

Paintball Returns
With a Splash

A Bug's
Afterlife

Academic Inventions
Go to Market

[DREXEL]

WINTER/SPRING 2015 // MAGAZINE // VOLUME 25 NO. 1

FOSSIL RECORD

How Drexel students lent
a hand to the biggest
dinosaur discovery ever

plus:

MEET THIS
YEAR'S

forty

UNDER

FORTY



1/2

J.D. WENTRAUB

This photograph has not been altered. The butterfly emerged from its chrysalis half male and half female, exhibiting a very rare condition known as gynandromorphy. It was recently discovered by chance in the butterfly room at the Academy of Natural Sciences of Drexel University and is now preserved as part of the Academy's Entomology Collection.

THE LEDGER

[A NUMERICAL ANALYSIS OF LIFE AT DREXEL]

\$2.4M	Sum of funds that Drexel students have won in nationally competitive individual fellowship awards last year, with half coming from NIH predoctoral grants to College of Medicine students.
220	Number of potential employers that lined up to recruit from more than 1,700 students at Drexel University's Fall Career Fair. This was the largest group of employers to come to the fall fair in the past five years.
1,300	Number of community members who participated in the third-annual fossil "Dig Day" hosted in a quarry by Ken Lacovara, a professor in the College of Arts and Sciences, to promote paleontology and science to young children.
9	Number of Drexel undergrads — the largest number ever in any year — selected to present their research at the National Collegiate Research Conference at Harvard University in January.
55,000	Number of U.S. adults and children with autism receiving services in 2014, as recorded in research by A.J. Drexel Autism Institute Senior Manager Lindsay Shea. The number is almost triple the number initially identified in 2009.
\$220,000	Donation from the Richard C. VonHess Foundation, which will allow the Robert and Penny Fox Historic Costume Collection to hold a full-scale retrospective exhibition and academic symposium this fall.
91,000	Number of Twitter users who saw the #DrexelStartup14 hashtag on their Twitter feed on Drexel Startup Day on Nov. 6. It was the top-trending hashtag in Philadelphia that day, appearing on 240,998 Twitter timelines.
\$2.5M	Amount of money awarded to Drexel by the state of Pennsylvania to support the "Philadelphia 30th Street Station District Plan," which is a vision to build in the air rights above the rail yard and expand commercial opportunities in the area.

[DREXEL MAGAZINE]

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Drexel is one of just a handful of universities endowed by the Coulter Program to turn academic inventions into reality.

BY LINI S. KADABA



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46 **Inc.**

THE VIEW FROM MAIN

Once again, it's time to recognize Drexel's "40 under 40," a selection of up-and-coming (or in many cases already-made-it) young alumni. From pilots to tunnel engineers, diplomats to rock drummers, their pursuits are as varied as their backgrounds.

But the stories I find myself drawn to are the ones that involve taking a great idea and building a business or organization out of it: a man who turned his own experience as a cancer patient into a line of clothing for people undergoing treatment; an attorney who teamed up with her law professor to market tools for video-based learning; a 2014 graduate who co-founded a brand of innovative solar chargers while still a student.



These alumni achievements highlight an essential character trait of Drexel: entrepreneurial spirit. That spirit led to the founding in 2013 of the Close School of Entrepreneurship, the nation's first freestanding entrepreneurship school to offer degrees. As reported in this issue, Founding Dean Donna De Carolis was recently named the first Silverman Family Professor of Entrepreneurial Leadership, a position endowed by alumnus and trustee Stan Silverman and his wife, Jackie, to advance teaching and research at the Close School.

Another side of Drexel's innovative nature is expressed through the Coulter-Drexel Translational Research Partnership Program. As Mara Neal of the Wallace H. Coulter Foundation says in this issue, the partnership encourages "research in search of a product." To date, more than 40 Drexel projects have received about \$5.5 million in funding to explore their commercial potential.

I am confident that 2015 will see many more achievements with real-world impact from Drexel students, faculty and alumni. I wish a happy and fulfilling new year to all of our alumni and their families.

Sincerely,

John A. Fry / President

EDITOR'S NOTEBOOK

Going to college is essentially an act of personal optimism.

You make a bargain with your intellect, your time and your wallet. The bargain is that you spend four (or five, in Drexel's case) years of your life attending class and polishing term papers, working co-op and delaying adult life, in the expectation that at the end of it, you'll be first in line for your dream life. If you're lucky, maybe you'll also meet your soulmate.

Regardless of the exact terms of our private contract with higher education, most of us undertake this rite with the belief that college is a first step toward fulfilling our hopes. You invest in a certain future.

There's a lot of that happening for the 40 Under 40, whose stories are inside. This year's honorees have accomplished a tremendous amount since they graduated. There's a chef for a prestigious restaurateur, a drummer for a popular rock band, an inventor with a hot idea. One is working to solve America's nuclear waste problem. Another hunts extraterrestrial microbes for NASA. These are some great stories, but they aren't the full story.

When we select the 40 Under 40, we look for achievement, but we also honor individuals who inspire us and who inspire others.

This year, we have two honorees who discovered, not long after leaving college to follow their dreams, that their futures had something unexpected in store for them. Each is a survivor of rare, advanced forms of cancer.

Notwithstanding their serious diagnoses, they committed themselves to projects that help others.

I'm sad to say that one of them, Marc Kuchler, passed away on Feb. 10.

I know firsthand how scary it is to discover you have cancer — even when, as in my case, there was a straightforward surgical cure. It takes character to set your vision on something beyond the diagnosis.

In the final three years of his life, Marc and his wife, Rachael, raised more than \$100,000 to benefit Free to Breathe, a nonprofit that funded some of Marc's medical treatment. Their hope was to raise money for research to develop drugs that target cancers like Marc's, which currently has no cure.

Anyone interested in making a contribution in his name can do so at freetobreathe.org. I just did.

Sonja Sherwood / Editor



COVER IMAGE: Robert Clark

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LETTERS

Reaching out

Bravo to *Drexel Magazine* for focusing attention on the Mental Health First Aid program (“Psyche and the City,” fall 2014 issue). Persons with mental illness deserve as much compassion and attention to urgent needs as anyone with a physical illness.

Helping someone with a mental illness can be very stressful. Some years ago, I visited a friend on the East Coast who was severely depressed and was refusing to eat or even change clothes. Fearing for her safety and knowing I needed to board a plane to return home, I alerted her family and other close friends to monitor her closely.

Upon my return home she called me and screamed at me for several minutes, insisting she would rather be dead than have anyone know she was ill. She hated what I had done. I listened without interrupting her.

I (and her other friends) saved her life. Her shunning me now is something I will have to live with. I am thankful she is alive to hate me.

Ron M. Aryel

MD (Hahnemann) '93

*Reno Center for Child and Adolescent Health
Reno, Nevada*

Much more to ‘Psyche and the City’

The importance of mental health in Philadelphia cannot be overstated; however as a magazine with a focus on Drexel University and its students, I am disappointed in the article, “Psyche and the City.”

The author missed a great opportunity to highlight that Drexel University students have had real impact. He failed to report on the impact students had on the success of the Mental Health First Aid (MHFA) program and other related initiatives.

One best practice to recruit students to a University is through the work its students do in the field and I believe the focus of this article should have been directed toward former students without whom the Department of Behavioral Health and Intellectual disAbility Services (DBHIDS) could not have developed this program.

Over the past four years, the Thomas Scattergood Behavioral Health Foundation has guided master’s-level students interested in health policy toward initiatives that would create major impact in the Philadelphia mental health community. Specifically, Alyson Ferguson MPH '12 was the author of the Mental Health First Aid strategic plan and within her position at the Scattergood Foundation has continued to help facilitate and implement MHFA with the DBHIDS. Alyson and a classmate, Kate Carroll, began developing the MHFA initiative and ideas as part of their second-year community-based master’s project.

The article very nicely highlighted the success that Hakim Pitts from QCare had at using his Mental Health First Aid skill set; however, the very reason Hakim Pitts went through the MHFA training was because the QCare site was the pilot project for the first-ever mental health screening kiosk.

The screening kiosk, better known as “Wellness at Your Fingertips,” was developed in conjunction with two recent Drexel University graduates, Teresa Moore MPH '14 and myself.

We are happy to report that the first kiosk has been successful, received over 55 independent news articles, and the Scattergood Foundation and other partners are currently publicly fundraising to bring more kiosks across the city.

Again, I am appreciative of the fact that mental health as a whole finally received some positive press; I am gravely disappointed that the focus of this article was on yet another city health agency doing their job and not on the impact the University’s aspiring students and alum are making.

Gregory H. Caplan

MPH '14

Syracuse, New York

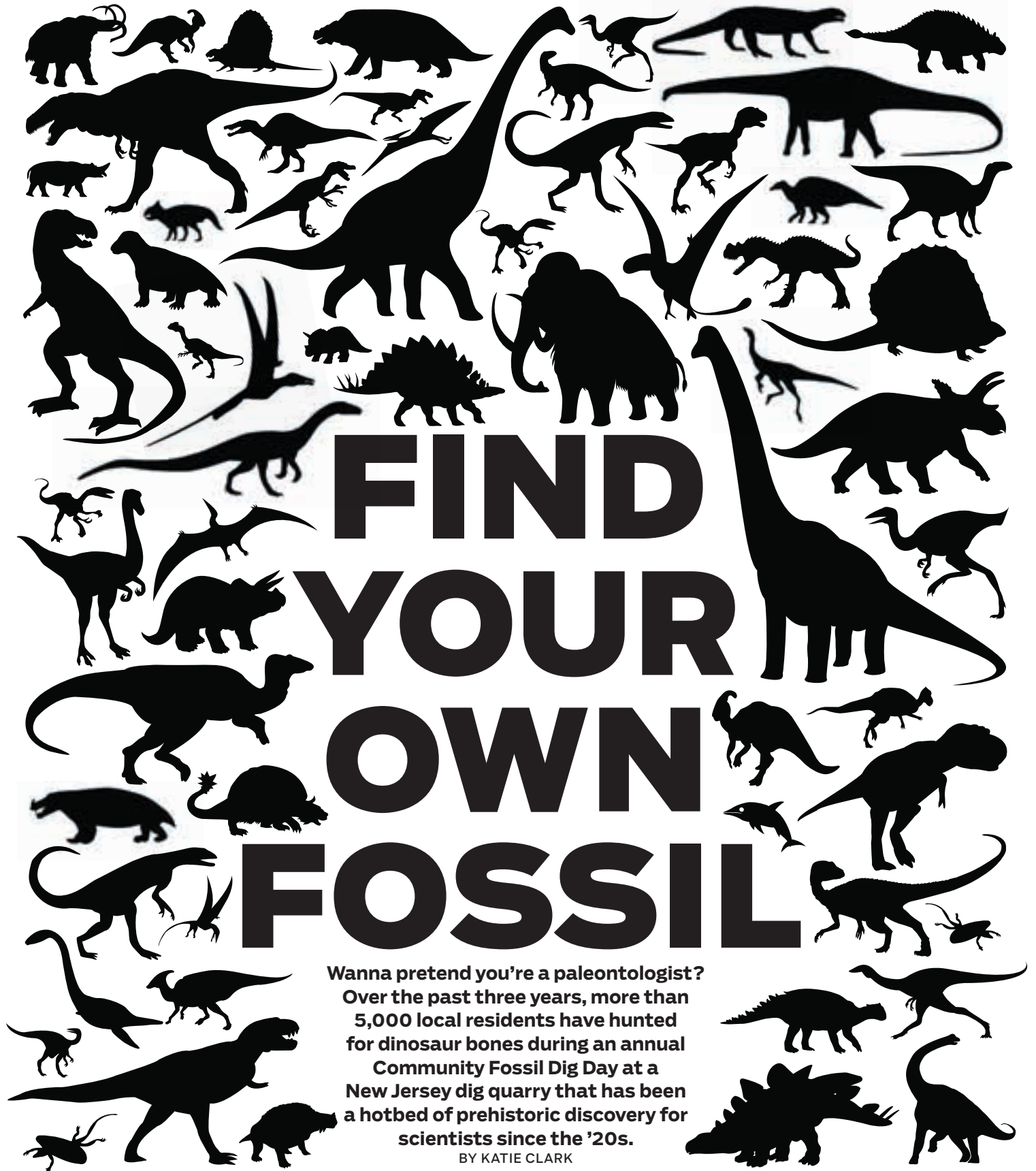
The Editor replies: *Thank you for contributing additional context to the story of Drexel’s role in the Mental Health First Aid program. In addition to the alumni you mention, current students are working on the evaluation and the program leaders intend to hire more as the project expands. While this article focused on introducing the evaluation portion of the project, we hope to follow the program as it evolves over the next couple of years and report more fully on the outcomes of the research and the connection to Drexel and its students.*

Did you know?

You can **increase your retirement income** and **support Drexel University** at the same time.

To learn more about the advantages of a Charitable Gift Annuity, contact **David Toll, JD**, associate vice president, at **dtoll@drexel.edu** or **215.895.1882**.

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FIND YOUR OWN FOSSIL

Wanna pretend you're a paleontologist? Over the past three years, more than 5,000 local residents have hunted for dinosaur bones during an annual Community Fossil Dig Day at a New Jersey dig quarry that has been a hotbed of prehistoric discovery for scientists since the '20s.

BY KATIE CLARK



The first year, Mantua Township, N.J., resident Kristin Sullivan wondered why there were tons of cars and police activity near a shopping plaza about a mile from her home. But she spotted a friend who was directing traffic and the next day she made a point to ask him what all the fuss was about.

"When he told me, I was interested right away," she recalls.

The following year, she made sure to bring along her 84-year-old grandmother and her two young sons.

Sullivan makes the annual Mantua Township Community Fossil Dig Day a part of her year every September. In the three years since it started, the event has seen more than 5,000 people come through southern New Jersey's Inversand Quarry, which has been a fossil dig site for generations of scientists continuously since 1926.

Drexel paleontologist Ken Lacovara — the same researcher who discovered the massive *Dreadnoughtus schrani* fossil in Patagonia described on page 20 — leads the dig event, but hunts for fossils year round there with Drexel students.

"Dinosaur paleontology began in New Jersey," Lacovara says. "The world's first discovered dinosaur was in Haddonfield, N.J., and was studied at what is now the Academy of Natural Sciences of Drexel University."

Sullivan loves the dig event because it's just so cool, and so close.

"There's a lot of pride that goes along with it," she says. "It's neat for us that we live so close, knowing that we have this amazing



"Dinosaur paleontology began in New Jersey. The world's first discovered dinosaur was in Haddonfield, N.J., and was studied at what is now the Academy of Natural Sciences of Drexel University."

— Ken Lacovara

place right near our house, and we have access to it."

Attendees of all ages at the event have the opportunity to dig for their own fossils and learn about the site's history and scientific importance, then observe the live excavation area where Drexel students are unearthing scientifically significant, articulated vertebrate fossils, like sea turtles and crocodiles. Attendees often find marine animal remains from 65 million years ago, including fossilized shark teeth, shark feces and clams — and in most cases they can take home what they find.

"It doesn't matter if you're 3 or 93, it's just an amazing day. Everyone is just so excited to be a part of it," Sullivan says.

Individuals interested in joining the waiting list for the 2015 Community Fossil Dig Day and groups interested in arranging other site tours and field trips should contact Michelle Bruner at mbruner@mantuatownship.com. [D]



DYNAMIC DUO

The man in this image is Theo Padnos, an American journalist who was released about six months ago from captivity in Syria.



He wrote about his kidnapping and release in a moving account for a forthcoming issue of *The New York Times Magazine*, whose photo editors needed a portrait of Padnos to accompany the story.

So they called Andrea Modica, an associate professor in the Department of Photography in Drexel's Westphal College of Media Arts & Design. She has built a name for herself by shooting highly emotional assignments. This would be her third *New York Times Magazine* cover.

She accepted the assignment on a Saturday morning and by mid afternoon, she was on the road to New England. By her side was an assistant she hired for the shoot, someone who she knew was right for the job and whom she could trust: one of her former students.

Before Modica called him, Mike Arrison '12 had fallen into a humdrum, just-doing-it-for-the-paycheck, 9-to-5 life. Somehow, somewhere he had lost the motivation to photograph. This assignment changed everything.

"This kind of relit my passion for why I got into photography in the first place," he says. "It reinvigorated me to get back out and start shooting again."

Arrison says he plans to continue working on indie film sets, shooting behind-the-scenes production stills, which he's been doing in his free time. And Nazraeli Press just published a monograph of Modica's work, "L'amico del cuore," which means "friend of the heart" or "best friend." Both former student and teacher are loving life behind the camera.

**STRESSED-OUT STUDENT'S BEST FRIEND**

Meet Jersey, Drexel's newest staff member and year-round, on-site therapy dog.

That's right: a therapy dog. It's been scientifically proven that playing with a dog can reduce blood pressure and lower anxiety and depression in college students.

But stress is not a prerequisite for students to visit and play with Jersey, says Kathryn Formica, coordinator of student fitness and wellness at the Drexel Recreation Center, and Jersey's adopter and sponsor. "Some students just really miss their family dogs from home," she says.

Next time you're in the Recreation Center, look for this handsome guy, a Carolina mix blend with an easy-to-spot therapy-dog bandana and his own official DragonCard.

