’Aquino sisters and Swick are headed to Stanford University for postdoctoral positions this year. They are just three graduate students whose experiences at Stateville have had a profound impact on their relationships with their disciplines and with teaching. “I was inspired to think it has the potential to be a beacon in the world of prison education in this nation.”

Monika Wnuk ’14 MS, ’19 MS is a writer and photographer in Northwestern’s Office of Global Marketing and Communications. Learn more about NPEP on our website at numag.nu/prison-education.

Prison Education Works

More than two-thirds of released state prisoners were arrested again within three years of release. Those numbers increased to 77% after five years and 83% after nine years.

• Prison education reduces re-arrests by 43%.

• The higher the degree, the lower the recidivism rate.

• Prison education, by cutting recidivism rates, saves $4 to $5 for each $1 spent.
For the last 16 years, since my commutation from a death sentence, I’ve resided at Stateville prison in Jessup. I’ve led a path to life without parole started when I was young. I was born to teenage parents living in the Stateway Gardens housing project in Chicago’s Bronzeville neighborhood. Less than a year later, they separated and we were headed for divorce. I would not meet my biological father until I was 7 years old. He remains a virtual stranger to me.

My late mother battled bipolar depression. One moment she would shower me with love and affection, the next she would physically and verbally abuse me. As an adult I would learn of her own sexual and physical abuse, as well as her mother. She said, “I just thought she hated me, and all I ever wanted was her love.”

During my formative years I had a stream of stepfathers, including some who negatively influenced me. I learned that fear and violence were tools of survival, and I was an apt pupil. At age 9 I bashed another boy’s teeth out with a brick because he pushed my 4-year-old sister down, skinned her knee. At age 11 I stabbed another boy with a dinner fork because he called me a sissy. By age 11 I was a full-grown delinquent and a member of the Black Gangster Disciples. But I was smart enough to avoid the then-prestigious Paul Laurence Dunbar vocational school. One teacher said, “If you put your hands on my mother, you’re gonna need more than just a nightstick.”

In the end, the sergeant arrived and said, “There’s no reason for us to get involved. Let the n----s handle their own problems.”

The night after we moved in, my mom and I bashed a fellow homeowner who kicked in our front door with guns drawn and shouted for me, and for a relative who was visiting, to lie face down on the ground. Hearing the commotion from her wheelchair upstairs, my mother demanded to know what they were doing to her son. When my mom objected to the officers’ threats to search the house, the younger cop barked, “We’re gonna search this house even if I have to go through you to do it.”

All fear left me at those words, and I stepped between the police and my mom and said, “If you put your hands on my mother, you’re gonna need more than just a nightstick.”

All fear left me at those words, and I stepped between the police and my mom and said, “If you put your hands on my mother, you’re gonna need more than just a nightstick.”

The next day I was arrested while going to the store. They claimed I fit the description of a “black boy” who was a threat to society. I went back to prison for 18 months, and when I came home this time, my soul was completely devoid of light. I began using drugs heavily; it was the only way I could numb the incessant pain in my heart. I took to burglarizing homes to get money for drugs. One such excursion would end in my vicious killing of another human being.

In May 1990 I arrived on death row at Pontiac Correctional Center, where I would spend 30 years awaiting to be executed. My sentence was commuted in 2003 to life without parole. In April 2017 I’d been off death row for 14 years and was working in the chaplain department at Stateville when I bumped into a diminutive white lady who greeted me warmly. What was unusual about her was the way she navigated around the prison; she walked confidently and with a sense of purpose and wasn’t fearful or standoffish. She looked me directly in the eye, acknowledging my humanity. I’d heard about this powerful teacher — Professor Jennifer Lackey — who was determined to bring the torchlight of knowledge to the inmates of Stateville. I had already begun my journey of self-actualization while still on death row, but I’d had no formal education since I received my GED in 1983.

I asked Professor Lackey if I could enroll in her values course, and she informed me that her class was already three weeks in. But then she said, “If you can catch up on the readings and write the six required papers, you’re in.” I assured her I could do it, and I missed yard and stayed up late two consecutive nights to accomplish my goal.

The values course was just the type of intellectual stimulation I craved, but more than anything I was impressed by how seriously Professor Lackey took educating the men in her class. Later that fall Professor Lackey told the class about the Northwestern Prison Education Program, in which we could earn credits toward a university degree.

I took an application with no intention of submitting it. After class Professor Lackey approached me and said sincerely, “William, I want you to apply. You’ll be a wonderful student.” I was 53 at the time, but I felt like a child who’d just been praised by his favorite teacher. I went back to my cell and wrote the best essay of my life. To my utter surprise, I was accepted! I felt so light, so ebulient, that I feared I might float away.

NPEP has changed me in so many ways and enriched my life to a degree that constantly astounds me. I took a sociology course with the renowned Mary Pattillo. When I told my now deceased granddaughter about her, she exclaimed, “You mean the smart black woman I see on PBS all the time?” Professor Pattillo held us to the same academic standards as she did her Evanston students. She expanded my range of knowledge exponentially. Her writing assignments were challenging, and her hard-earned praise of my essays made me beam with pride.

Then there are the Northwestern students who come here — nay, stint or snow — every week to tutor us. One student, 18-year-old Devion, had a profound impact on me. I asked her to critique a paper on decision-making I had to write for Professor David Smith’s psychology class. It dealt with my decision to marry a woman while I was on death row. After reading, and then re-reading my paper, Devion said, “You are an exceptional writer. I’m so sorry you’ve had such a difficult life.” It was not what she said, but the sincerity behind what she said, that gave me the confidence that I could excel as a student.

NPEP has had a big impact on my family. I grew up as the outcast. However, when they heard I’d been accepted into Northwestern University’s education program, every one of them told me how proud they were.

Moving forward, my primary goal is to earn my freedom either through clemency or the “young adult” issue that allows judges to resentence men and women who committed their crimes at an age when they were not fully culpable. In the interim I intend to keep evolving, both intellectually and as a conscientious human being. I cannot undo what I’ve done, but I can atone.

The knowledge of what it means to be “human” has become a new teacher for me true remorse for the harm I have done to others. Knowledge gave me the courage to accept responsibility for my crimes against society, even though on many levels society failed to nurture and protect the helpless child that I once was. True and lasting change is not the result of retributive justice and harsh sentencing. Change comes from a renewing of the mind, and that can only come through the education and cultivation of incarcerated men and women.

William Peeples, a student in the Northwestern Prison Education Program (NPEP), is serving time in Stateville Correctional Center in Crest Hill, Ill. He was part of the original cohort of NPEP students.
SAVING AFRICA’S LAST RHINOS

Engineering student Saif Bhatti has created an acoustic device that can detect poachers’ gunshots — and help stop the relentless slaughter of rhinoceros for their horns.

BY AMANDA MORRIS
You can tell a lot about a poacher by the way they dehorn a rhinoceros.

Was the horn hacked off crudely — snout and all — with a machete? Or was it removed skillfully with a sharp, scalpel-like instrument, right along the thin partition of cartilage that separates horn from bone?

As Saif Bhatti bumped along the dirt back roads of Thornybush Game Reserve in South Africa, he was unsure which one they might find. He sat shotgun in an old pickup truck next to the reserve’s security manager, who held his phone in his right hand, gripped his radio in his left and steered through the savanna with his elbows. Someone in the area had reported two gunshots fired around 6 a.m. But in the sprawling 35,000-acre park, it was hard to know where to search.

With more than 8,000 poached in South Africa from 2010 through 2019, rhinos are likely to become extinct within our lifetime. Habitat loss is partially responsible for the rhinos’ dwindling numbers. But, overwhelmingly, poaching remains the largest threat. On the black market rhino horn is worth more than gold, which fuels illegal hunting.

The search for the poachers in Thornybush took place throughout the day and night and included helicopter, patrol and canine units at different times.

It wasn’t until the next morning that the security manager’s radio crackled to life: His team had discovered the carcass of the reserve’s last female black rhino.