DREXEL'S FIRST TRUE 'TOWN SQUARE'

Raymond G. Perelman Plaza, the reimagined outdoor space along the former 32nd Street between Market and Chestnut streets, has transformed the campus center of gravity at Drexel.

In place of an older, congested walkway is a wide swathe of pathstones, ample shading around comfortable benches, and a design that provides natural beauty as well as integrated stormwater management and rainwater usage.

"Perelman Plaza will do so many things for Drexel, providing the only outdoor space capable of seating a large event," says Bob Francis, vice president for University Facilities. "It will beautify. It will be a primary connection to Chestnut Street and expanded retail on Drexel's southern flank. And it will provide a visual connection north through the Innovation Neighborhood, all while moving large volumes of people."

THIS ONE'S FOR THE CHILDREN

The William Penn Foundation and Drexel have teamed up to help young children living in West Philadelphia get a strong start in life.

The foundation and Drexel are working together with community child care centers and other local agencies to help tackle some of the issues facing early childhood education. The partnership will support the West Philadelphia Early Childhood Education Initiative to increase the supply of high-quality child care in the Mantua, West Powelton and Belmont neighborhoods, an area plagued with low-quality child care options.

A year ago, West Philadelphia was designated one of five national Promise Zones, a new federal initiative that aims to revitalize high-poverty communities across the country. This new collaboration between the William Penn Foundation, Drexel and other partners will help address some of the educational challenges that the Promise Zone program seeks to alleviate.



ALE FOR ALL

Beer brings people together, says Lynn Hoffman, a professor in Drexel's Center for Hospitality and Sport Management. And now, beer brings people together at Drexel — through the "Fundamentals of Beer," a new course Hoffman teaches that launched in the fall.

Hoffman has a passion for the brew and has authored several books on beer and wine. Beyond just being an enjoyable beverage, "beer is the fastest-growing part of the hospitality industry and our students need to be knowledgeable about it," Hoffman says.

Here is maybe the best part: there are several spots in the class open to the public. That means you, alumni. For a few hundreds bucks, you too can grab your own place at the bar, or rather, "classroom" in the University's on-campus Academic Bistro and learn the origins of this nectar of the gods. Only enrolled students, and not members of the public, will receive college credit.

LEGAL AID FOR DREXEL'S NEIGHBORS

In the fall, Drexel's Kline School of Law launched a new Community Lawyering Clinic at the Dana and David Dornsife Center for Neighborhood Partnerships to help residents of West Philadelphia's Mantua and Powelton neighborhoods. The clinic can assist with basic legal questions like where to file a complaint, organizing wills and estates, and full-scale representation in a court of law.

The clinic is free to residents, and it helps Drexel's law students gain experience working with real clients.

Third-year law student Stephany Gordon is one of them.

"This is an experience I wouldn't be getting in the classroom," she says. "To see your work come to fruition versus just writing a brief or taking a final exam — the one-on-one contact and being able to help someone is just amazing."

The clinic is run by Rachel López, an assistant professor in the Kline School of Law. It is staffed by third-year students who are certified legal interns and can appear in court.



A NEW INSPIRATION STATION

Often, the hardest part for writers is getting started. A new public workshop run by Drexel is hoping to change that.

The Drexel Storylab, set to open in March, invites writers from the community to look to the University's past for inspiration. From the Robert and Penny Fox Historic Costume Collection to the rare archival artifacts of The Drexel Collection and the Academy of Natural Sciences of Drexel University, Drexel's treasure troves of historic objects can now serve as inspiration for aspiring writers.

The Storylab's "Insider Access Workshops" will bring writers behind the scenes to experience Drexel's collections and then engage in writing exercises inspired by them. The workshops will be taught by Drexel faculty and visiting writers who are accomplished in their fields. Drexel alumni can enroll at a discount.

"Whether an engineer, a ballet dancer, a jockey, emergency room nurse or lawyer, everyone has a story to tell," says Nomi Eve, an author and writing instructor who will direct the lab. "Storylab workshops will honor the storyteller in everyone, and will endeavor to give people the tools to tell their own tales."

HIGH QUALITY OF LIFE, FOR LIFE

Individuals on the autism spectrum face lifelong challenges as they grow into adulthood, yet little research has been done on how life unfolds for people on the spectrum.

Drexel's Life Course Outcomes Program in the A.J. Drexel Autism Institute is one of the few research programs tackling this underrepresented area.

A recent \$3.6 million gift

from an anonymous donor will help the program's director, Associate Professor Paul Shattuck, conduct research and collect data that addresses questions about quality of life across the entire lifespan: Are children getting diagnosed and entering services at an early age? What's holding back more adults on the spectrum from attending college or becoming gainfully employed? What kind of services do people receive

compared to what they need? What's working and what's not?

"We need to know if the billions spent to move the needle on life outcomes like employment, health, community contribution and social participation are having a measurable impact," Shattuck says. "This gift positions the institute to lead the way in figuring out how to strengthen the connection between efforts and outcomes, so we know what's working for whom."



The Close School's Cool Scoop

Eric Bassett joined the Close School of Entrepreneurship's first-ever entering class to learn how to keep innovation alive in his family's century-old ice cream business. BY JOSEPH MASTER

It's 7 a.m. and Reading Terminal Market will open in an hour. Vendors ready their stations. Flat screen TVs illuminate. Coffee percolates. Prep work begins for a day that will see more than 16,000 customers pass through Philadelphia's most-visited tourist destination.

Eric Bassett, 21, blue-eyed with a youthful face that belies a sharp entrepreneurial mind, is among the merchants making their rounds. He has supply orders to sort, money drawers to fill and staff to oversee. Young though he may be, he is the general manager of his family's business, Bassetts Ice Cream, the oldest ice cream company in the nation.

Eric Bassett is the last link in a family chain that stretches back six generations to 1861, when his great-great-great-grandfather Lewis Dubois Bassett began making ice cream in his Salem County, New Jersey, backyard.

Legend has it that old L.D. Bassett was the first merchant to sign a lease in the Reading Terminal Market when it opened in 1892. But this part isn't lore: Bassetts is the only remaining merchant in the market with

the same marble counter-top — a symbol of strength for a family business that has weathered the Great Depression, penny-rubbing recessions, the decline of the railroad in a train-bound town, and, well, all of the those ordinary crises and coups a typical American family endures through the generations.

But today, like every weekday, Eric Bassett has to jump on a SEPTA train to make it to Drexel in time for his 9 a.m. class. He'll be back to work before noon, though — and back in class again later in the day. He works seven days a week while taking a full course load. Sometimes, he does homework in the market, after hours, when all he can hear is the peaceful hum of the overhead lights. He likes life this way.

"I am very proud of my last name," Bassett says. "I feel the pressure to continue the business. And I know I need to learn more."

Bassett is one of the Close School of Entrepreneurship's inaugural students — a group that includes 20 undergraduate entrepreneurship and innovation majors and 11 minors. He came to Drexel as a transfer student this fall from Saint Joseph's University's food market-

ing program after becoming disenchanted with the curriculum. It just wasn't a good fit.

"My program was all about working for corporations," Bassett says. "I don't want to work for the boss. I want to be the boss. When I heard about the Close School, I said, 'Can I get in on this?'"

Since the Close School's launch in January 2013, much has been written about its sound-bite-ready message of developing and incubating student startups. But little has been said about its goal of teaching students the skills necessary to innovate within established companies. While the latter is the less provocative message, it might prove to be the most important.

"Eric represents a misconception that we are hyper-focused on just helping students to launch companies," Founding Dean Donna De Carolis says. "Not all students will launch companies before graduation. Not all students want to launch companies, either. Eric is the perfect example. He's here to take what he learns and apply it to a family business, his life."

De Carolis has made it her mission to let the press, parents and most importantly, students, know that entrepreneurship is a mindset, not a business model — and that earning a degree in entrepreneurship and launching a venture aren't one and the same. In a recent guest column in *Forbes*, she wrote: "Maybe [entrepreneurship] is starting a company; maybe it is



Eric Bassett in Reading Terminal Market

JEFF FUSCO



"I don't want to work for the boss. I want to be the boss."

— Eric Bassett

presenting a new idea to your boss; maybe it is choosing to pursue a degree; maybe it is physically moving to another location...the choices are endless and we face them throughout our lives.”

Her message has struck a chord. After the Close School was established in early 2013 with a gift of \$12.5 million from the Charles and Barbara Close Foundation, there has been a flux of national press and even a vote of confidence from two-time Drexel alumnus Stanley W. Silverman '69, '74 and his wife, Jackie, in the form of a \$2 million gift to endow De Carolis as the first Silverman Family Professor of Entrepreneurial Leadership.

In April, the Close School became the first freestanding school of entrepreneurship in the nation to offer degrees. The inaugural 2014 class came a full year ahead of schedule. It happened that fast.

“The recognition for the Close School has been so meaningful,” De Carolis says. “It lets us know that there is a market demand for our brand of hands-on entrepreneurship education. But more importantly, it allows us to reach the students. That’s why we’re here.”

While the Close School’s 25-course undergraduate program includes glamorous gems like “Launch It!” and “Ready, Set, Fail” that focus in-depth on venture creation, there are also classes like “Dynamics of the Family Firm” and “Franchising” designed to teach intrapreneurship — the process of acting as an entrepreneur within an existing organization.

It is this duality — a two-fold mission of helping to develop student startups while teaching students the personal skills necessary to innovate anywhere, in organizations large and small — that can sometimes bury what De Carolis calls the Close School’s greatest mission.



Close School Founding Dean Donna De Carolis with students Will Andrew and Will Cartwright.

“We are preparing students to create their lives and careers in the 21st century,” she says. “Regardless of what those careers are, it is our job to prepare them to not only enter the workforce, but to be pioneers in whatever field they chose to enter.”

As for Eric Bassett, he’s already made his choice. He came to the Close School for the good of the family business, and he finds a certain sense of nobility in his decision.

In addition to serving as general manager for Bassett’s Ice Cream, Eric also serves as managing partner of the Market Bakery, another family-owned shop located just across the aisle from Bassett’s in the Reading Terminal. He’s also the general manager for The Original Turkey, a company his father, Roger, opened at the age of 21 as an offshoot of the family business to capitalize on the lunch crowd.

Like his son, Roger Bassett earned his stripes inside the Reading Terminal Market. He has served presidents, mayors, tourists and vagrants — all demographics, from all walks of life. He started The Original Turkey from nothing and grew it to 20 franchises before selling them off to focus on the flagship store. He refers to Reading Terminal as “his office” and he is extremely proud of his son.

“Transferring to Drexel was the best decision he could have made,” the elder Bassett says. “An entrepreneur is someone who wakes up in the morning thinking about what they are going to do different today, not taking ‘no’ for answer, not being afraid to fail and loving every minute of it. Eric is an entrepreneur.”

Like his father before him, and the generations on his shoulders, the younger Bassett has no intention of leaving the fold.

“I want to take what I learn at Drexel and put it back into the business,” he says. “I want to learn something new. Something I can actually use. Here, at the Close School, they want you to develop an idea and run with it. I’ve never seen anything like it.”

Bassett is full of ideas for the family business. But for now, he’s keeping mum.

“I know what I’d like to do,” he says. “I’ll have to pitch it to the family.” [D]

Practice What You Teach

Drexel’s new home for the College of Nursing and Health Professions provides services to the public. BY KATIE CLARK

Drexel’s College of Nursing and Health Professions recently opened a 23,000-square-foot faculty practice called Parkway Health & Wellness in the Three Parkway Building in Center City.

The facility is open to the public and provides clinical services ranging from primary care to behavioral counseling and physical therapy. It accepts major health insurance plans for most services, including physical therapy. For services less commonly covered by insurance, clients pay based on a sliding fee scale. Services are provided by doctoral and professional student trainees under the supervision of experienced Drexel faculty.

The faculty practice format, common to medical schools, allows faculty to practice their clinical skills and students to gain valuable clinical experience through supervised practice with patients.

Integration with research is also a major part of the vision for the site. Parkway Health & Wellness is co-located with new Drexel nursing and health professions research labs, providing faculty and students opportunities to translate new findings into clinical practice. Individuals interested in seeking services can call 215.553.7012. [D]



The Not-So-Secret Life of Keith Forsyth

A recent book and documentary recounts how a group of activists including Drexel alumnus Keith Forsyth '92 burglarized an FBI office to expose its secret surveillance of anti-war protesters in 1971.

His classmates and professors didn't know it, but Keith Forsyth was guarding a huge secret as a graduate student at Drexel University in the early '90s.

In fact, most of his friends, neighbors and fellow Americans didn't know about the secret either until last year, when Forsyth came forward as one of the eight Vietnam War protesters who broke into an FBI office in Media, Pennsylvania, in 1971 and leaked over 1,000 classified documents to the press. Forsyth, who at the time was a 20-year-old cab driver and political activist, was responsible for breaking the office's lock. He and the other members of the Citizens' Commission to Investigate the FBI remained unknown until 43 years later, long after the statue of limitations ran out and the 200-man FBI investigation closed.

The documents revealed that the FBI was secretly spying on anti-war, leftist and civil rights groups, and the bombshell revelations contributed to public outrage and congressional hearings that undermined J. Edgar Hoover's iron rule.

Now, in the aftermath of Edward Snowden's NSA revelations, their actions and their impact on the public perception of the government are the subjects of "The Burglary: The Discovery of J. Edgar Hoover's Secret F.B.I.," a book written by a former *Washington Post* reporter, and "1971," a documentary that premiered at the Tribeca Film Festival and was backed by Laura Poitras, the Pulitzer Prize-winning filmmaker who was among the three reporters to meet with Snowden in Hong Kong.



Now the principal engineer and program manager at Avo Photonics, a photonics manufacturer in Horsham, Forsyth has opened up about his past in interviews with *The New York Times*, answered questions in a Reddit AMA and spoke with his fellow perpetrators during the documentary's Philadelphia premiere at the National Constitution Center. Recently, *Drexel Magazine* asked him what persuaded him to go public. — *Alissa Falcone*

Q: Now that the story is out, you've been getting a lot of publicity. What did it feel like to finally have this out in the open?

I have mixed feelings about it. I was never an advocate for publicizing our actions. We had very good reasons for not making what we did public. The value of what we did, for the most part, had nothing to do with who we were. In fact, that probably would have been a distraction.

Some other people convinced me that this was something that had some historical impact and that it would be good to get documentation on the record before we all pass away. So I was

convinced that, especially given what's been happening in recent years with the Patriot Act and the abuse of rights by courts and the stuff that Edward Snowden revealed, it might be a good time to talk about it again.

I thought that it might be a vehicle for stimulating that conversation over again, and this maybe would have a good effect on our country. Usually the NSA and Edward Snowden comes up as a topic in every one of these public forums, so that part has been great.

But I'm never going to be entirely comfortable with talking about myself in public. I'm from a small town in Ohio and that's just not something we do.

Q: Did you expect this kind of reaction?

It's about what I expected, but I wasn't sure what to expect. I wasn't expecting any more reaction than this, but I wasn't sure that there'd even be this much, especially among younger people. There's been more interest from that group than I really expected.

Q: What do you think about activism in America today? Are young people less inclined to question the status quo now?

Certainly there are fewer and smaller street protests, acts of civil disobedience and other political activity outside of electoral politics than there were in the '60s and '70s. That's partially because we achieved many of our goals, including making many forms of race and sex discrimination illegal and helping to stop the war in Vietnam (the Vietnamese did the heavy lifting). It's also a fact that mass movements are the rare exception in history, not the rule. Fighting the system on the streets is hard, frustrating and sometimes frightening; you have to have a pretty strong reason. But I don't think that young people today are less inclined to question the status quo; poll data on issues like race and Edward Snowden show that. [D]

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THE ACADEMY
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Trachelophorus giraffa

A BUG'S AFTERLIFE

The Academy of Natural Sciences of Drexel University's insect collection now has an upgraded resting place within the Academy and a new life online.

BY SONJA SHERWOOD

The insect world is so diverse that if you lined up every living organism on the planet side by side, every fifth one would be a type of beetle — with beetles being just one Order within the Class Insecta.

Identifying, cataloging and preserving all of these creatures is a gargantuan task, but it just got a little easier for the entomologists at the Academy of Natural Sciences of Drexel University.

The Academy recently completed a digital index of every specimen in its Entomology Collection in concert with a two-year, \$1 million renovation of its insect storage facility.

Now, scientists anywhere in the world can access the collection and request specimen loans through the new online relational database. The collection contains many beautiful specimens with spectacular morphology and color patterns, some of which are featured on the opposite page.

The collection totals more than 2.5 million insects — 106,000 species preserved in over 17,000 storage cases — and is one of the larger and more taxonomically complete entomological collections in North America. It's as old as the Academy itself, and includes some of the earliest North American specimens. Some of the collection, such as the Orthoptera and related orders (grasshoppers, crickets, katydids, cockroaches, etc.) rank among the best in the world, and it includes many insects that are important to medicine or agriculture.

Up until recently, these irreplaceable specimens were housed in exposed wooden shelves in a room with no climate control,

under threat of being devoured by carpet beetle larvae (beetles again!), which thrive on dried organic material.

"Until fairly recently we depended on fumigants such as naphthalene to control the infestations," says Jason Weintraub, the collection manager for the Department of Entomology. "But it's not good for scientists to inhale the vapor 24/7."

The renovation allowed the Academy to install new hermetically sealed steel cabinets with tight-fitting gaskets around the doors and an HVAC system to control temperature fluctuations and humidity, as well as a new "clean-tile" ceiling to reduce hiding places for pests.

The new, compact shelving expands the collection's storage space by nearly 20 percent, ensuring that the Academy can continue to accommodate new accessions and protect and preserve the collection for future generations of scientists. "We're adding hundreds of thousands of specimens each decade," says Weintraub. **[D]**



Megascolia procer



Papilio andraemon



Lytrosis sinuosa



Tosena paviei



Corydalis sp.



Scamandra thetis



Mictus sp.



Tagoidea nigrofasciata

from the **DAC**



THE COMEBACK

The Drexel paintball team is in the midst of a comeback.

Twenty years ago, the Drexel paintball team, a club sport at the University, was founded as one of the earliest college paintball clubs in the country. In fact, Drexel's club was a founding member of the National Collegiate Paintball Association (NCPA), which governs college paintball.

In 2010, Drexel's team had an amazing season, and won the NCPA Championship and was even featured on "Fox College Sports." But shortly afterward, there were issues, namely administrative ones and, as one can expect, members slowly started graduating. In January

2014, the team started the second chapter of its two-decade history. The team gained re-recognition, and played every event in the regular season, earning several podium finishes and a place in the final eight of 50 teams who participated in the college championship tournament. This year, the goal was to gain more players and move up in the ranks in the Northeast Intercollegiate Conference (NEIC) of the NPCA to further solidify the team's comeback story.

"Paintball is definitely one of the most intense sports you can play," says Anthony Varenas, the club's president and an undergraduate student in the College of Arts and Sciences. "It's loud, it's dirty — we've played in the snow, mud and even torrential rainfall — there's a lot of yelling across the field, and plays happen during split-second windows of opportunity."

The best way to describe the sport, he says, is like an intense combination of dodgeball and capture the flag — but not the elementary school, gym-class versions. And, the team members are not "creeping around out in the woods in camouflage," Varenas says, referring to the more widely-known type of paintball, woodsball, which is played in a wooded outdoor space.

Instead, the team plays speedball, which means the games take place on a netted 50-yard field, with inflatable air bunkers placed in a specific layout that is mirrored on both sides. Each team plays five players who start on opposite sides of the field and then sprint, dive and take cover to eliminate opposing players by hitting them with a paintball, a gelatin capsule filled with water- or oil-based paint. The goal is to capture the flag at the center of the field and hang it at the opposing team's start box. Flashy uniforms are accompanied by a paintball marker (or gun) setup, pods of paintballs for reloading, and, most importantly, a mask and goggles. The players must take measures to protect themselves from paintballs, which can travel up to 300 feet per second.



KIDS

Drexel's paintball team is back after a four-year hiatus — now with alumni coaches and a killer season in their sights. BY ALISSA FALCONE

"A person is not even allowed on the field without a mask," says Varenas. "Safety is taken very seriously and enforced by numerous referees on the field whose responsibility is to ensure players are safe and the games are fairly played."

Fortunately, interested students don't need to have the equipment or skillset to join, said team captain Luigi Cervantes, an undergraduate student in the LeBow College of Business.

"We want players who can be committed to attending practices and team workouts to improve and play tournaments," Cervantes says.

Practices are on Sundays, at the Playground Paintball Park in Mantua, New Jersey, Drexel's home field. The team runs drills on shooting and target obstacle courses, and even plays against other local teams or schools, including Temple University, Rowan University, Rutgers University and Penn State University.

Currently, the team plays in Class AA of the NEIC, playing against other schools in a bracketed tournament format. They hope to move on to Class A next season, which promotes a higher level of play and the opportunity to play more competitive schools in a faster-paced format. To get there, though, the team will need more funds and more players, for substitutions.

As one of the splashiest and colorful club sports programs on campus, Drexel paintball is also one of the most familial.

Last season, for the 2014 National Collegiate Championships in Florida, the team decided to drive a rented RV down the East Coast, since it was cheaper than airfare and included sleeping arrangements.

"Everyone was digging our RV when we rolled up to the field," says Orlando Lam '14, one of three alumni who coaches the team.

Several of the players also play on a local team with alumni when the college season finishes in April (college paintball season runs from September to April). Zapantis and Orlando Lam coach the team with Jon Cuccinello '14.

"There is a camaraderie involved in the team," Zapantis says. "We try to make sure everyone is having fun." **[D]**

As much as competitive paintball is about eliminating the other team and hanging the flag, there is also a fashion element to the game, says head coach Michael Zapantis '10, who played on the 2010 Championship team. "Everyone tries to be unique and have their own style when it comes down to wearing headgear, matching or non-matching equipment colors, jersey or pant designs and cleats. Players will go great lengths to stand out, on and off the field."



MATTD PHOTOGRAPHY

The Great Defender

Senior Melissa Chapman ended her career with the Drexel women's soccer team in November, but not before leaving her mark. Her defensive prowess and surprising sum of game-winning goals helped take the team to two appearances in the CAA tournament, a level never before reached in the team's history.

BY MIKE UNGER

Fortunately for the Drexel women's soccer program, Melissa Chapman listens to her elders.

When the Landsdale, Pennsylvania,

native was a high school student looking at colleges, three criteria stood above the rest: she wanted to attend a university in a city, one with top-rate academics, and she needed to play big-time collegiate soccer. She found her answer in the cafeteria at the retirement home where she worked, from the mouths of the residents who lived there.

"A lot of the residents said, 100 percent, go to Drexel," Chapman says. "I learned a lot from some of those retirees."

Drexel owes them a debt of gratitude as well. A four-year starter, Chapman ended her career in November as the women's soccer program's eighth all-time leading goal scorer — a particularly impressive feat considering she's a defender.

"She's been tremendously important to our team," head coach Ray Goon says. "The team had confidence in her and they just knew that she was going to be an imposing figure in the back. She allowed everyone else to focus on their jobs."

In addition to soccer, Chapman played basketball and softball while growing up. But it was the physicality and the fine line between winning and losing that made soccer her true love.

She began the first game of her Drexel

career on the bench, then started the second and never looked back. She ended her career tied for fifth on the school's all-time games-played list. Despite being a hard-nosed defender, she tallied 10 goals over the course of her career, including a team co-leading five this season.

"She's really strong in the air," Goon says. "A lot of her goals came off of designed plays. Even though that's a strong trait for her, it's also very well known on scouting reports. To give her credit, even though she's many times double-teamed, she still finds a way. When she sees the ball, she's going to get to it."

That's exactly what happened on Oct. 12 in Williamsburg, Virginia, when the Dragons were battling William & Mary in overtime.

"There was a foul near half, and Alyssa Findlay took the free kick," Chapman recalls. "It was me and a William & Mary defender close to the goal line. I knew this was the opportunity, so I dove and stuck my head out and reached the ball first. I got a foot to the face, but it was definitely worth it."

When the adrenaline wore off the next day she had a slight headache, but no regrets. A three-time First Team All-Colonial Athletic Association (CAA) selection, Chapman helped lead Drexel to its first two appearances in the

conference tournament. She did so, her teammates say, by example.

"She motivates people by the effort she puts in," says senior goalkeeper Eve Badana, who describes her former roommate as quiet at first, then silly in a lovable way. "She was a really big presence on the field. There were a lot of times when she came out of nowhere and saved the back line. If you didn't know her you'd think she was just a wrecking ball. She'll go up for 50-50 balls and I'll put my money on her every time to win it."

As a kid, Chapman would tag along with her dad as he drove 18-wheelers. As the rig rumbled over bridges, she sat captivated. The structures still amaze her. A civil engineering major, she's completed co-ops for the Philadelphia Streets Department and in the transportation division of Pennoni Associates Inc. Both experiences confirmed that she would enjoy her chosen career: building bridges. Literally.

Soccer, she says, will help.

"You have to take initiative on the field if you want something to get done, and it's the same thing in the classroom and in the workforce," she says.

A three-time CAA Commissioner's Academic Award recipient, Chapman is scheduled to graduate in June 2016. The harsh reality of collegiate athletics is that a four-year career seems as if it passes in a flash. Although Chapman's is over, she'll remain a part of the team next season in some capacity.

"I love the game and I'm so happy that I started playing when I was 8 years old and I was able to play throughout college," she says. "It was a great privilege and something I'll never forget." **[D]**



DRUGS
YOU
TALK

THE STORY OF HOW DREXEL STUDENTS

HELPED TO DISCOVER,

UNEARTH AND PRESERVE

THE LARGEST DINOSAUR

EVER FOUND.

by Rachel Ewing

THE DAY WAS SEPT. 4, 2014, AND THE TIME WAS PRECISELY 9 A.M. ¶ At that moment, Aja Carter (BS '14) and Elena Schroeter (PhD '13) dashed out the door of Drexel's Papadakis Integrated Sciences Building. Facing the stream of crowds on the sidewalk of Chestnut Street, they shouted a long-held secret name, just because they finally could. ¶ Inside the building, Drexel paleontologist Kenneth Lacovara stepped toward a podium. He felt the weight of a decade of hard work and waiting lift from his shoulders as he told the assembled crowd in the atrium what that name and that decade of effort represented. ¶ That was the moment when a new gigantic dinosaur became real to science and to the world at large. ¶ A scientific paper from Lacovara's team, naming and formally describing the extraordinary new species, was published online then in the journal *Scientific Reports*. At 65 tons in life with a body the size of a house, this new dinosaur is the largest ever discovered for which a mass can be accurately calculated — and this

individual was still growing when it died.

With a skeleton far more complete and well preserved than any other of the largest-known dinosaurs, this specimen is poised to reveal new information about the physical workings of life at the upper limits of size for animals on land.

For many people, hearing this news and that name was a moment of awe, discovery and delight.

For those closest to the beast, who had labored over its 145 enormous bones over the past decade, it was the moment of release.

Outside, Carter and Schroeter shouted at the top of their lungs: “*Dreadnoughtus!*”

Everything is Multiplied

Schroeter first met the dinosaur *Dreadnoughtus schrani* in the winter term of 2009, when she traveled to southern Patagonia in Argentina.

It was the first year of her graduate studies under Lacovara and the team’s final field season digging up the *Dreadnoughtus* skeleton there. As she got to work on her major task that summer of shoring up the bones’ protective plaster casts to prepare them for shipment, she quickly learned one of the defining truths about

this dinosaur: “Work goes into every discovery when you have a dinosaur that’s brand new. But in this particular instance, everything was so big, everything is multiplied,” she says.

Getting those enormous and numerous bones out of the ground, then halfway across the world to Philadelphia and into the scientific record, took hundreds of people thousands of hours of labor. In baking desert heat, in windstorms and in multilingual legal negotiations, the scientists and students who knew *Dreadnoughtus* first, spent more time and effort on this beast than is typical of most projects in paleontology.

Over four field seasons, Lacovara estimates he spent about a year of his life sleeping in his tent in Patagonia while digging up *Dreadnoughtus* during the day. At one point during the years of fossil prep in his lab, he tried to track the hours spent at work there. (Prepara-

tion of *Dreadnoughtus* fossils was also done in the labs at the Academy of Natural Sciences of Drexel University and at the Carnegie Museum of Natural History in Pittsburgh.) He gave up and just counts the total by order of magnitude: Thousands of person-hours went into preparing those bones over a period of five years — five years spent removing the thin outer layers of rock, stabilizing decompression cracks and reassembling bits that had crumbled and holding them together with glue and putty. Thousands of hours of 3D laser scanning to preserve digital models of the bones took two years. Writing the manuscript of the scientific paper took about a year and a half.

“There are paleontologists that would step over *Dreadnoughtus* and keep on going,” Lacovara says. “Maybe they’re smarter. They would dig up and publish five dinosaurs in the



THIS IS A
SINGLE
CLAW!

JEFF FUSCO



KENNETH LACOVARA

1



KENNETH LACOVARA

2

“THERE ARE SOME PRETTY COOL NAMES FOR DINOSAURS, BUT **DREADNOUGHTUS**, FEARLESS, FOR A NON-MEAT-EATER — THAT’S AWESOME. AWESOME AS IN COOL, BUT ALSO AWESOME AS IN AWE INSPIRING.”

— AJA CARTER



1. Ken Lacovara displays some *Dreadnoughtus schrani* bone jackets excavated in Argentina. 2. Stormy skies over the remote and weatherbeaten dinosaur quarry. 3. Drexel alumna Alison Moyer going above (well, below) and beyond to jacket a single cervical (neck) vertebra from *Dreadnoughtus*.

time I spent on just this one. But I want to do the things that are hard. I feel a responsibility toward the animal. Once you find it, you've got to take care of it."

How to Hunt Giants

Finding a dinosaur in Patagonia is not difficult, if you know what to look for.

In the Connecticut-sized area where Lacovara has the rights to prospect for Cretaceous fossils, virtually every rock on the ground is a fossil, and many of those fossils are dinosaurs.

But loose rocks on the ground are usually too weathered and disconnected from other fossil bones to identify, and are separated from their geological context. Paleontologists prospect for more informative finds by looking for fossils that are still mostly buried in the sediments that preserved them. And they do this by walking with their eyes open and hoping to get lucky with a buried find.

It was the first day of the second field season when unreasonably good luck struck in the form of one tiny piece of bone peeking through the sediment.

At first the field team members thought it was fragmentary like everything else, recalls Christopher Coughenour (BS '04, PhD '09), who was on the first day of his first paleontological dig ever as a first-year doctoral student in geology under Lacovara after earning his undergraduate degree in physics.

"We started to excavate around it and it kept getting bigger and bigger," says Coughenour. "That ended up being the discovery femur."

By the second day, with the whole field team digging, the more they dug, the more they saw, and the more they then had to dig. To extract a fossil bone from the ground, you have to dig deeper underneath to be able to stabilize the bone on a pedestal of supporting sediment and wrap it in plaster on all sides for safe transport. But when it turns out the bone you are digging has more bones underneath, you need to tunnel further down.

Find more bones, and it's time to dig deeper still.

"When we have to work to take one bone out, another bone appeared under it, so we had to go deeper and deeper," says Lucio Ibiricu (PhD '10), who was part of every field expedition with Lacovara in Patagonia — initially as an Argentinian undergraduate volunteer, then as a doctoral student at Drexel. "When we work on one bone, another bone appeared under it, deeper. This was a nice problem to have."

The next year, Lacovara came back with reinforcements: More students, including Alison Moyer (BS '08), joined the expedition.

"There was just so much to dig up that everyone was digging up something at all times," Moyer recalls. "Everybody got a section and went to it. I remember spending a lot of time on the rib yard. It was like pick-up sticks of ribs about 10 feet long."

Moyer spent most of her second field season on one bone, the cervical vertebra, or neck bone. It was three feet across and so difficult to extract that Moyer was one of the few members of the team flexible enough to get into the hole to dig underneath it.

But if it sounds like a relatively straightforward task — heads down, dig in, get it done — hold on. There were a few outside challenges.

Nights were cold, and days were baking hot. Temperatures also swung without warning.

At times in the quarry, the wind would come rolling over the hills and the team would stop and looking at each another, knowing.

"It was just enough time for us to take cover, duck down and cover our faces with our shirts," Moyer says. "It was raining dirt and rocks and the wind would just take over."

It took two more field seasons to extract all of the dinosaur's remains.

Chipping Away

For the first several field seasons, while plaster jackets filled with *Dreadnoughtus* bones piled up in the team's gaucho's mother's chicken yard, Lacovara remained unsure whether the bones would ever leave Argentina for detailed study.

Fossils found in Argentinian soil belong to that country, and negotiating a research loan in a multilingual mix of science and legalese took countless suspenseful hours of negotiation and muddy translation. By 2009, the loan was finally secured.

The dinosaur arrived in Philadelphia by cargo ship with a total of 234 jackets protecting 16 tons of bones. A boisterous crowd celebrated opening the shipping container at the port on May 1, 2009.

Then a group of 20 experienced fossil preparators got to work unloading the heavy jackets from the truck.

Aja Carter (BS '14), then 18 years old and not yet a Drexel freshman, was among them. As a volunteer at the Academy of Natural Sciences, where *Dreadnoughtus* field team member Jason Poole manages the fossil prep lab, Carter had heard rumors about this giant dinosaur since she was 14.

Unloading the truck filled with extraordinarily large bones was humbling for Carter. This dinosaur sealed the deal — she was definitely attending Drexel.

The years of Carter's undergraduate study were the same years of *Dreadnoughtus*' lab preparation and study. Lacovara and his graduate students regularly invited undergraduate volunteers to come by the fossil lab and get involved in the process of preparing a piece of prehistory for future study.

Carter put in far more of her prep time over the years at the Academy of Natural Sciences, which began its affiliation with Drexel two years after the arrival of *Dreadnoughtus* bones, in 2011. As a longtime volunteer, Carter spent many of her undergraduate years in the Academy's public-facing lab while preparing this dinosaur.

"I got to see kids' faces, gaping, wide eyed," she recalls. "We had this femur propped against the wall. They didn't always know what a femur was, but when I asked them to look at their thigh bone, and then said 'This one bone is as tall as your mom or your dad or your aunt' — it took them a second, but then they got it."

Lab and Family Secrets

Lacovara's son, Rudyard, now 7 years old, may be the one person in the world who is the least impressed by *Dreadnoughtus*. He was not quite two when the shipping container filled with fossils arrived in Philadelphia, so he has no memory of life before his dad had a dinosaur, or before it had the name *Dreadnoughtus*.