The first bullet had ripped through the right side of the rhino’s abdomen. As she turned to run, a second shot blew through her left shoulder. She finally stumbled to the ground and — likely painfully and slowly — bled to death. The rhino was pregnant; the fetus did not survive.

“The horn had been expertly removed,” Bhatti says. “It was not this group’s first poach.”

But if Bhatti’s new technology works as well as he imagines, this poach could be one of their last.

Cold-Hearted Reality and New Motivation. In April 2019 Bhatti began developing Renoster, a smart listening device that detects gunshot sounds in the savanna. (The name means rhinoceros in Afrikaans.) The devices, which are slightly bigger than the palm of a hand, sit in trees, glistening and yawning toward the sun.

As Saif Bhatti bumped along the dirt back roads of Thornybush Game Reserve in South Africa, he was unsure where enforcement of wildlife poaching laws remains inconsistent.

Poachers can easily escape into nearby Mozambique, where police are not as vigilant as in South Africa.

Witnessing the discovery, recovery and subsequent autopsy of the black rhino in Thornybush marked the first time Bhatti saw a rhino up close in the wild.

“Seeing the dead rhino was a devastating, cold-hearted reality,” Bhatti says. “It was surreal but it gave me new motivation for why my technology is relevant and why it’s important to get the product on the ground. If we could help catch one poacher, that would be a huge deterrent.”

Purpose-Built Technology. Bhatti’s device uses signal processing to distinguish gunshot sounds from other loud noises, such as thunder, branches breaking or elephants stampeding. To refine gunshot detection, Bhatti has worked closely with Stephen Tarzia ’09 MS, ’11 PhD, an assistant professor of computer science in the McCormick School of Engineering. An expert in acoustic sensing, Tarzia and his graduate students, Jiayue Sheng and Yuxing Guo, have helped Bhatti implement signal processing algorithms into his devices.

The basic challenge is to make a computer capable of listening for gunshots, Tarzia says. “The software must be simple enough to run on a cheap, solar-powered microprocessor but also sophisticated enough to distinguish between a gunshot and similar sounds.”

To train the device, Bhatti and his collaborators went to an outdoor shooting range. They recorded sounds from guns commonly used in poaching — including those with silencers.

The shooting range trials paid off. “In tests at Thornybush during the African winter, our device was able to detect a nonsuppressed weapon from 800 meters away and a suppressed weapon from 300 meters away,” Bhatti says.

One of Africa’s largest reserves lies at the west of Kruger National Park. One of Africa’s largest reserves at nearly 5 million acres, Kruger teems with wildlife, including more than 20,000 rhinos, and is a hotbed for poaching. Wedged against South Africa’s northeastern border, Kruger and nearby game reserves like Thornybush are particularly vulnerable.
one of Bhatti’s advisers. “It has turned into a literal war in Engineering at Stellenbosch University in South Africa and success. tried many methods to deter rhino poachers, with little that lead from that initial idea to successful deployment. ”

Tarzia says. “My main role has been to slow him down when necessary to show him partnerships and building prototypes, “ Tarzia says. “My main purpose-built technology that takes those things into account. ”

Tarzia credits Renoster’s innovative technology to Bhatti’s visionary thinking and collaborative approach. “Sail has excelled at creating a vision for his project, forging partnerships and building prototypes,” Tarzia says. “My main role has been to slow him down when necessary to show him how to navigate the engineering product development steps that lead from that initial idea to successful deployment.”

On the Front Lines Conservationists and rangers have tried many methods to deter rhino poachers, with little success. “The conservation of rhinos is not a simple issue,” says Martin Nieuwoudt, director of the Institute for Biomedical Engineering at Stellenbosch University in South Africa and one of Bhatti’s advisers. “It has turned into a literal war in the northeastern part of South Africa. Many conservationists, who got into science because of their love for ecosystems, are now soldiers in that war.”