And for all that time, the name was the family secret, never to be spoken in public.

The secret was also shared among members of Lacovara's lab and the scientific collaborators from other institutions who worked on describing the species. The secret was for good reason: A new species name isn't real until it's introduced in a scientific paper, so it had to be closely held. And a name as cool as '*Dreadnoughtus*' or 'Fears Nothing'? That's one you want to keep for yourself.

Going hand-in-hand with that secret was one other rule that shaped life in Lacovara's lab for a period of years. The rule was written clearly on a sign in Lacovara's lab for the better part of that decade: "No photos."

It was unlikely, but still possible, that if any pictures of the bones had appeared online then another scientist could have used information from the photos to describe and name it as a new species, beating Lacovara's team to the punch. To eliminate that risk, Lacovara disal-

lowed outsiders from taking photos in the lab, except when the dinosaur's bones were covered up. For lab insiders, photos they took remained hidden away and saved for the future, or posted only on the lab's private Facebook group.

"The picture thing was the weirdest," Schroeter recalls. "People are taking pictures of salt shakers and putting them on Twitter. But you can't do that with arguably the most important thing in your life at that moment."

When she graduated with her PhD in 2013 based primarily on work with *Dreadnoughtus*, Schroeter proudly posed for photos in the lab beside her parents, professors and fellow graduate students, while wearing her cap and gown — but not on her parents' cameras. She had to take a separate "Facebook-safe" photo without the bones to share that moment with extended family and friends.

The Aftermath and the Afterlife

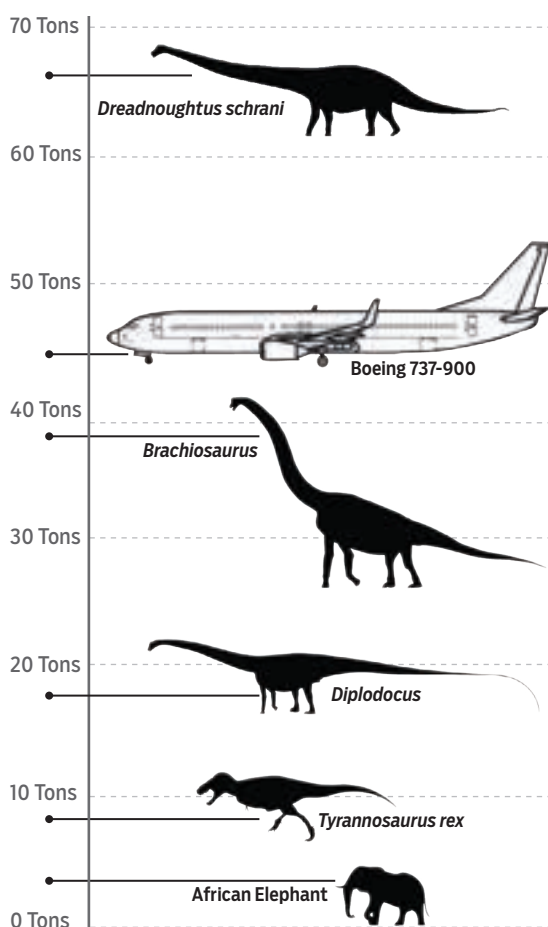
The floodgates to share *Dreadnoughtus* — the name and all the photos — burst open on Sept. 4. That day, Lacovara was inundated with media requests, appearing on national and international television and radio broadcasts and commenting for print and online news stories worldwide. Most of the rest of the team spent the morning frantically posting years of old photos and stories to Facebook, at long last.

That initial joy of sharing the experience of finding *Dreadnoughtus* was only the beginning of what the dinosaur's public unveiling is bringing to life.

Much of that is the wonder of the life that *Dreadnoughtus* lived, before it became a pile of buried bones. What makes this animal so interesting, so worth the decade of hard labor for dozens of people, is all that those bones reveal about the living animal it once was and about the potential for life on Earth, previously unknown.

Dreadnoughtus, for an animal so astonishingly huge, somehow managed to do all the ordinary and mundane tasks common to life, from eating and walking to breathing and reproducing. Yet doing so for an animal so large is hard to contemplate. Can you picture a two-story house eating, breathing and sometimes standing up to take a walk? You would want to get out of the way. You would wonder how it's possible. And now there's potential for scientists to find out.

Sixty-five tons and as tall as a two-story house....





1

1. Plaster-jacketed dinosaur bones at Estancia Bon Accord (a ranch in Patagonia), awaiting transportation to the port. 2. Back in the lab at Drexel, students Elena Schroeter, David Schloss and Aja Carter don gear to begin the messy work of removing bones from plaster casts.



2

“**THE THING PEOPLE DON'T REALIZE ABOUT [FOSSIL]PREP WORK IS IT'S SO DIRTY.**”

—ELENA SCHROETER

The imposing size of this animal is just part of the reason for its name, inspired by early-20th-century battleships called dreadnoughts. The dinosaur's species name, “*schrani*,” was chosen in honor of American entrepreneur Adam Schran, who provided support for the research. In life, this dinosaur also would have feared no threat in its environment because of its powerful muscles. Along the 30-foot tail, each vertebra pairs with a set of bones called chevrons that have a spur of bone pointing downward where the tail-wagging muscles attached. In other long-necked, long-tailed sauropod dinosaurs, those attachment spurs taper down to a fine point, but in *Dreadnoughtus* they flare out into wide paddles for a strong muscle attachment point. This gave the creature what Lacovara calls a “weaponized tail.” It could swat any predator away easily without slowing its steady vacuum-slurp of all nearby vegetation.

Dreadnoughtus was an herbivore. Only plant-eaters can possibly grow to be the largest animals in an ecosystem because a large percentage of the energy is lost with each step up in the food chain — and for an animal as large as *Dreadnoughtus*, it would take a large percentage of all the energy an ecosystem could produce just to maintain its body size. A lot of ecological questions about how *Dreadnoughtus* lived in its environment are still unanswered, but that much is certain.

Lacovara speculates that to maintain its body size, *Dreadnoughtus* would need to eat all of the vegetation within reach of its 37-foot neck, then take a few steps to one side and start over.

Many of the remaining questions about how *Dreadnoughtus* lived and moved may be answerable thanks to the many types of bones recovered and the quality of their preservation. Lacovara and his current and former students are already working on additional scientific papers addressing biomechanical questions as well as more technical analyses of the shape of the bones.

And the impact extends far beyond Lacovara's own lab at Drexel. “*Dreadnoughtus* has become an important data set in the study of sauropods,” Lacovara says. “If you're writing about the environment, evolution and anatomy of sauropods, there's a pretty good chance you want to include this one.”

Lacovara noted it was gratifying to see that in the fall, several presentations at the Society of Vertebrate Paleontology meeting in Berlin incorporated reference to *Dreadnoughtus* in other dinosaur research.

As for the students who worked alongside him, their experience with the fossil has helped them move ahead in the field.

“*Dreadnoughtus* has really been a big career boost for the students,” Lacovara says. “Other professors know they worked on this, that they have good skills and can do the hard work.”

Moyer is now in the final year of a PhD program at North Carolina State University in molecular paleontology, a new subspecialty pioneered by her advisor, Mary Schweitzer, who famously extracted soft tissues and proteins from *T. rex* fossils. Schroeter is joining her there as a postdoctoral fellow. Coughenour is now an assistant professor at the University of Pittsburgh's Johnstown campus, where he directs the Department of Energy and Earth Resources. Ibiricu is a scientist with Argentina's equivalent of the National Science Foundation. Carter is beginning a doctoral program in paleontology at the University of Pennsylvania.

This winter, Lacovara and his students were hard at work packing wooden crates to send *Dreadnoughtus* back home to Argentina.

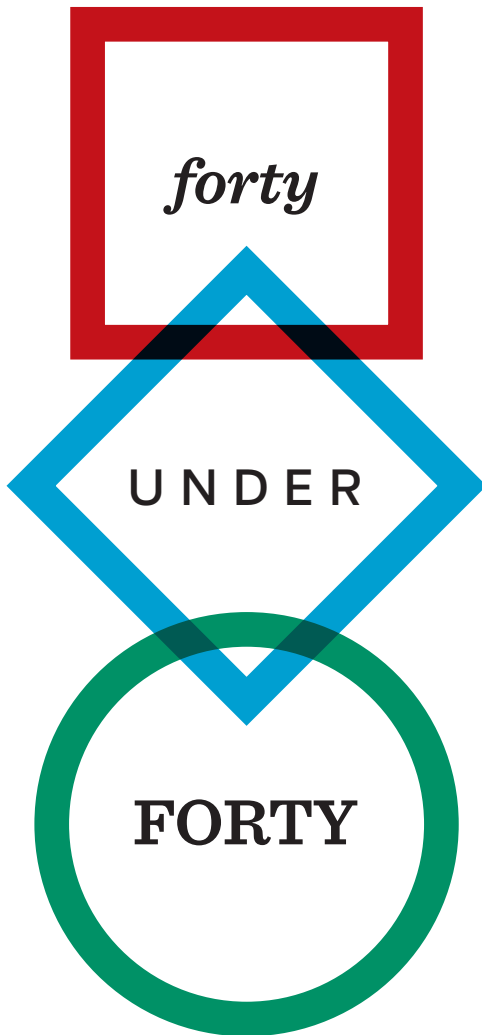
The Academy's Jason Poole once told Carter that, as paleontologists, they have the glorious job of ushering ancient animals into their afterlife.

For *Dreadnoughtus*, the afterlife has finally begun. [D]

▶ Take a tour of Ken Lacovara's dinosaur lab at drexelmagazine.org.

DREXEL
UNIVERSITY

THE
2015



THERE'S NO TELLING where a Drexel degree will take you. As we pored over this year's nominations — we received over 200 altogether throughout the spring and summer — we were impressed by the variety we saw. As Drexel has grown and flourished, so have the career paths of its graduates. Want to be NASA engineer? How about a jazz promoter or a startup CEO? Our grads work in entertainment and medicine, in the arts and the sciences, they build and they design, and many of them are quietly doing inspiring work outside of their fields. We can't claim credit for all of our alumni's successes, but we applaud you all (yes, you, whether you're in this list or not).

Thank you for being a part of Drexel's journey.

— the editors



JASON BROWNE ►

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JASON BROWNE

AGE 24



A SIMPLE IDEA. A HOT KICKSTARTER CAMPAIGN. JASON BROWNE JUST LEFT SCHOOL AND HE'S ALREADY A SUCCESSFUL ENTREPRENEUR

FOR JASON BROWNE, one of the youngest alums in this year's 40 under 40 list, graduation was the least of his worries last summer.

The recent LeBow College of Business grad was in the middle of a Kickstarter campaign for Spor, a startup he cofounded two years ago with another LeBow alum, David Hunt '14, to produce tiny yet powerful solar-powered portable chargers for mobile devices.

"We ran a Kickstarter campaign for Spor while we were graduating. Within 10 days of graduation, we had raised over \$112,000, surpassing our goal of \$100,000. Within a month and a half after graduation, we had raised over \$200,000 from a Drexel alumni investor [LeBow alumnus Francis Wisniewski '96]. And within three months, we were on the other side of the planet actually sourcing the pieces of the product in China," says Browne, who majored in business with a concentration in entrepreneurship.

People went nuts for the charger, and why wouldn't they? It can charge smartphones, tablets and cameras — isolated or at the same time — using any light source. It comes with a small solar panel, a battery that is about three times the size of an average phone battery, several different types of cables and a thick shell that can be customized with 3D printing — and it's smaller than the palm of your hand.

The success of the Kickstarter campaign changed everything. People all over the world heard about the charger, and wanted to know how to get their hands on

one. Local and national press did features on the story. Best of all, Browne says the campaign "put us in a position to go and talk to investors in a very confident way."

Having received enough capital to build the products, Spor is set to ship out over 2,500 chargers this March to those who had backed the Kickstarter campaign. Soon, Spor chargers will be assembled and shipped out of their West Philadelphia headquarters regularly. But that's not enough for Browne.

"The next step for us is developing an ecosystem around this product with larger versions of the charger, smaller versions of the charger, larger solar panels, more cables. We're basically building the best product possible for the most people possible," he says.

And to reach the most people, Browne is looking to revolutionize how people can gain access to electricity. Sure, the device is great for charging cell phones on the go, but it can do so much more than that. The powerful yet small-scale solar grid can be easily assembled and just needs sun — which is good, since only 24 percent of the population in sub-Saharan Africa has access to electricity. Browne has wanted to change that ever since the company got its start.

"Spor is such a Drexel-centered company. The only person on our team who isn't a Drexel grad is our engineer. This project has been through classes, and it's been through co-ops, including my own," he says. "I've built this company at Drexel, and because of Drexel. So I give the upmost respect and thanks to Drexel for putting me in a position to succeed." — *Alissa Falcone*

2 CAPT. RYAN J. MCCAUGHAN | 32

BS MECHANICAL ENGINEERING
AND MECHANICS '05

C-130 evaluator navigator and flight commander,
U.S. Air Force

MY GREATEST ACCOMPLISHMENT: I've flown 190 combat missions in Afghanistan and Iraq and accumulated 2,000 flight hours delivering personnel and cargo. I've conducted nine combat airdrops to support austere forward-operating bases throughout the Middle East. I've deployed to Poland to instruct the NATO partners on airdrop operations and aircraft defensive counter tactics. My greatest accomplishment, however, is probably the work I was able to do in Haiti following the 2010 earthquake. For three weeks, my crew and I flew into and out of the severely damaged airfield in Port-Au-Prince, delivering medical relief and personnel. We evacuated 170 people including newly orphaned children and reunited them with relatives in the United States. The United States saved lives in Haiti and it was an absolute privilege to be a part of that.

HOW DREXEL HELPED: My job requires a great deal of math and Drexel ensured that I have the ability to compute the complex algorithms used to calculate the precise point in time and space to airdrop a pallet of rations or a tank to an exact point on the Earth. Much more important, Drexel taught me how to creatively solve problems. I have not worked as an engineer, but to methodically analyze a situation, develop solutions and move forward has been critical to development within the Air Force. In most situations there is a hard-to-see solution clouded by preconceived perceptions or the "fog of war." I attribute my Drexel education to providing me the skills necessary to not accept a false dilemma and to locate that unseen solution. Finally, Drexel emphasized the importance of "life-long learning." Since graduation, I've earned an MS in space studies and an MA in international relations. This education combined with my career training and Drexel foundation has made me valuable to the Air Force, but also to the private sector when I decide to separate. **WHERE I'LL BE IN FIVE YEARS:** My next assignment will be at the Air Force Academy, where I'll be a professor of political science as well as military and strategic studies. From there, while still on active duty, I will apply to a PhD program in one of those fields and continue to teach at the university level. I'm excited to help create the critically thinking aviator and officer necessary to face America's future complex security paradigms.



BRIAN D. DEAN | 38

MS CLINICAL RESEARCH ORGANIZATION AND MANAGEMENT '14

CEO and co-founder, CliniTx International Inc., and founder, Dean Clinical Consulting

3 **MY GREATEST ACCOMPLISHMENT:** My greatest venture is just beginning with the startup CliniTx International, a contract research organization. CliniTx manages the clinical trials that pharmaceutical companies must perform before they can receive regulatory approval to sell a new drug. **HOW DREXEL HELPED:** The CROM program at the College of Medicine provided me with a working knowledge of the service areas that CliniTx offers to the pharmaceutical industry. Courses such as biostatistics, designing the clinical trial, pharmacovigilance, clinical data management and pharmaceutical law taught me the essentials of these fields so that I can apply the knowledge to the daily operations of conducting and managing clinical trials to bring new treatments to market. **WHERE I'LL BE IN FIVE YEARS:** Continuing to guide the growth of CliniTx into new therapeutic areas and conducting clinical trials in new regions of the world.



NO.4 ELLIE PYLE | 38

BS PLAYWRITING AND SCREENWRITING '05

Editor, Vertigo (DC Comics)

MY GREATEST ACCOMPLISHMENT: Over the past four years, I have built a reputation in the comics industry as an editor with good taste who talented people trust and want to work with. In my free time, I also self-published two novels ("Southern Girls with Big Vocabularies" and "The Men in Between"). Forcing myself to sit down and write every now and then helps me maintain empathy for how difficult, scary and exhilarating the creative side of publishing can be. **HOW DREXEL HELPED:** I never would have thought of leaving theatre for comics until fellow Drexel alumnus (and past 40 Under 40 honoree) Tom Brennan suggested it. He had done his co-op at Marvel and was later hired as an assistant editor. He convinced me that my experience with playwriting and running a theatre would translate into the unique combination of storytelling and management skills that an editor needs. I always tell people who ask how I broke into comics that it's important to remember that the friends you're making now might become colleagues five years down the road. Additionally, Drexel gave me the vital perspective that storytelling is an art form, but it's also a job. Talent means very little without both professionalism and an understanding of how the industry works. Drexel taught me how to take a practical approach to a creative career. **WHERE I'LL BE IN FIVE YEARS:** Working with incredible talent to tell stories that mean something to their audience.