Nieuwoudt has studied the radio tracking of rhinos, which is notoriously difficult. By continuously monitoring rhinos with an ankle bracelet, he says, experts could potentially learn more about rhino behaviors. This information could make rangers more proficient at protecting the world’s last rhinos and rebulding their fading populations. “This is difficult for many reasons,” Nieuwoudt says. “Rhinos have an incredibly thick hide and hate having anything attached to them. They will destroy those things.”

Rangers also have tried safely removing rhinos’ horns preemptively, hoping to remove the temptation to poachers. Tragically, this seemingly logical solution has not worked either. Poachers have continued to kill rhinos for the horns’ remaining, blunted stumps, because it is the heaviest — and thus most valuable — part of the horn.

Try, Try Again Of course, Bhatti’s system also has faced its own challenges. Last summer he mounted 15 Renoster units in trees across Thornybush. From there, he encountered multiple unanticipated engineering challenges. Everything from the types of trees to the heat to the rain disrupted his plans. “I wanted to put the devices up in the trees to avoid interference from the deviations of sound on the ground,” he says. “But then I learned that elephants just like smashing trees. And then there was the weather. During the summer rainy season, parts of South Africa receive heavy amounts of rain. A big challenge is to make the units porous enough to allow sound to enter them while ensuring that they remain water- and dust-proof. Bhatti first put boxes around the devices to waterproof them. The boxes, however, made the devices more susceptible to heat. “It turns out that when you put a device in a black box in the summer sun, it’ll bake,” Bhatti laughs. For his next iteration, he used a special UV coating.

To help solve the waterproofing problem, Bhatti used Gore-Tex material to make a semipermeable acoustic vent that would prevent dust and water droppers from getting inside the device but still allow the microphones to pick up sound. In late December, Bhatti returned to Thornybush Game Reserve to add the acoustic vents to his devices. He also collected data from the devices to see how well they processed and correctly identified sounds. “When I first installed the devices, it was winter, so the bush was dead,” Bhatti says. “When I returned in the summer, the landscape was lush with greenery. The additional foliage really affects how sound dissipates away from a gunshot, so capturing that difference was important.”

Those working with Bhatti expect that he will press on until he perfects Renoster. “Saif’s primary personality trait is persistence,” Nieuwoudt says. “He simply does not give up.”

Northwestern in Action With its vulnerable rhino population and manageable size, Thornybush Game Reserve seemed like the natural place for Bhatti to field-test Renoster. And even better — Thornybush has a Northwestern connection.

Demand from Asia Drives Rhino Poaching On the black market, rhino horns are worth more than gold — up to $100,000 for one kilogram of ground-up powder. Although global trade in rhino horn is banned by the Convention on International Trade in Endangered Species (CITES), skyrocketing demand in Asia since 2007 has led to unprecedented levels of poaching in South Africa. More than 8,000 rhinos have been slaughtered there in the last decade, mainly in and around Kruger National Park, including Thornybush Game Reserve, where engineering senior Saif Bhatti is testing his anti-poaching technology, Renoster. Most poached rhino horns from Africa end up in China, where they are ground up, dissolved in liquid and used in traditional medicines. Rhino horns are made of keratin — the same substance in human fingernails and horse hooves. Although there is no evidence that keratin has any medicinal benefit, people have used rhino horns for 2,000 years for perceived treatments for many ailments, including hangovers, snakebites, headaches, cancer and impotence. In China and Vietnam rhino horns are also a status symbol and often used as ornaments, dagger handles and jewelry. — A.M.

Clockwise from left, McCormick senior Saif Bhatti visits South Africa’s Thornybush Game Reserve in August 2019 to field-test Renoster; while testing the device (with circuitry obscured) last winter, Bhatti saw a herd of white rhinos; the Renoster device sits perched high in a marula tree to maximize listening and transmission range.}

Demands from Asia drives rhino poaching. With its vulnerable rhino population and manageable size, Thornybush Game Reserve seemed like the natural place for Bhatti to field-test Renoster. And even better, Thornybush has a Northwestern connection.

Northwestern’s Global Learning Office (GLO) connected Bhatti with Nieuwoudt, the Stellenbosch University professor who directs the South African side of Northwestern’s Global Healthcare Technologies study abroad program. The GLO also helped put Bhatti in touch with alumnus David Bunn ’80 MA, ’87 PhD. After meeting with Bhatti in Evanston, Nieuwoudt later introduced him to Bunn, the former director of the Wits Knowledge Hub for Rural Development at the Wits Rural Facility, one of the largest and most prestigious rural research centers in Africa. Bunn then connected Bhatti to the owner of a resort at Thornybush. Once this connection was made, Bhatti was off to the reserve to begin testing device prototypes. “This project almost didn’t happen because I couldn’t find any rhinos,” Bhatti says. “But after Martin and I connected over our shared passion for animal conservation, everything changed.”

Protecting the Bush This June, Bhatti graduates from Northwestern with a bachelor’s degree in industrial engineering and philosophy. But his journey with Renoster will not end with the Commencement ceremony. In addition to Gore-Tex, Bhatti has support from Thornybush, the Nature Conservancy, the Institute for Sustainability and Energy at Northwestern (ISEN) and the McCormick School to continue to develop his device. Bhatti currently builds each device, one by one, in the lab. As soon as the prototypes are perfected, he will have enough funding from NSF to enter a manufacturing stage. Professors at the Northwestern Pritzker School of Law also advised Bhatti on establishing Renoster as a private company, which will launch this summer.

Although developing the technology has been gratifying, Bhatti is motivated by the people he has met at the reserve and by the likelihood of thepone rhino he saw on his first day at Thornybush. “At the current rate of poaching, rhinos will be extinct within my lifetime,” he says. “People in South Africa are fighting to protect the bush on a daily basis. Just being able to help them in some way, that’s been the most rewarding.”

Amanda Morris ’16 MA is a science and engineering writer in Northwestern’s Office of Global Marketing and Communications. Learn more on our website at numag.nu/renoster.
Antetokounmpo. “Greek Freak,” Giannis fellow countryman — the globe, including his alum Alex Saratsis Multilingual international representation some of the Replying to leave 9-10, He’ll return home by 5-5. His kids wake at 6. After his wife, Amanda Mubs Saratsis ’02, an assistant professor of neurological surgery and biochemistry, and molecular genetics at the Feinberg School of Medicine, departs for another day of pediatric neurosurgery at Lurie Children’s Hospital of Chicago, Saratsis feeds Beckett, 6, and Eva, 3, and sends them off to school.

Finally, another day as perhaps the world’s premier international sports player agent, directing Octagon Worldwide’s global basketball operations, begins in earnest. With a pugilist’s intensity, Saratsis is ready to fight for each of his clients.

This summer Saratsis’ top client, Milwaukee Bucks superstar and reigning NBA MVP Giannis Antetokounmpo, faces a potential contract extension that could make him the highest-paid player in league history. Should Saratsis and Antetokounmpo decline the deal, they would signal that such a revelatory talent faces a potential contract extension that would be open to departing Milwaukee if Saratsis and Antetokounmpo decline the deal, they would signal that such a revelatory talent could make him the highest-paid player in league history.

When he’s not stateside, working out and preparing for Octagon’s Chicago office, Saratsis is exploring the world for the next great international prospect.

“Once I joined the agency, however, before I was hired in 2009,” says Saratsis. “Once I joined the agency, however, there was almost a mandate from the NBA to continue to grow and expand its international business.”

A dual citizen of the U.S. and Greece, Saratsis could claim global citizenship. “That village, especially in Greece, is a citizen of the world and can relate to multiple cultures, thinks of himself as an intercontinental upbringing and a global village. His friends were sons of diplomats and his native tongue. “I was lucky,” he says. “I spoke three languages by the time I was 8.”

Saratsis’ skills have helped turn Octagon into an international basketball leader. “The company began focusing on international players in the decade before I was hired in 2009,” says Saratsis. “Once I joined the agency, however, there was almost a mandate from the NBA to continue to grow and expand its international business.”