5 LAUREN FINN | 28

MPH EPIDEMIOLOGY '13

Surveillance coordinator, acute communicable disease program, Philadelphia Department of Public Health

MY GREATEST ACCOMPLISHMENT: So far, my greatest accomplishment has been my acceptance

into and graduation from the CDC/CSTE Applied Epidemiology Fellowship, which is a two-year program that places fellows at a local or state health agency. I conducted my infectious disease fellowship at the Philadelphia Department of Public

Health. My projects included numerous outbreak investigations; the development of guidance and educational materials for influenza, MERS-CoV and Ebola; and an analysis of prenatal screening practices in Philadelphia. I also spent a month

providing data management support at the Centers for Disease Control for the response to the Ebola outbreak. **HOW DREXEL HELPED:** As an epidemiologist at a local health department, the health communication and analytic skills I learned at Drexel are

vital to my day-to-day activities, which include the development of health guidance and educational materials, as well as epidemiologic investigations. **WHERE I'LL BE IN FIVE YEARS:** In five years I would like to still be working as an epidemiologist at the state or local level!



**ADAM J.
O'DONNELL**
| 36
PRINCIPAL
ENGINEER,
CISCO



6

BS electrical engineering '01, MS chemical engineering '04, PhD electrical engineering '05

MY GREATEST ACCOMPLISHMENT: Professionally, I would have to say that my greatest accomplishment so far was co-founding, building and selling ImmuneNet, a computer security firm that is now the backbone of Cisco's Advanced Malware Protection platform. I never expected to be a startup guy, but together my friends and I saw an opportunity, and built out a meaningful company.

HOW DREXEL HELPED: The undergraduate co-op program taught me how to drop into an environment and quickly generate value. Graduate school taught me how to work for the longer-term wins, and the value of severely delayed gratification in achieving my personal goals. Both of these lessons have served me well in the startup world.

WHERE I'LL BE IN FIVE YEARS: For the foreseeable future, I will most likely be building information security products. I love the challenge of the work and enjoy knowing that my ideas have a real impact globally — both in the security world and for everyday consumers. And when I do switch gears, you can expect to find me living in a commune in Sonoma dry farming a wine vineyard when the thinking machines come to enslave the remnants of mankind.

LEE SINGLETARY AGE 26

IN JUST THREE MONTHS, LEE SINGLETARY WENT FROM ANSWERING PHONES AT CBS 3 TO HEADING UP THE STATION'S NEW 24-HOUR LOCAL NEWS CHANNEL.

7 IT'S FAIR TO SAY that Lee Singletary all but staggered into television.

"I was sitting at my desk one day and I saw the first edition of 'DNews' come out and I said to myself: How cool is that!" he recalls.

He soon landed a reporter spot on the program, which led to work on "The Pre-Game," an internal Drexel television show interviewing leaders in the Philadelphia community.

"It sounded glamorous and fun and I had no idea what the hell I was doing," he says.

That didn't stop him from designing the set, writing the pilot episode and launching the show as the executive producer and host.

Since then, his 2011 business degree, combined with a journalism minor, has pushed him further into broadcasting. Today at age 26, Singletary is heading up the CBS 3 pilot news product "CBS Philly Plus," an amalgam of local and syndicated news and information running 24/7 with constant updates. He also produces "Digital News Brief" a nightly, two-minute news capsule of headlines on CBSPhilly.com. It is not work for the faint of heart.

"It's very high energy, it's exciting, but you have to really love it to succeed there," he says. "If it's a breaking news situation you have to know what to do with that information. Have you confirmed your sources? Is this information that can be reported? If you don't have an office with a door that closes, it can be a challenge to think it through."

The challenges are manifold: Getting the news right, getting the kind of information people care about, and — increasingly — getting it in the right format. With the rise of digital, Singletary and his team are pushing hard to incorporate social media into their playbook.

Working in the news helps to fulfill a range of interests for Singletary. It's creative work, it's driven by business logic, and there is an entrepreneurial spirit in bringing life into relatively new enterprises. Perhaps most important, though, is the social significance he sees in the work.

For example, he points to the case of Carlesha Freeland-Gaither, a Philadelphia woman abducted in November and rescued in Maryland soon after.

"We pushed that story out there relentlessly until that 22-year-old victim was able to come home, and law enforcement officials thanked us for that work," Singletary says. "Ultimately we are doing a service for the community when we can get out there with the correct information and disseminate it appropriately."

— Adam Stone



JUSTIN D. LATHIA | 34

BS/MS BIOMEDICAL ENGINEERING '03

8 Assistant professor, Lerner Research Institute, Cleveland Clinic

MY GREATEST ACCOMPLISHMENT: This is a tough one to answer because I think we're just getting started! We established a lab in 2012 to work on understanding how stem cell programs drive tumor progression. We have successfully competed for research grants from the National Institutes of Health and foundations, including the V Scholar Award from the V Foundation for Cancer Research and the Distinguished Scientist Award from the Sontag Foundation — this is a point of pride for us. We have also recently published several papers on how cancer stem cells function in malignant brain tumors and have had several more contributions as collaborators. Advanced cancer has a poor prognosis and I am optimistic that this can be changed!

HOW DREXEL HELPED: Drexel empowered me to look at a complex problem and break it down into its key components. It has been informative to apply these engineering approaches to a complex biological disease such as malignant brain tumors. My fondest memories at Drexel were working in teams to solve problems and I have tried to apply this philosophy to larger research questions, in which we have made substantial progress through collaborations.

WHERE I'LL BE IN FIVE YEARS: Our long-term goal is to develop therapies to advanced cancers by targeting the cancer stem cell aspects of the disease. There is increasing evidence that stem cell programs are essential for tumor growth and therapeutic resistance, yet conventional therapies do not take advantage of targeting these processes. It is my hope that in the next five years, we will have translated some of our findings using clinical relevant compounds to early phase clinical trials and also generated additional therapeutic approaches that will be undergoing validation in pre-clinical models.



DANIEL KRIEGER

NO.
9

NATALIE MARONSKI | 31

BS CULINARY ARTS '06

Chef de Cuisine, Volver Restaurant

MY GREATEST ACCOMPLISHMENT: Being named Chef de Cuisine at Volver, a Jose Garces restaurant in Center City Philadelphia, was a huge step in my career. **HOW DREXEL HELPED:** Without a doubt, my co-op was instrumental in helping me get to where I am today. Drexel provided a sense of community — the friends and colleagues I've met through Drexel have been important to my growth as a person and a professional. **WHERE I'LL BE IN FIVE YEARS:** I have no idea. My plans seem to change the more I learn, but I do know that I'd love to stay in Philly — continuing to learn and teach in restaurants.

SCOTT KAHAN | 39

MD MEDICINE '02

10 Physician and director, National Center for Weight and Wellness; and faculty, Johns Hopkins Bloomberg School of Public Health

MY GREATEST ACCOMPLISHMENT: I've been fortunate to be involved in many influential settings in connection with national obesity policy, such as working with Congress and the Food and Drug Administration, and I'm particularly proud of the patient-centered weight and health clinic my colleagues and I created in Washington, D.C. We practice a scientific and evidence-based treatment approach, but not a sterile one. I like to say that

we focus on people first, pounds second. Weight is such a personal and sensitive part of our lives. We meet people where they are, address the nuanced factors that contribute to their weight difficulties, and build strong relationships to support them through the inevitable ups and downs of long-term weight management. This seems like an obvious approach to me, but few clinics do what we do. **HOW DREXEL HELPED:** I learned how to think at Drexel. Drexel has a small, innovative medical school track, the Program for Integrated Learning, which is a case-based, self-directed educational experience. It's

one of only a handful nationwide. Rather than listen to lectures, we were expected to work in small groups and teach ourselves the medical school curriculum, with faculty support. We learned how to find and interpret medical information and how to problem-solve. I've written 14 books on medicine and public health; this program helped me

build the skillset I needed.

WHERE I'LL BE IN 5 YEARS: On a population level, I'll be working in obesity policy and building the field of evidence-based obesity medicine. On an individual level, I'll continue to work with my patients, day in and day out, supporting them through the challenges and obstacles of weight — and life.



KRISTINA MASSIE | 24

BS FILM AND VIDEO PRODUCTION '12

Second assistant director, Directors Guild of America

11 MY GREATEST ACCOMPLISHMENT:

Graduating from New York's prestigious DGA Training Program and getting my first job as a second assistant director! **HOW DREXEL HELPED:** Drexel provided me with the tools I needed to believe in my ability to make it in this business. The co-op program gave me the opportunity to move to Los Angeles for six months to make my first film contacts, and those contacts influenced me to apply for the DGA Training Program. Now, a little over two years later, I am a member of the Directors Guild of America as a second assistant director, and am currently working on a movie in Jackson, Mississippi. I get to go to work every day and love what I do. I get to see amazing places, meet interesting people, and create beautiful pieces of art. I couldn't imagine a better place I could be at this point in my career. **WHERE I'LL BE IN FIVE YEARS:** I have no idea where I'll be since productions are shooting all over the United States right now. I just hope somewhere warm! As long as I get to continue working, and visiting unique places while doing so, then I am happy with where my profession and life are heading.

ANDREI MUNTEAN | 38

BS HISTORY AND POLITICS '98

Head of Economic Governance Unit, Office of the Co-ordinator of OSCE Economic and Environmental Activities; and Secretariat, Organization for Security and Co-operation in Europe (OSCE)

MY GREATEST ACCOMPLISHMENT: Rapid professional growth at the OSCE. I started as a field officer in 2009 and became a head of the Economic and Environmental Department at the OSCE office in Tajikistan that year and later I became a political officer at the OSCE Centre

in Turkmenistan. In both countries, I have managed to bring substantial financial investments, provide targeted political and economic support, launch previously inconceivable activities with governments in Central Asia and contributed toward the growth of civil society. Personally, my greatest accomplishment is my family. They provide the sense of reason and determination to continue to perform better as a person and as an international diplomat. **HOW DREXEL HELPED:** Drexel helped shape my perception of the world and sharpened my mind. My professor and mentor, William Rosenberg, has been making everlasting

contributions toward my successes. Eric Brose and Walter High helped me in my search for facts and truth and have made me a confident and independent thinker. As a lecturer at Drexel for almost nine years, I learned many things from Drexel students. I was also privileged to serve Drexel as a director for federal affairs in the Office of Government and Community Relations along with Brian Keech and Dimitrios Boufidis. **WHERE I'LL BE IN FIVE YEARS:** I hope to remain in the realm of international diplomacy, conflict prevention and conflict resolution and make tangible contributions in my profession.

no.
12



KIERAN BILLMANN | 34

BS ELECTRICAL ENGINEERING '11



Electrical engineer, Naval Air Systems Command

MY GREATEST ACCOMPLISHMENT: I grew up in a military family and have always dreamed of getting a job in the defense sector. After graduating from Drexel, I was able to join the Department of Defense. For the U.S. Navy, I design air traffic control systems on aircraft carriers. Often working on the boat, I can see my system making an impact on the daily operations of the fleet. When I see a sailor using my system it is very rewarding and knowing that I am supporting the U.S. warfighter makes my job extremely gratifying. **HOW DREXEL HELPED:** Prior to attending Drexel, I was a college dropout in a dead-end job. I always wanted to finish my degree, but never knew how to do it. Drexel had great teachers and staff who helped me get where I wanted to be. My co-op experience in a research lab was great, but what I believe was just as essential, was the experience gathered throughout the co-op interviewing process. When I was interviewing for engineering jobs during my senior year, I had the experience of over 20 interviews under my belt. My résumé was polished, my interview skills honed and my dream job was in my sights. **WHERE I'LL BE IN FIVE YEARS:** In spring 2015 I will be finishing my MS in electrical engineering at Drexel. I plan to use my Drexel degrees to help advance in my field and become a senior engineer within my field. I look forward to tackling the future needs of the Navy.

14 MICHAEL MANGOS | 38

BS INFORMATION SYSTEMS '02

Founder, Tamman Technologies Inc.

MY GREATEST ACCOMPLISHMENT: Creating a company in Philadelphia that is locally owned, supports all aspects of the local community, creates well-paying jobs in

the new technology economy, and is a place where I actually want to work. **HOW DREXEL HELPED:** Drexel gave me the opportunity to find my voice and my path. The quality of encouragement I received from the faculty in the College

of Information Science and Technology as well as the support from administrators and faculty across the University was unanticipated and greatly appreciated. Also, the breadth of social, charitable and academic organizations on campus provided

an ideal environment to explore my interests and talents. When one didn't exist, the student life council supported me in creating it. **WHERE I'LL BE IN FIVE YEARS:** Professionally, heading my software and IT consulting and services firm as well as

running a new successful software product company. Philanthropically, growing the size of Tamman's scholarship fund, assisting local nonprofits as a "technology in business" advisor, and supporting youth education charities across Philadelphia.



NO.15 WILL NOON

AGE 34

AS THE TOURING DRUMMER FOR THE INDIE POP BAND FUN, WILL NOON ADMITS THE PAST FEW YEARS HAVE BEEN A CRAZY RIDE. IT'S A THRILLING, VOLATILE AND UNPREDICTABLE LIFE – AND HE WOULDN'T HAVE IT ANY OTHER WAY.

WILL NOON has spent the past few years traveling the country and the world, playing for thousands of fans, the reward for having the right combination of talent and luck.

The Long Island, New York, native admits that he's had a "good run," and has done more living in his 34 years than many get to do in a lifetime. But, according to Noon, 30 is the new 20, and some day 40 will be the new 20, so in his mind, he's only just beginning.

Let's go back to somewhere in the middle. Germany. 2010. Noon is working as a tour manager

for a hip-hop artist, putting his Drexel degree in economics ('03) to good use. Tour managing is just OK; Noon would rather be playing drums, his ultimate passion. But, for now, this was paying the bills.

A friend from his band days texted and said he was in need of a drummer for his newish pop band that was quickly gaining popularity. Noon's last band, Straylight Run, had called it quits the year before, so Noon was eager to get back behind a drum kit. He rushed back to the United States, learned some songs, and landed the gig with

indie pop band Fun, the group that would go on to create the Grammy Award-winning and *Billboard* chart-topping hit "We Are Young," the catchy, can't-stop-humming-it 2012 anthem for so many who wanted to stay young forever.

So, how did Noon get here? Let's travel back further to the early '90s. When he was in elementary school, Noon's older brother gave him a choice. "I need someone to jam with," his guitarist brother had said, "so you better learn to play either bass or drums." Noon chose drums.

"Playing drums was something that was natural for me, the rhythm of it just made sense to me," he says.

He played his way through high school and soon found himself at a crossroads. It was time for college, and he struggled with what path to pursue: music, his passion, or the "safe" choice, economics, something else that "just made sense" for Noon since

excelling in it in high school.

Buried in a mountain of junk mail, one college brochure stood out from the rest, Noon says. Two little syllables made him choose Drexel: co-op.

"The Drexel co-op lets you get a taste, early on, of what it is you might love doing," says Noon. "But it also lets you get a taste of what you might not want to do, and then you have time to change your course."

Such was the case during Noon's co-op with PECO his sophomore year. While it was a good learning experience, he says, "I realized that I was much more passionate about touring and playing music than sitting behind a desk."

Even still, Noon had a thing for economics. In class, he enjoyed the clean logic of supply and demand. In between academic quarters, he was on tour with his band at the time, Breaking Pangaea. At Drexel, he was able to employ both sides of his brain, something



SHANE TIMM

not many people get to do.

In 2003, Noon graduated and soon after, Breaking Pangaea broke up, which opened the door for his five-year stint with Straylight Run, which ultimately led to Noon joining Fun.

For most of 2014, the members of Fun pursued individual projects. Noon moved to Los Angeles early in the year, and has bounced between projects like playing for solo artists at music festivals across the country, releasing music through his label “the record collective,” and recording new music for his solo project, “Cuddle.”

Some day, when he’s ready, he might consider teaching, Noon says. “Education and teaching and the spreading of ideas — that’s something that I’m really interested in.”

But today is not that day.

“I just want to be happy,” he says, “and right now playing music and touring makes me happy.”
— Katie Clark

JOSE BODIPO-MEMBA | 38

MASTERS OF BUSINESS ADMINISTRATION '12

16 Environmental management supervisor,
Sacramento Municipal Utility District

MY GREATEST ACCOMPLISHMENT: Non-work-related, being appointed by the Sacramento City Council as a planning and design commissioner in 2014. Work-related, being named the supervisor of environmen-



TIA GEMMELL

tal stewardship for the sixth-largest public utility in the United States and helping to maintain low rates for our customers through the successful execution of the Solano Wind Farm Project, where I was the environmental compliance lead. I lead a team that is responsible for handling local, state and federal environmental compliance for all development activities within SMUD’s service area. **HOW DREXEL HELPED:** Drexel gave me the financial management, personnel management and leadership tools necessary to work with diverse stakeholders both within and outside organization. I have to get buy-in from line crews, construction management teams, executives, consultants and our elected board. The skills and lessons I gained from my professors are tools I use and share with my team every day. **WHERE I’LL BE IN FIVE YEARS:** I plan on being in an elevated leadership position at SMUD’s Regulatory Affairs group, setting the bar for how a public utility can provide reliable service and great rates, while working for the betterment of the overall community and the environment. I still plan to be serving the City of Sacramento as a planning commissioner and helping to continue Sacramento’s downtown Renaissance.