Generations of the Saratsis family called Greece home until Costas Saratsis’ parents were robbed on three occasions, once while the family slept. The Saratsis children were warned against leaving the house by themselves. Two of Alex’s closest friends, a pair of brothers, were kidnapped but fortunately returned in time for school on Monday. That was Costas’ last straw. When the call came to relocate his family once more, he quickly relayed his options to his children: Czech Republic or Japan? His three teenagers unanimously chose Tokyo.

At school in Japan, Saratsis encountered classmates from across the globe. His friends were sons of diplomats from Nigeria, Italy and France. When visiting their houses, he ate and helped cook authentic udon or chin chin. “Japan is such a magical place,” he says. “And living internationally you learn so much about people and different environments.”

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“My political science major taught me to understand different cultures, how to do business in different countries and that decisions made in the past can shape what happens in the future.”

— Alex Saratsis

presenting nothing but new situations with foreign figures. He always assumed he’d someday return to Greece and thus chose to attend college in the United States. He landed in Evanston as a political science major, with dreams of becoming a Greek diplomat.

It turned out, however, that his political science and international relations classes were the ideal setup for his future as a sports agent. “My political science major taught me to understand different cultures, how to do business in different countries and that decisions made in the past can shape what happens in the future.”

While his Northwestern education prepared him well for his career, the University also led him to his life partner. During Senior Week he met Amanda Muhs, the woman who would become his wife. After graduating, Saratsis relocated to Chicago and joined CSMG, a firm.

Chicago-based sports management and marketing company.

The Daily Northwestern

Saratsis arrived late to the meeting after struggling to find the building’s parking garage. Thirty minutes later he had detailed how the NBA was exploring a European expansion. “I got a good gut feeling that this was a guy I needed to have with me,” Austin recalls. “I was trying to sell what I thought I could potentially be.”

Saratsis has connected deeply with players’ families and team executives alike. While attempting to recruit Brazilian prospect Bruno Caboclo to play for the Toronto Raptors, Saratsis cemented a friendship with Caboclo’s executive Masai Ujiri. They spent two full days together in São Paulo, at one point finding their way into a dinner at the Brazilian president of basketball’s palatial estate. “They’re moments you remember all your life in terms of experience and growing major says.

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Instead of paying international agents to essentially broker contracts for their clients with foreign teams, Octagon was employing European-based agents of its own. Saratsis soon partnered with Giorgos Dimitropoulos, a Greek industry veteran, to help direct Octagon’s European division. The Dimitropoulos partnership quickly proved valuable. He knew former Greek national team assistant coach Giorgos Panos — whom they’d later employ at Octagon Basketball Europe. It was Panos who had spotted a young, gangly Giannis Antetokounmpo in a local Athens gym and referred the phenom to Octagon for representation. With Saratsis’ assistance, Antetokounmpo became the 15th pick in the 2013 NBA Draft, landing in Milwaukee. “Alex has been there since day one,” says Antetokounmpo. “I think I’ve become a better basketball player, and he’s become a better agent,” he adds. “One of the things that I love about Alex, he never hypes me up. You know how agents say, ‘Oh you’re the best. You’re gonna make this amount of money. You’re gonna get this amount of endorsements.’ I don’t like that. And he respects that. He never does that to me.”

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Saratsis’ transparency also greatly benefits his clients.

“If you don’t have a connection with your agent, you don’t have an agent. You just have somebody working for you,” says Miami Heat forward Bam Adebayo, a budding All-Star who frequently gets earnest feedback from Saratsis by phone.

“He’s really down to earth and honest,” Adebayo adds. “He’s not one of those yes-man types.”

Saratsis would agree.

“I’m extremely blunt with people, which isn’t always the best way to be, but I think, if you work for your client and not for yourself, honesty is paramount to being a good agent,” he says. “And in an environment now where basketball is global, you have to get outside your comfort zone to understand how people think.”

Looking to the future of basketball, Saratsis says that the NBA is doing a great job of growing its fan base internationally, recently adding streaming services in India, for example, and new development camps in Bangladesh.

“I’m continuing to see the growth of basketball globally — new sources of revenue, new ways that the game can touch the world.

“I’m excited to be a part of that.”

Jake Fischer is a former Sports Illustrated reporter.

Get a behind-the-scenes look at our photo shoot with Alex Saratsis and watch an interview with him at numag.nu/freak-agent.

On July 1 the Milwaukee Bucks are all but guaranteed to offer Giannis Antetokounmpo, the NBA’s reigning MVP and Alex Saratsis’ star client, a five-year contract extension expected to be worth a league-record $247 million.

The son of undocumented Nigerian immigrants in Greece, Antetokounmpo began playing basketball in a dilapidated Athens park with his brothers, Thanassis and Kostas, now NBA players as well. Through a chance discovery by local hoops figures, the brothers quickly ascended within the Greek basketball scene.

Saratsis originally observed Antetokounmpo’s talent in Greece but didn’t want to overwhelm the young phenom, on the threshold of changing his family’s lives forever.

He first spoke to his client when the 18-year-old arrived in New York City the day before the 2013 NBA Draft.

“You could just tell that there was an innocence to him, and a sweetness, but it’s the same Giannis you see now,” Saratsis says. “He has always been a fierce, fierce competitor.”

After getting picked by the Milwaukee Bucks, Antetokounmpo spent his first six months living on his own in a Milwaukee hotel — until his family could get visas to join him. So Saratsis traveled to Milwaukee from Chicago every three to four days to see his new client, help him adapt and go shopping for food, sheets and toiletries. Sharing the same first language (Greek), birthplace (Athens) and mutual family values, Saratsis and Antetokounmpo developed a strong bond that goes far beyond the typical agent-client relationship.

“Our connection was really strengthened because when we’d be in meetings or talking with teams, he could easily turn to me and tell me something in Greek that he didn’t want anybody else to know,” Saratsis says. “We spend so much time together, Giannis and I are at the point now where it’s almost nonverbal. I can tell what he’s thinking without him even saying anything to me.”

“He’s not my agent, he’s one of my best friends” says Antetokounmpo. “He’s become family during these seven years, and it’s always great to have him by my side.”

This summer Antetokounmpo will visit Nigeria for the first time, to see the country where his parents grew up. Saratsis will be with him every step of the way.

— J.F.
1. What were your motivations for writing this book? At the 1996 Olympic Games, Richard Jewell discovered a massive bomb hidden under a bench in a crowded park, helped to clear a perimeter and saved scores of lives. But over the next several weeks, he was judged to have been the bomber, then tried and convicted in the court of public opinion. This case was led by two of the most powerful forces on earth: the FBI and the media. And I always wondered how it all went so horribly wrong, that a man who should have a statue in the center of Atlanta ended up being in the crosshairs of those two powerful forces.

2. How did you reconstruct the story of the bombing and the investigation? At the time of the bombing, I was running the Wall Street Journal's Southeast news operation. My co-author, Kent Alexander, was the U.S. attorney. So we thought he knew all the law enforcement stuff and I knew all the journalism stuff. Far from it. Over five years we did 187 formal interviews. We read through more than 90,000 pages of documents. We were frequently surprised by what we hadn't known. Then, the trick was to create something that doesn't read like a history book but instead reads much more like a work of narrative nonfiction, even a novel.

3. What are the lessons learned from the media's role in what happened to Richard Jewell? The media need to get back to valuing accuracy over speed, the critical nature of slowing down and getting it right. Not everything is knowable right now. Another important lesson: If the standard journalists are using for whether to run a story isn't high enough. The media need to get back to valuing accuracy over speed, the critical nature of slowing down and getting it right. Not everything is knowable right now. Another important lesson: If the standard journalists are using for whether to run a story isn't high enough.

4. Do you think the book vindicates Jewell? We got a helpful note from Dana Jewell, Richard's widow, saying, "I believe that the time you guys spent with me and the truth in the book has fulfilled my promise to Richard to ensure his story was told. I don't have the words to tell you both how much I appreciate what you have accomplished with this book. Trust me, you did not disappoint."

5. What was it like to work on the Richard Jewell film? Every writer's dream is to get Hollywood to make a film about Richard Jewell being the lead suspect was factual. But he was never arrested or charged with any crime. Did everyone who was writing about that forget about the fact that there's a human being on the other end of that story? And the toll that took on Richard Jewell — and his mother — was devastating.