17 SARA CRITCHFIELD | 34

BS GRAPHIC DESIGN '04

Founding editorial director,
Upworthy

MY GREATEST ACCOMPLISHMENT: When we started Upworthy with the idea to make meaningful, important content go just as viral as cat videos, people told us that it was a nice idea, but that we’d only achieve having a niche site about social issues. No one thought there was a large market out there for what we wanted to do. Now, reaching over 50 million visitors each month, we’ve proven that there is an incredible appetite for positive, socially conscious content — audiences simply wanted it formatted in a different way. **HOW DREXEL HELPED:** Drexel remains the single, most formative experience of my life. The graphic design program taught me to be resourceful; every project starts with a blank page and you have to make it up. That’s where I learned there is much more than one solution to every problem if you can just get creative about it. In addition, that’s where I started

to think deeply about communicating visually and what that really means. Upworthy is a visual-content-only site and I think that’s a huge part of our success. And just to say it — Philly is the best city in the world. The diversity, culture and personality of the city

is a great backdrop for personal and professional growth. **WHERE I’LL BE IN FIVE YEARS:** I’ll leave that up to God, but I would be thrilled to continue to help shift the entire media industry in the direction of socially progressive content in a larger way.



No.
18
AMOL
SATHE | 30
MS DIGITAL
MEDIA '08

Lighting supervisor,
Walt Disney Animation
Studios

MY GREATEST ACCOMPLISHMENT: I've worked with an amazing team of artists on movies like "Bolt," "Tangled," "Wreck-it Ralph" and "Frozen." In the lighting department, we visually stage and emotionally enhance every scene in a film using color, light and shadow. It's a fun task that continues a decades-old tradition of combining art and technology at Disney Animation. Being a small part of that vast legacy has been a dream come true, and I feel very lucky. **HOW DREXEL HELPED:** The professors in the Digital Media Department were incredible. They challenged every student creatively and technically, but in a supportive environment that encouraged teamwork. My years at Drexel were terrific preparation for the highly collaborative environment I'm currently in. **WHERE I'LL BE IN FIVE YEARS:** Hopefully I'm continuing on my journey in filmmaking, working on great movies, and having a blast doing it!



MOOGEGA COOPER

AGE 34

MOOGEGA COOPER'S ROLE AS AN INTERPLANETARY MICROBIAL CONTAMINATION EXPERT FOR NASA IS OUT OF THIS WORLD.



IF ALIEN LIFE ever comes to Earth on a returning spaceship, Moogega Cooper would be one of the first people to know. After all, it could happen.

As a planetary protection engineer at NASA's Jet Propulsion Lab in Pasadena, California, the 29-year-old helps to prevent NASA satellites and probes from contaminating other planets or moons with microorganisms from Earth — and vice versa.

When rocks are brought back from missions to Mars, for instance, Cooper is part of the team responsible for making sure no hardy bacteria hitched a ride and for analyzing samples. Crafts are carefully checked before they're sent into space, too.

"For instance, the Curiosity Rover that's roving right now on Mars has been thoroughly sterilized in heat microbial reduction chambers and monitored during assembly," she says. "Even in the cleanroom environment we were able to find microorganisms that survived with essentially zero nutrients. This whole place is wiped down with alcohol every day and still a small population of microorganisms can survive."

In the past, other planetary protection engineers have found and named new types of special strains that were found in cleanrooms.

"A lot of what I do sounds like

sci-fi," she says. But her work is rooted in legitimate scientific and microbiological principles and theory. One astrobiology theory called panspermia proposes that life began on Earth when microorganisms in a rock, comet or a meteor crashed on the planet.

"That could easily happen elsewhere," she says. "Especially looking at microorganisms and seeing how easily they can shield themselves, I would bet money there's at least microbial life somewhere else in the universe," said Cooper.

It's all part of what makes this a dream job for Cooper, who has wanted to work for NASA since she started renting Carl Sagan's iconic "Cosmos" series from the library as a little girl.

She attended college near NASA Langley Research Center in Virginia, where she first started interning for NASA. She chose Drexel for her MS ('08) and PhD ('10), which she earned by age 24, because she wanted to work at Drexel's A.J. Drexel Plasma Institute, the nation's biggest and most renowned research center of its kind.

As part of her PhD thesis at Drexel, Cooper worked on a project between Drexel and the Jet Propulsion Lab, where she later worked on a fellowship and then

a postdoc before she was hired full-time.

Her education came in handy when she took about a month off from work to join TBS' first season of the reality show "King of the Nerds" in 2013. Cooper competed in "nerd" challenges against competitors who included a professional gamer, a comic book enthusiast and a neuroscientist, and she eventually placed fifth before her elimination. No hard feelings, though: She still keeps in touch with the other participants, and said she would do it all over again if she could.

Back at NASA, Cooper is working on her 15-year plan: She's been put in charge of a project that will use plasma technology to demonstrate that a prototype of the capsule that will return from the Mars 2020 rover mission is clean of soil and other contaminants. It's her first time leading a proposal, and she even brought in Drexel's Plasma Institute and a former fellow Drexel grad student (now an assistant research professor at the institute) as a co-investigator.

It will take at least a decade for the samples collected throughout the 2020 mission to return to Earth, so Cooper's technology will be applied sometime in 2030. "I never want to leave NASA!" she says. — *Alissa Falcone*



RYAN ORANGE



NICK WOOD

LIZ HOFFMAN | 35

BS/PHD MATERIALS SCIENCE AND
ENGINEERING '02/'06



Manager of engineering process development, Savannah River National Laboratory

MY GREATEST ACCOMPLISHMENT: It is difficult to name a specific activity as a

greatest accomplishment. I work each day to do my best. I am pleased with the balance I have been able to achieve in my life. Maintaining life balance in a competitive career can be difficult at times, particularly when continuously pushing to reach my goals. At the Savannah River National Laboratory, researchers work on finding ways to process nuclear materials and dispose of nuclear waste. While I was a researcher, I was involved in a chemistry control program to mitigate corrosion of large carbon steel underground tanks containing nuclear waste. The challenge was to identify just the right amount of inhibitor to add to protect the steel from corrosion without increasing the volume of waste. As a manager, I now work with a group of researchers involved in the materials and processing challenges of developing and implementing glass and grout waste forms both at the Savannah River and Hanford sites. **HOW DREXEL HELPED:** Drexel gave me the strong technical foundation necessary to further research and development in a technical field that still has so much to offer. Beyond the technical facts and theories, I developed the leadership and communication skills necessary to help my career move forward. Drexel also provided me with the most critical education in time management by working multiple projects at one time. While working for my PhD, I was under the advisement of two professors, Michel Barsoum and Yury Gogotsi. While I did not realize it at the time, the necessity of having to concurrently address the urgent demands of multiple individuals left me with a skill that is invaluable in today's workplace. It left me more aware of the necessity to address the needs of fellow

researchers and staff, while also meeting the needs of my employer.

WHERE I'LL BE IN FIVE YEARS: In five years, I expect to continue to be involved in the R&D process in helping to find a solution to our nation's legacy nuclear waste.



NICOLE PORTER WILLCOX | 34

MA ART THERAPY '08

20

Entrepreneur, director and supervising art therapist, Emerald Sketch

MY GREATEST ACCOMPLISHMENT: Maintaining a three-month volunteer presence after the Sandy Hook School shooting tragedy. I was there to educate the community on how art therapy heals trauma and provide clinical services for the families requesting help. In March 2013, I established Emerald Sketch for the Newtown/Sandy Hook community. **HOW DREXEL HELPED:** The Creative Art Therapies program at Drexel immerses students in experience. Associate Clinical Professor Nancy Gerber of Drexel's College of Nursing and Health Professions encouraged me to choose my second-year practicum using the opportunity to explore my top interests. I spent my time in the Therapeutic Nursery at the Children's Crisis Treatment Center. It was there that I developed my first sustainable art therapy program and established the model that would later evolve into my facility in Newtown. **WHERE I'LL BE IN FIVE YEARS:** Collaborating on innovative and playful films and games designed to educate children to live a safe and healthy lifestyle in an era of technology, modern hazards and heightened anxiety. Our culture needs more creative arts therapists with specialized training in trauma treatment. If sufficient funding permits, I envision the Emerald Sketch developing into an expansive clinical response team with mobile creative arts therapy units across our nation ready for dispatch to help devastated communities instantaneously.

22

SARAH HOLTZ WILSON

AGE 39

SARAH HOLTZ WILSON'S PATH TO BECOMING A TUNNEL EXPERT LED HER STRAIGHT DOWN, AND HER CAREER HAS BEEN RISING EVER SINCE.

WHEN SARAH HOLTZ Wilson entered Drexel, digging massive tunnels was the last thing on her mind.

"I didn't really understand what engineering was," she recalls. But she'd been a stellar math-and-science kid in high school, and the study of "rocks and dirt" seemed appealing. Drexel professors Ed Doheny and Ken Lacovara — a geologist and paleontologist, respectively — helped to inspire her to dig below the surface of things, literally.

At 39, Wilson has worked on acclaimed, big-dollar construction projects and high-profile (low-profile?) tunnels such as the \$234 million San Francisco Central Subway project and Puerto Rico's first subway line, a 1,500-meter-long underground rapid transit line with two underground stations.

Wilson is now a lead associate (and first female director) at Jacobs Associates in San Francisco but she began her career with Drexel co-

ops, including one shadowing the San Jose, California, city geologist in a search for ground stable enough to build on. After graduating with a BS in civil engineering from Drexel in 1998 and getting an MS in geotechnical engineering from the University of California in Berkeley, she went to work as a designer and soon moved up to the position of construction manager.

While some might envision the construction manager sitting around reading the paper all day, she says, the truth is just the opposite.

"It is minute-by-minute adrenaline driven. You are constantly putting out fires. Construction management is a crazy exciting job," she says.

Part of the excitement comes from the intrinsic nature of the work, which calls for constant vigilance. "No two tunnels are alike," she says. "You don't know what the ground is going to do until you are excavating

through it, poking holes in the ground, conducting engineering tests."

The sense of the unknown is what makes for the greatest challenge in Wilson's work. Tunnel engineering is all about understanding what lies below, and that understanding only comes with experience.

"The part that makes it an art, the part where your experience becomes important, is understanding ground behavior," she says. "It's about understanding why the ground is behaving in a certain way, and addressing it in a timely manner."

Wilson has learned to address other types of behaviors, too. As a woman in a male-dominated field, she has had to find ways to short-circuit those who would dismiss her skills. "You just have to be straight. You don't make things up if you don't know the answers, and you stand behind your answers," she says. It helps to have a supportive boss. "Every time a contractor has tried to run behind me, to go to the directors in my company, my guys have backed me up." As the mother of a 4-year-old undergoing treatment for leukemia, Wilson also considers her hard-fought work-life balance one of her greatest achievements.

As she continues digging downward on her upward career path, Wilson credits her alma mater with much of her success thus far. "I honestly believe it's the best education you could get as an undergraduate student," she says. "They give you the intellectual tools that you need, you get the theory that you need, and then they make you apply it."

— Adam Stone



TIM QUIRINO | 30

BS GRAPHIC DESIGN '07

23

Product design manager, Facebook
Co-founder, Geekadelphia

MY GREATEST ACCOMPLISHMENT: The continued growth and success of The Philadelphia Geek Awards, which honor the brightest, positive, geek minds in the city. The awards were an outgrowth of Geekadelphia, a news blog for Philadelphia's tech community that I helped create in 2007. I'm also proud of my contribution to the design community as a former lead designer of P'unk Avenue, a mission-driven agency in South Philly that only partners with organizations that align with their goals of a better Philadelphia (and citizenry) through urbanism, health and wellness, education and social good. In January 2014, I moved to San Francisco to work for Facebook, where I decided to serve as the design lead for Business.Facebook.com, a new business tool aimed at advertisers. Having never worked in advertising before (and actually despising most advertising) I felt that this was a big challenge. I'm leading a team of talented designers in building the next great advertising product. It will be released in early 2015. In my spare time I've been able to "hack" on a few projects, such as a method by which people can quickly donate money via Facebook to a few worthy causes such as ALS or research for Ebola treatment. **HOW DREXEL HELPED:** The graphic design faculty taught me the hard design skills, but the co-op program was where I learned how to be an independently employed designer where discipline and work ethic were equally important to develop alongside the craft and execution. **WHERE I'LL BE IN FIVE YEARS:** Back on the East Coast ;)



ROBBINS CO.

RACHEL WASHBURN | 26

BA HISTORY '10

Captain, U.S. Army

MY GREATEST ACCOMPLISHMENT: Being selected as a member of the Army's Cultural Support Team and subsequently deploying to Afghanistan. The team's task is to engage a host nation's female and adolescent population where their interaction with the Army may be deemed culturally inappropriate. We work with special-operations forces performing missions such as medical outreach programs, civil-military operations, key leader engagements, and searches and seizures. The women I worked with are some of the most impressive and courageous people I have ever known. Together our small sisterhood was able to accomplish great things. **HOW DREXEL HELPED:** I attended Drexel University on an Army ROTC scholarship. I was on Drexel's dance team for one year before auditioning for the Philadelphia Eagles cheerleaders in 2007. I cheered for the Eagles for three seasons. While an Eagles cheerleader, I was lucky enough to take part in a goodwill military tour to Iraq. Though I knew I would commission as a second lieutenant in the Army upon graduation, this experience completely solidified my choice. I was excited to start the next journey. After my basic officers course I volunteered for the Cultural Support Team program (it began in 2011 and I was part of the first recruiting/training cycle) and went through a very rigorous selection process. There were about 50 girls in the class and we deployed to every region of Afghanistan, many of us to the most remote, austere and kinetic areas of the country. **WHERE I'LL BE IN FIVE YEARS:** Finishing up my time in the Army and applying for law school.

no. 24



JESSICA FARRIS | 32

JD LAW '12

Policy and advocacy counsel, American Civil Liberties Union of Southern California

25

MY GREATEST ACCOMPLISHMENT:

In the spring of my first year of law school, I contacted a nonprofit called Innocence Matters near my family in Southern California. The executive director offered me a position for that summer and, with it, the chance to change a man's life. Over the next two years of law school, I performed the investigation and co-authored the petition for writ of habeas corpus that exonerated an innocent man, John Smith, after 19 years of wrongful incarceration. My work with Innocence Matters improved me as a human and as a lawyer. I now serve on the board, along with my friend John Smith. **HOW DREXEL HELPED:** Drexel professors taught me the law and how to be exacting and convincing in my legal arguments. They also taught me that the law doesn't always work as it should, that mistakes happen, and that we should be vigilant not to make those mistakes. Drexel's commitment to public interest work fueled my journey and the cheering of Drexel professors, staff and my fellow students kept me going on very late nights. The overall supportive atmosphere of open doors, accessible professors, and collaborative classmates made my work with Innocence Matters possible. **WHERE I'LL BE IN 5 YEARS:** At ACLU So-Cal continuing to reform a system that leads to cycles of crime, disproportionate sentencing and John Smiths.

26 KAREN DEJORAS NELSON | 34

MASTERS OF BUSINESS ADMINISTRATION '12

Chief operations officer, American Leadership Forum — Mountain Valley Forum

MY GREATEST ACCOMPLISHMENT: I'm honored to be a governor appointee for the California Commission on the Status

of Women and Girls. But my greatest accomplishment is being the proud parent of a 7-year-old boy who now tells me that he would like to get his education at Drexel some day, who sees the value of education and hard work as we did our homework

together during those two years of the program, and who saw his mom attain a master's degree and go up the ranks in an organization, to the C-suite. **HOW DREXEL HELPED:** Drexel Sacramento created a community of leaders who supported

and learned from each other. My MBA cohort experience was quite tremendous — consisting of young, talented and ambitious professionals who shared a passion around creating a better region. We gained valuable insight from the diverse per-

spectives in the room. I consistently draw upon my experiences from my MBA in my role as COO. **WHERE I'LL BE IN FIVE YEARS:** I hope to continue to be in a position to influence work that positively impacts our region and our youth.



ROBERT BAHAR | 40

BS ELECTRICAL AND
COMPUTER ENGINEERING '98



Documentary
filmmaker

MY GREATEST ACCOMPLISHMENT: I am proud to be making films that are both artistic and that make a real social impact. The documentary "Made in L.A." (produced in collaboration with my wife and filmmaking partner, Almudena Carracedo) tells the story of three immigrant women fighting for their rights in Los Angeles garment factories. It premiered on PBS' "POV" series, won an Emmy and was positively reviewed by *The New York Times*. But perhaps more important was the impact that it had in telling the story of low-wage immigrant workers across the United States. There were more than 600 community and faith-based screenings. We received overwhelming and emotional feedback from families across the country who had been touched by the film's

reflection of their own immigration stories. My current project (also in collaboration with Carracedo) looks at the first attempt in history to prosecute crimes of Spain's 40-year dictatorship under Franco. We've been shooting for nearly three years and we expect the film to have a powerful impact. **HOW DREXEL HELPED:** Drexel was pivotal in my transition from electrical engineering to documentary filmmaking. While studying engineering, I was inspired by an honors colloquium to make the film "Laid to Waste" (in collaboration with George McColough, then director of DUTV) about environmental injustice in Chester, Pennsylvania. I was mentored by former dean of Pennoni Honors College David B. Jones and the project was supported by former Provost Mark Greenberg through the Honors Program. Those four people really changed my life. I applied to the Producers Program at USC's film school and my course was set. **WHERE I'LL BE IN FIVE YEARS:** I hope to be ever-deepening the kinds of stories that I am involved with and the ways that they are told.