6. What is your dream for Elevate Northland? Well, it's more like a work of narrative nonfiction. Trust me, you did not disappoint. I always wondered how it all went so horribly wrong, that a man who should have a statue in the center of Atlanta ended up being in the crosshairs of those two powerful forces.
Tackles Love and Justice
Professor’s Debut Album

In the classroom, Danny M. Cohen ’06 MA, ’11 PhD grapples with the big issues. An associate professor in both the School of Education and Social Policy and the Crown Family Center for Jewish and Israel Studies, he teaches social change, human rights and Holocaust history.

Outside the classroom, the London native is an author, nonprofit leader and folk-rock singer-songwriter. In 2017 he discovered the duo discovered them out in the world, we find beautiful — songs that, if we had wished we had written them. “It’s up to each listener to decide what they want to take,” he says. “We just believe the album has a central message. Though Cohen acknowledges the potential power of the project, he doesn’t believe the album has a central message. As he points out, even the band’s name — a nod to the Crowded House song “Don’t Dream It’s Over” — wasn’t intended to be a statement. “It’s up to each listener to decide what they want to take,” he says. “We just wanted to write songs that we would find beautiful — songs that, if we had discovered them out in the world, we would wish we had written them.”
With a Song in His Heart
Alum centenarian Alan Tripp might be part of the oldest songwriting duo in the world.

For the retirement-age and older crowd, the lead song of Alan Tripp’s debut album has a catchy and relatable chorus: “I’m ready now to kiss you/but baby there’s an issue/I just can’t remember your name.”

After graduating from Northwestern with an undergraduate business degree, Tripp ’37 worked in broadcasting and advertising, at one point running his own ad agency. Now, from his retirement home in Bryn Mawr, Pa., the 102-year-old has achieved a lifelong dream with the release of Senior Song Book— a mix of ‘40s- and ‘50s-style tunes with modern lyrics that he calls “grown-up music.”

Marvin Weisbord was at my 99th birthday party when I read a poem that I had written called “Best Old Friends.” He wrote music to put that poem into a song as a present for my 100th birthday. Marvin didn’t know that I had the lyrics for six other songs in a drawer. He’s a very good jazz pianist. In a few months, we had written 14 songs together.

We decided we shouldn’t let these songs disappear into the darkness of musical history. We put together a band of musicians and recorded them. Someone told me that the whole thing has gone viral. At first, I thought that was a disease. But it was a great success, and now we are working on making it into a cabaret night. [Tripp and Weisbord have been featured on Access Hollywood, CBS Evening News and NPR.]

All my life I wanted to be a songwriter. When I was 15 years old, I used to hang out at the Brill Building in Manhattan, where all the song publishers had their offices. One day a little jingle popped into my mind for Kool cigarettes, so I took it over to the ad agency. When I sang it for them, they bought it for $75 on the spot. I again tried to be a songwriter when I was around 40 years old. I produced a weekly TV show in Philadelphia, and the director was Alan Bergman (who later won two Oscars for best original song). Alan and I wrote a couple songs that never got anywhere. So finally, at 102, I have become a songwriter.

I was very happy at Northwestern. You do better work when you’re happy. In college, you’re honing and polishing a jewel — yourself. At that age, you don’t understand that each day is precious. Make the most of those years. You don’t get to repeat that experience.

John Paul Jones said, “Don’t give up the ship!” If you really love something, you should do it. People talk about having a passion. It’s just a word, but it’s the right word.

If you like an idea, never just throw it away. I’ve got a song I’m writing now. I’ve written the first half, but I’m hung up on the second half. I’ll beat it. I’ll get it. I’ve always been that way. My kids always knew that I was like a little dog that gets hold of a ball and doesn’t let it go. It’s my nature.

Interview by Dan Rosenzweig-Ziff, a junior journalism major from Newton, Mass.
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RHINOS POACHED IN SOUTH AFRICA
2010–19