DANIELLE CHRISTOPHER | 30

BS GRAPHIC DESIGN '07

28

Senior book jacket designer, St. Martin's Press

MY GREATEST ACCOMPLISHMENT: Designing a new series of covers for a favorite childhood author of mine, *New York Times* bestselling author R.L. Stine. **HOW DREXEL HELPED:** Drexel's Graphic Design program literally taught me everything I know about print design. I learned how to use all of the computer programs in my field and took classes in many different kinds of design: typography, packaging design, photography, poster design, portfolio design, and most importantly for me, book design. I was also active in Drexel's Greek system. During my time as an undergraduate member of Delta Phi Epsilon sorority, I learned invaluable leadership and time management skills. **WHERE I'LL BE IN FIVE YEARS:** Professionally, hopefully working as an art director in the publishing field. Personally, doing some traveling and starting a family with my husband and fellow Drexel alum Mark Christopher '08!



MARC E. KUCHLER | 31

BS ARCHITECTURAL ENGINEERING '06

Lung cancer fundraiser.

MY GREATEST

ACCOMPLISHMENT: Over the course of the past year my life has taken a dramatic shift. I went from working full time, doing a job I loved with Massimino Building Corp., to working full time in a fight against Stage IV lung cancer. Up until I left construction management, I felt very accomplished for a 30-year-old. I played a key role in a number of different, high-profile projects — I worked on an industrial chilled water plant, a hospital expansion, a vivarium for the Wistar Institute, a remodel of The Princeton Firestone Library, and a loading/storage dock for valuable and oversized art for the Philadelphia Museum of Art. I accomplished many of these things while also undergoing chemotherapy treatments, radiation and

even lung surgery. Since June, I've focused on fighting this disease, fighting for a cure and working closely with my wife, Rachael, to establish a nonprofit. Since my diagnosis in 2011, we have raised over \$100,000 toward lung cancer research and awareness benefitting the Free to Breathe organization. **HOW DREXEL HELPED:** The co-op program taught me early on that to make the money I aspired to make and to have the career I hoped for, would require hard work and dedication. I was privileged to work with some amazingly talented people during my co-op whose knowledge and teachings allowed me to develop tangible skills that would help mold my career. **WHERE I'LL BE IN FIVE YEARS:** At this point in time, five-year survival rates for people with Stage IV "non-small cell" lung cancer is less than 10

percent; I am in year three of my diagnosis. I am hopeful that in five years, I am still fortunate enough to be raising vital funds for this disease through my own nonprofit with the help of my wife, family and friends.

Editor's note: On Feb. 10, Marc lost his fight with lung cancer. Drexel is honored to recognize him posthumously.



30

**ERIC
DVORSKY
| 33**

 BS FILM AND
VIDEO '03

 Aerial cameraman,
Pictorvision

MY GREATEST ACCOMPLISHMENT: One was working with the Jet Propulsion Laboratory to test the landing system for the Mars Rover, Curiosity. We used a helicopter to simulate the Mars landing. My job also gave me the opportunity to work as the helicopter camera technician for the Giro D'Italia. I did the bicycle race for three years in a row, and it allowed me to see so much of that beautiful country. For the film industry, I've gotten to work with many of my childhood heroes. Most currently I am working on "Superman vs Batman" but have also had the pleasure of working on "Avengers 2," "Iron Man 3" and "Thor" to name a few. **HOW DREXEL HELPED:** Drexel's film program gave me access to cameras freshman year. The classes I took let me be creative and gain experience shooting short films. Putting a camera in a young student's hand is the best thing a film program can do. **WHERE I'LL BE IN FIVE YEARS:** I hope to be doing the same thing! I love my job at Pictorvision.


NO. 31 MARK CHRISTMAN

AGE 38

ARS NOVA WORKSHOP PUTS JAZZ AND EXPERIMENTAL MUSIC IN ITS PLACE — AND ITS SUCCESS HAS TAKEN FOUNDER MARK CHRISTMAN IN SOME SURPRISING DIRECTIONS.

WHEN MARK CHRISTMAN graduated from Drexel 16 years ago with a marketing degree and a minor in music, he assumed he would open a record store.

Instead, he went one better. In 2000, after many years of having to travel to New York City to get his fill of live avant-garde jazz and improvised music, Christman founded Ars Nova Workshop to produce concerts in Philadelphia, where experimental music was relatively scarce.

At the time, he never suspected his nonprofit would grow to become one of the city's most important cultural institutions.

"I don't think that what the organization stands for and tries to accomplish have necessarily changed," Christman says. "It's still an organization that hopes to connect and challenge listeners and to elevate jazz, improvised and experimental music. I want Philadelphia to be a relevant place for this music."

Christman's specialty is presenting unique music, in unique spaces. He staged one recent concert inside Philadelphia's last remaining rowhouse shul in South Philly: While rain poured onto the dark residential street outside,

a tiny audience of jazz devotees huddled together on benches facing the central *bimah*, while the four members of the radical Jewish rock group Abraxas played intense compositions by John Zorn under the glow of an electric menorah.

Since its founding, Ars Nova Workshop has presented more than 600 events throughout the city featuring many of the most significant names in the music's modern history, including Cecil Taylor, Thurston Moore, the Art Ensemble of Chicago, Anthony Braxton, Vijay Iyer and John Zorn.

Some recent productions include the New Paths Festival, which offers performances at 10 unusual spaces, including the Barnes Foundation and Bartram's Gardens; and the Outbeat Festival, billed as "America's First Queer Jazz Festival."

In parallel with his work with Ars Nova, Christman spent nearly a decade at the nonprofit University City District, developing arts and culture activity with an eye toward furthering the organization's mission of neighborhood improvement. He played a key role in initiatives including the storefront transformation of Lancaster Avenue and the 40th Street Summer Series, monthly free outdoor concerts.

"I would say that over the past 10 years the idea of 40th Street has changed pretty dramatically, and that series has had a little to do with that," he says humbly.

His time at Drexel was integral in developing his interest in merging culture and community.

"It was a great shift in my life as far as the balance of work and academic life," he recalls. "You were really in school all year long — six months in the classroom and six months in the field. I had a few internships during that time that were very intense and placed me in very mature environments for a young person."

Christman left the UCD in February 2014 to concentrate full-time on Ars Nova, a transition eased by his work on the Outbeat Festival and foundation grants. He has his sights set on more ambitious projects over the next few years, including more festivals, several visual arts exhibitions, recordings from the Ars Nova archives, and possibly a more permanent home base.

"It's not just about presenting a band in a room," he says. "It's about trying to make people who are excited about peculiar or interesting music aware of the improvised music of the past and future." — Shaun Brady



JEFF FUSCO

32

STEVEN WITTENBERG | 39

BS BUSINESS ADMINISTRATION AND FINANCE/MARKETING '98

Director of legacy planning, SEI Investments and president, Spells Writing Lab

MY GREATEST ACCOMPLISHMENT: Finding the time, most of the time. I am the co-founder and current president of the board of Spells Writing Lab. We are a 5-year-old startup nonprofit inspired by the 826 Model developed by Dave Eggers, whose mission is to develop the creative and expository writing abilities of Philadelphia-area school-age children through free, fun and imaginative writing programs. Through after-school and weekend programming as well as a summer camp, we've engaged more than 4,450 kids, mostly of whom are underprivileged youth. Our programming runs the gamut from poetry to song-writing, plays, story-telling and comics, and we combine them with visual art, music, film and technology. **HOW DREXEL HELPED:** How could I say anything but the co-op program? The real-life work experience and connections I made via my co-op employer, Rohm and Haas Co. (now Dow), has led to every step of my career. I must also credit the great friendships formed with my Drexel "clique" who brought me out of my shell and taught me the value of giving of oneself. **WHERE I'LL BE IN FIVE YEARS:** I have always viewed my life holistically. I hope to be maintaining a true work-life balance. My career will be stimulating and provide avenues for growth. My personal life should be full with a happy and healthy family and a broad circle of friends. Growing the Spells Writing Lab into an even more vibrant organization that makes a meaningful community impact would be especially rewarding.



SARAH HUTTON | 25

MS GLOBAL AND INTERNATIONAL EDUCATION '13

33 Retention and advisement, first-year experience specialist, Delaware State University

MY GREATEST ACCOMPLISHMENT: Working with extremely diverse, multicultural groups to truly make a difference for some of our country's most traditionally underserved student popula-



tions. Currently, I work with first-year college students (many of whom are first-generation) to ensure they are fully supported in their academic and personal needs as they transition to college. I also sit on the board of a new charter school that serves grades six through 12 in Wilmington, Delaware. This school is part of a network that is making great strides toward improving education for low-income youth in urban settings. Prior to these roles, I led alternative education and after-school programs for middle and high school students at a nonprofit in Wilmington. During this time, I also advocated at a local and national level for policies that would benefit the students and families with whom I worked. I love what I do and I'm so happy that I am able to put my Drexel degree to good use every day! **HOW DREXEL HELPED:** Drexel's

Global and International Education program taught me how to prepare students of all ages for an increasingly globalized world. It also taught me how to work with diverse, multicultural groups within the field of education. Additionally, the program was a great networking opportunity. I obtained my first degree-related position due largely to participating in a volunteer opportunity that I had found out about from a fellow student. **WHERE I'LL BE IN FIVE YEARS:** Five years from now I hope I'll have obtained my doctorate in education. I also want to continue to hold professional roles where I can help ensure our nation's most traditionally underserved and historically underrepresented groups have access to a high-quality education and also where I can help eliminate the achievement and attainment gaps that unfortunately exist in our country.

AUBREY REICHARD-ELINE | 37

BS DESIGN AND MERCHANDISING '99



Senior director of mens merchandising, DKNY Jeans

MY GREATEST ACCOMPLISHMENT: Professionally, I am proud of being a director for an amazing fashion brand by the age of 28, eventually growing to a senior role handling a large global business. I am proud for the connections I have made through this journey that continue to propel me forward in my career. Personally, con-

quering the challenge of being able to balance work and life each day and still have fun is a great accomplishment for me. Being happy in this moment with where I am, with who I am, is something that makes me smile each day. **HOW DREXEL HELPED:** I credit Drexel every day with where I am today. They throw you in from day one, consistently challenge you and immerse you in your major from the start. It was the best training ground for a career in the fashion industry. The professors and staff put pressure on you, which makes you comfortable handling tough situations, and they give you the tools to help your career down

the road. The co-op experience cannot be beat. It stacks your résumé before you even graduate, setting you apart from the competition. I always say that if I had to pick a college again and do it all over, I would pick Drexel. **WHERE I'LL BE IN FIVE YEARS:** I hope to work for a highly innovative brand where I have the continued opportunity

to build and lead a team and be inspired by the product I work on. I want to continue to have my Drexel connections to support and hire co-ops and recent graduates, facilitate their growth and maybe even teach at Drexel one day. I will continue the work and life balance. I will keep laughing with my children, my family and friends. I will expand my volunteering opportunities with my local VA hospital to give back to those who serve our country so bravely. I will continue to teach yoga at a nonprofit in my spare time...who knows, maybe there is a way to combine all of this. I am open to new opportunities each day.



WADE BALMER

AGE 36

WADE BALMER HASN'T LET A SERIOUS FORM OF ARTHRITIS SLOW DOWN HIS EFFORTS TO HELP OTHERS WITH THE DISEASE.

NO. 35

IN NOVEMBER 2013, Wade Balmer launched a new fitness regime. He made the usual commitments we all make when we start an exercise challenge: eat better, trim some fat, build strength.

He set a list of goals for the year: Exercise for 30 hours over 30 days. Race 30 kilometers in professional runs. Hike 30,000 feet of elevation in 30 days. And to cap it off: Cycle 363 miles down the coast of Oregon over six days.

He chose the number 30 because for 30 years of his life, ever since he was 5, Balmer has coped with a rare and debilitating form of arthritis called juvenile dermatomyositis.

Juvenile dermatomyositis is a serious autoimmune disorder that can cause system-wide long-term inflammation. In Balmer, it resulted in muscle atrophy, calcium deposits in most major joints, high blood pressure and metabolic disorders. It makes any physical activity challenging.

Balmer wanted to test, and break, the physical limitations he'd lived with for most of his life — the same physical limitations he's seen in countless others he has met through his position as the vice president of marketing and communications for the Arthritis Foundation.

"Many of these people are in a lot of pain and think that there isn't anything that can be done to help them; this is far from the truth," says Balmer, who has worked with the nonprofit and its members in the western United States since graduating from Drexel with a bachelor's in communication in 2002.

To prepare, Balmer trained with a cycling coach. During countless sessions at physical rehab, he increased his cardio and physical capabilities.

As the date of the cycling race near, Balmer felt stronger and fitter than ever, so when his rheumatologist suggested he bring prednisone along with him as a precaution, he was crushed.

Prednisone is a corticosteroid that reduces inflammation, and Balmer had hated taking it while growing up. Besides, extra medication wasn't part of the plan to discover what he could achieve by training, stretching and changing his diet.

Reluctantly, he brought the drug along, but he kept it in his cycle pack.



The ride was difficult, and whenever he felt sore and frustrated, he bargained with himself that he'd consider taking the pills at the next five-mile mark. But at each of these points, just when he felt like reaching into his pack, a fellow rider gave him the encouragement he needed to keep riding.

On the fifth day, he hid his GPS so he couldn't evaluate when he might consider taking the drug. And on the last day, when he wasn't sure if he could finish, a group of riders rode alongside him for support.

The pill bottle was never opened.

The race is behind him now, but Balmer has joined a gym in Denver, where he strives to keep up with other boot camp and fitness class participants. He expects that five years from now, he'll still be involved with the Arthritis Foundation, and he'll still be working as part of the team to cure arthritis — the only difference is he'll also be helping others achieve their exercise goals.

"I'd like to volunteer as part of a collaborative that preps individuals with disabilities for their first running or cycling event. I learned a lot this year about maximizing health care and community resources around me when I was training for the Oregon ride," he says. "It would be great to gather a group of health and wellness gurus who can pass that same knowledge onto individuals who think that they can't take part in a 5K or biking event because of physical limitations." — Alissa Falcone



A NEW SCHOOL OF EDUCATION is on the HORIZON...

GLOBALLY CONNECTED.

URBAN FOCUSED.

STEM STRONG.

BETTER THAN EVER.

THE NEW SCHOOL OF EDUCATION:

REVITALIZING LEARNING



DREXEL UNIVERSITY
School of
Education

drexel.edu/soe

36 EMILY FOOTE | 35

JD LAW '10

COO and co-founder of ApprenNet

MY GREATEST ACCOMPLISHMENT: In 2011, I co-founded ApprenNet, an education company, with Drexel Law Professor Karl Okamoto and engineer extraordinaire, Paul Tzen. ApprenNet is an education technology company that gives instructors the power to build highly interactive, scalable learning exercises that mimic the things that make live classrooms or trainings effective: role play, peer review and mentoring. We do this through an online, video-based platform. **HOW DREXEL HELPED:** If I didn't go to Drexel, I would likely be teaching or practicing law and more or less coloring within the lines of a very predictable path. At Drexel, I have met people who have given me the confidence to color outside the lines and who have supported all of my scribbles. ApprenNet's first beta users were Drexel law professors. Our first large-scale client was Drexel's College of Nursing and Health Professions. Our first hire was Jason Blanchard, a Drexel instructional designer turned Web developer. Our team has also been extremely fortunate to work from and collaborate with innovators at Drexel's ExCITE Center. In short, Drexel has helped me live a life where I can innovate and create among a group of smart, forward-thinking people. **WHERE DO YOU WANT TO BE IN FIVE YEARS:** In five years I'd like to be leading a team that continues to push the boundaries of how we can leverage technology to provide a world-class education to all learners.



ADAM M. GREEN | 36

BS BUSINESS ADMINISTRATION '01



Owner/managing partner,
The Green Firm LLC

MY GREATEST ACCOMPLISHMENT: After the 2008 financial crisis, I launched my own personal injury and securities litigation law firm with the goal of helping aggrieved investors, many of whom were retirees who'd lost their life's savings. Helping investors across the country supported my firm's early success and established our reputation, as we recovered several million dollars in settlements to help recoup our clients' wealth and savings lost due to investment fraud and misconduct. **HOW DREXEL HELPED:** Drexel laid the groundwork for my future; without it, I would never be where I am now. As an undergrad at Drexel, I formed many of the most important and lasting personal relationships of my life, and I gained a rootedness to the city of Philadelphia that will never leave me. At Drexel, I met my wife, who has inspired and

supported me in my professional endeavors ever since. Through playing varsity soccer and Greek life, I made friends and contacts who I still spend time with on a regular basis, and whose company I couldn't live without. Having grown up in a suburb of Philadelphia, Drexel was my first immersive experience with the city, from which I emerged with a sense of having found my new home. **WHERE I'LL BE IN FIVE YEARS:** In five years, I will still be living in the South Philadelphia neighborhood I now proudly call home; I hope still to be surrounded by the friends and family who make every experience richer and every victory sweeter; and I envision myself running a thriving law practice that continues to fight for the small investor against the negligence and predations of "Big Money."



38 MICHELLE FREEMAN | 31

BS GENERAL STUDIES/COMMUNICATION '07



President and founder,
Witty Gritty

MY GREATEST ACCOMPLISHMENT: One of my greatest, more recent, accomplishments was producing TEDxPhiladelphia earlier this year with my team. More generally speaking, making the decision to become self-employed in 2007 is one of my single greatest accomplishments. Since then, I've grown

my business and hired a team of dedicated and talented people to work beside me. The journey so far has allowed me to pave a road of self-discovery, challenge and reward. I've also had the opportunity to start and grow an online magazine, *Flying Kite*, which has allowed me to connect with people, places and initiatives that are helping to move the region forward. Be-

tween the projects Witty Gritty takes on and the stories *Flying Kite* tells, I work and live at an intersection of community engagement and creating spaces and experiences for people to connect. **HOW DREXEL HELPED:** Drexel put me in the "work" mindset ever since I was a freshman back in 2001. I began an early internship with the nonprofit Campus Philly and, thanks to

the co-op program, was able to help build and grow this organization while taking classes. I eventually switched to part-time student status and started working at Campus Philly full-time. The experience I gained at Campus Philly became the backbone for everything I do today. **WHERE I'LL BE IN FIVE YEARS:** If all goes well, I'll have multiple community media hubs open

and operating across the region. These hubs will provide a space for media outlets to better connect with communities at the neighborhood level. They will be spaces for programming and for civic dialogue. They will become little connectors to help better unify the city and region through storytelling and in-person events. In another five years, this will become national.

NO. 39 ALEX NILES

AGE 32

A CANCER DIAGNOSIS INSPIRED ALEX NILES TO HELP MAKE TREATMENT A LITTLE MORE COMFORTABLE FOR THE CHRONICALLY ILL.

THEY SAY that every new business is all about the numbers.

For Alex Niles, that axiom has an urgent poignancy.

Consider the numbers.

The amount Niles raised on Kickstarter to launch his CureWear clothing line last year is \$50,000, surpassing his goal by 66 percent. He's initially producing 1,500 shirts and will market them for \$55 each.

Now consider these numbers. Eighteen months ago, at age 30, Niles was diagnosed with Stage IV gastric cancer and given a less than 5 percent chance of surviving five years.

It's not just a business he's building, it's "a positive distraction," as he calls it. An athlete who came to Drexel on a Division I soccer scholarship, Niles has attacked his health as if throwing himself into a make-or-break match.

"Give it to me, I can handle it," he told his doctors as he started intensive chemotherapy.

Meanwhile, he kept his mind busy putting his bachelor's degree in business administration to use in ways he never expected when he graduated in 2006. He has picked out fabrics and interviewed manufacturers, and now he's meeting with would-be sponsors — Drexel's Athletics Department and Hahnemann University Hospital, to name a couple — and lining up marketing opportunities.

His business is also a cause. Ten percent of proceeds go toward providing free apparel to chronically ill patients to make their treatment more comfortable. CureWear has two lines of design — one is high-performance athletic wear that family and friends can wear in support of a loved one. The other has a special feature: A Velcro flap on the chest

that opens so nurses can access surgically implanted ports used to deliver medications directly into patients' veins.

"I call mine Natalie Port-man," he smiles, tapping his chest.

The flap is a shred of dignity. Niles designed it to spare patients the awkwardness of having to undress for treatment.

Three months ago, Niles got a new number. After 21 cycles of aggressive chemotherapy, he had a scan in November and the number was zero — zero detectable cancer cells.

He downplays the news in retelling it. "I celebrated with a portabella mushroom vegan burger with my parents," he says, with a delicate smile.

But in the moment, his body reacted strongly. His nose started to bleed.

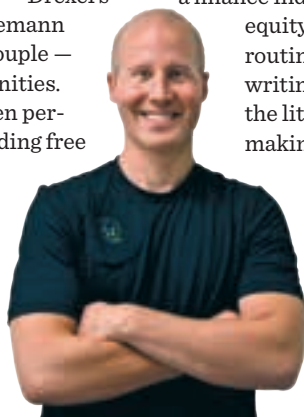
It's a victorious finish to the most challenging year of his life. But Niles is clear-eyed about what it means. There is no cure, and the fight is never over.

Still, he's won a period of grace during which he can set his prognosis aside and retire his patients' jersey. He's 32 now, and his lifestyle has veered widely from the path of a finance industry jock. He's left his private-

equity job and taken up a calming new routine of meditation, vegan food, book writing and blogging, and letting go of the little things while he focuses on making CureWear a success.

"As cheesy as it may sound, this has brought me to things," he reflects. "It's turning a crazy situation into something extremely positive, which I'm proud of. My motto is, 'It's not life's situations that define you, it's how you react to them.'"

— Sonja Sherwood



WHAT'S YOUR STORY?

What does it take to be named one of Drexel's 40 Under 40?

Past honorees include authors, filmmakers, fashion designers, and founders of companies and nonprofits. They are leaders, inventors, scientists and athletes. We're incredibly proud of their stories, because they show how far a person can go with a great mind and a solid education.

We're looking for our next group of accomplished young alumni. If that's you, or someone you know, we want to hear from you.

ELIGIBILITY

- Must be 39 years or younger as of Feb. 15, 2015.
- Must have received a Drexel degree from the University.
- Should have achieved demonstrated success in business, the private or nonprofit sector, the arts, community involvement or advocacy.
- Must submit nominee's high-resolution photograph and résumé.

Nominations can be submitted at drexelmagazine.org/40U40 or sent to the following mailing address by Sept. 11, 2015.

DREXEL MAGAZINE

40 Under 40 Nominations

3141 Chestnut Street, Suite 309

Philadelphia, PA 19104



40

PHILLIP GOSS | 31

BS COMMUNICATION '05

Pro basketball player, Umana Venezia Italy

MY GREATEST ACCOMPLISHMENT: When I graduated from Drexel University, Drexel has helped me in many ways on and off the court. **HOW DREXEL HELPED:** Coming to Philadelphia from Washington D.C., I wasn't used to going to school with people from different ethnic backgrounds. Interacting with so many people from different cultures and countries really changed my perspective on life. **WHERE I'LL BE IN FIVE YEARS:** I should be finishing up my long career playing professional basketball overseas.

Drexel is one of just a handful of universities endowed by the Coulter Foundation to help academic researchers bring their health-care discoveries to market — much the way an angel investor helps entrepreneurs.

University, Inc.

BY LINI S. KADABA



A photograph of Margaret E. O'Neil, a woman with short blonde hair and glasses, smiling and looking to her right. She is wearing a dark blue cardigan over a patterned skirt and is holding a black and red device, likely the Kollect prototype, in her hands.

The aha! moment

came when Drexel University researcher Margaret E. O'Neil looked at how children with cerebral palsy spent time.

Like many youngsters, these children enjoyed video games, including the X Box 360 Kinect, where they use their body to control the games. In theory, the games could encourage children with the neuromotor disability to improve their physical function, but most children found the games on the market too challenging (too fast, distracting or noisy) to play successfully. What was needed was a game designed at their level that would challenge them to use their motor skills — while still being fun to play.

“Wouldn't it be great if we could change the parameters of this game?” wondered O'Neil, an associate professor of physical therapy and rehabilitation sciences in the College of Nursing and Health Professions.

Fast-forward a couple of years. Called Kollect, the video game prototype she developed can match therapeutic goals to game play and then transmit feedback on the patient's progress. For many academics, the idea might have stopped there, with a lab model. But O'Neil and three colleagues hope to bring Kollect to market through Drexel's innovative Coulter-Drexel Translational Research Partnership Program.

In its ninth year, the unusual — and intense — program helps researchers commercialize discoveries that improve human health. Researchers submit applications to an oversight committee at their university. Those who advance must make a 20-minute oral presentation and prepare for pointed questions about market size and competition. Winners receive grants and guidance to help commercialize their ideas. Think of it as a kinder, gentler version of the reality TV show “Shark Tank.”

“I think of the Coulter program as the angel investor,” says Davood Tashayyod, director of Drexel's Coulter Program.

Paul Diefenbach and Margaret O'Neil are using Coulter Foundation resources to commercialize a video game that combines fun with physical therapy movements for children with cerebral palsy.

Established by the Wallace H. Coulter Foundation, the program carries on the legacy of health-care innovation that biomedical engineer and inventor Wallace Coulter prized. Only 16 universities around the country have Coulter programs and just seven of those have been endowed.

**“We’re swimming
in science, in very
good science. But
most of it sits on a
shelf and gathers
dust. It loses value.”**

The foundation granted initial annual awards to the universities and then established endowments of \$10 million, equally matched by the institutions.

“We don’t believe in basic research, research in search of knowledge,” says Mara Neal, director of research awards for the Miami-based foundation. “Translational research is research in search of a product. ...We do not want to create entrepreneurs. We want serial innovators — those professors who stay at the University and do what they do best...teach, research and innovate.”

Nationally, Coulter programs have funded 280 projects to the tune of \$70 million, according to Neal. About 25 projects have resulted in commercial products.

At Drexel, more than 40 projects — devices, diagnostics and drugs — have received money totaling about \$5.54 million, says Tashayyod. Of those, a dozen have been licensed, meaning management teams are raising venture capital for additional pivotal FDA studies, he says. No projects have made it to market, though some are getting close.

Kollect, however, is one of several newer technologies that hold the promise to change that record soon. In many ways, O’Neil’s experience serves as a case study of the Coulter model and the importance of this resource for all Drexel researchers.

“As we continue to invest heavily in our technology commercialization efforts, the Coulter experience informs everything we do,” President John A. Fry says. “Coulter recognition also gave us the privilege and responsibility to be ambassadors for translational research around the world and put us in a research network with wonderful institutions such as Duke, Michigan, Stanford and Virginia. Drexel is committed to this program and I encourage all faculty to apply.”

To apply for a Coulter award, researchers must show their idea has efficacy based on previous studies. “The program does not fund projects at the back-of-the-napkin idea stage,” Tashayyod says. “In our program, we design a ‘killer experiment’ to prove the technology. It’s usually a pre-clinical study that, if successful, will convince potential licensees that this technology has commercial value. Alternatively, a negative result can ‘kill’ the projects that are unlikely to reach the market.”

O’Neil had previously studied 57 youth with cerebral palsy to evaluate how they used the motion-sensing features of Kinect in active Xbox gaming. She determined that off-the-shelf games aren’t flexible enough to be used as tools for physical therapy.

To create a prototype of a game that challenges players to collect objects, she teamed up with Paul J. Diefenbach, an associate professor in digital media who directs Drexel’s RePlay Lab for game research and who has startup experience. Also joining the team were Patricia Shewokis, a professor in the College of Nursing and Health Professions with appointments in the College of Medicine and School of Biomedical Engineering, Science and Health Systems (BIOMED), whose specialties are movement science, integration of brain and behavior and applied statistics; and Hasan Ayaz, an assistant research professor in

BIOMED who is a brain-computer interface expert.

Kollect, Diefenbach says, is unique because it allows a therapist or parent to adjust parameters, such as the length of the game or the size of the screen on which the objects appear — all to target therapy.

The platform also records data and will have social networking aspects. “The cost will be very reasonable,” he says. “We want this to be very accessible. ... I don’t see anybody else filling this niche.”

Already, a father in Germany who saw a video about the project asked how to purchase it for his toddler, Diefenbach adds.

O’Neil calls the game “stealth health,” a catchy phrase sure to please marketers.

In the lead-up to the selection, the team received training in technology commercialization. Beginning this year, Drexel will formalize the effort by offering applicants Coulter College — a crash course in topics such as intellectual property protection and how to negotiate the FDA’s regulatory pathways. “All of these activities are to get the applicants familiarized with what the investor expects to hear,” Tashayyod says.

A key element of the Coulter program is the business mentor, who offers in-depth advice to shape the oral presentation. In Kollect’s case, Antonio Tedesco, an angel investor and Drexel graduate in chemical engineering (BS ’96), volunteered for the role.

“I was looking for ways to help the [Drexel] community,” he says. “I’m passionate about entrepreneurship and startups.”

Tedesco helped refine the team’s oral presentation. Rather than focus on scientific data, typical for an academic seminar, he urged a big-picture talk. “You’re trying to present the opportunity to create a business,” he says. “You have to assume the product works. Now what? Is there a market? Is anyone else doing this?”

The Coulter program is “awesome,” Tedesco says. “It’s a great opportunity to get some early financing to validate what you’re doing. From the investors’ perspective, there is less risk.”

For academics, the business angle can prove intimidating. “I didn’t know how to write a business plan,” O’Neil allows. “I failed miserably in the practice session. Too many words. Not enough visuals. [Tedesco] helped us turn my boring presentation into one that was more a business, marketing, innovation plan.”

The end result was a win of \$130,000 for further game development as well as a rigorous patient study to test the product. Over the next couple of years, the team aims to license its technology, establish a startup as well as a management team, possibly drawn from among Drexel alums, and attract venture capital.

“It was funded with a lot of enthusiasm,” says Brenda Gavin, a member of the oversight committee and a partner with Quaker Partners, a life-sciences venture capital fund in Philadelphia.

“We’re swimming in science, in very good science,” she says. “But most of it sits on a shelf and gathers dust. It loses value.”

The Coulter Program aims to change that, one project at a time. **[D]**

1960s

Judith Entine Glaser, MS human services management '69, was honored to be the only woman whose article, "Vital Instincts: The DNA of Healthy Conversations," was selected to be featured in the fall 2014 issue of *Leader to Leader*.

Christine Lyons Medlin, BS home economics '69, professor of nutrition and dietetics in the Division of Health Professions at Tidewater Community College, was conferred the titles of professor emerita by the Virginia Community College Board of Visitors and fellow by the Academy of Nutrition and Dietetics.

Elizabeth McCool Stanton, BS business for women '69, of Taft Stettinius & Hollister LLP, was named to the Best Lawyers in America List for 2015 for her work in employment law (management, litigation), labor and employment, and litigation (land use and zoning).

Stewart Weintraub, BS business administration '68, discussed current SALT apportionment and alternate apportionment issues for multi-state income tax taxpayers as part of a program sponsored by the SALT Committee of the Houston chapter of Tax Executives Institute Inc. He was also a panelist for a presentation titled "Business Tax Issues for Law Firms" at the Philadelphia Bar Association's Conference in Atlantic City, and was a co-course planner for the Pennsylvania Bar Institute's program Philadelphia and Commonwealth Taxes.



1970s

Raymond J. Fabius, MD medicine '77, is the 2014 recipient of the Global Leadership in Corporate Health Award sponsored by the American College of Occupational and Environmental Medicine.

Kim R. Holston, MS library science '76, authored the teen time travel novel, "Attila's Sorceress."



Dr. Norman Smith, BS business administration '69, MBA '71, became president of Suffolk University Boston in September 2014. Prior to Suffolk, he was interim president of Dowling College in New York and previously was the founding chancellor of a planned American international university under construction in Egypt. The project was terminated by the government change following the Arab Spring revolution, and Smith returned to the United States and joined the Registry of College and University Presidents,

providing leadership to colleges and universities seeking interim veteran higher education leadership expertise.

Smith is the past president and university professor of Richmond, The American International University in London. Richmond is a multi-sited, residential university with campuses in Richmond-upon-Thames, Central London, Rome and Florence.

Before Richmond, Smith was president of Wagner College in New York City. His presidency marked Wagner's most successful fundraising era with the first seven-and-eight-figure single-source donations in the college's history.

Prior to Wagner, Smith was at Harvard University where he was the assistant dean of the Harvard Graduate School of Education and then of the John F. Kennedy School of Government. Early in his career, Smith was affiliated with Moore College of Art in Philadelphia as executive vice president, at Philadelphia University as vice president and dean, and at Drexel University as assistant dean of students.

Helene Von Rosenstiel, MS home economics '70, and her Brazilian jazz quintet, Minas, released its newest single, "The Girl from Ipanema."

1980s

Nasirali Emadi, BS materials engineering '88, earned the American Society for Quality Certified Six Sigma Black Belt.

Kathleen T. Kirk, BS information systems '89, celebrated her 20th anniversary at Data Systems Analysts Inc. She is the vice president of the company's Strategic Solutions Group and serves as team lead for the Technical Management Division for the U.S. Army Program Executive Office Command, Control, and Communications Tactical Military Technical Solutions Office.



Thomas J. Fanuka, BS business administration '85, is serving as immediate past president of the New Jersey Association of School Business Officials during the 2014-15 school year.

Gary Mignogna, BS mechanical engineering, '81, MS '81, was appointed president and CEO of AREVA Inc. He is a member of the Nuclear

Strategic Issues Advisory Committee since 2007 and serves on the University of North Carolina Charlotte's Lee College of Engineering Leadership Academy Advisory Board and the Board of Trustees of the Academy of Fine Arts in Lynchburg, Virginia.

Catherine Swift Sennett, BS humanities and communications '80, partner in charge of Advisory Services for Jackson Cross Partners, was recognized as a Women of Distinction by the *Philadelphia Business Journal*.

Marianne Thomas Gilson, MCAT creative arts '82, was promoted to senior vice president and chief operating officer of Penn Foundation Behavioral Health in Sellersville, Pennsylvania.



WEDDINGS

Amit Gera, BS business administration, BS and legal studies '12, and **Ashley Cooke**, BS nursing '12, were married on Aug. 22.

Thomas M. Raia, BS information systems '01, and Nancy Cardone were married on Aug. 30.



To submit your Class Note for the next issue of *Drexel Magazine*, email Lara Geragi at lec36@drexel.edu.

1990s

Andrea Ames, MS technical and science communication '90, was honored by The Society for Technical Communication at its annual conference in Phoenix. Ames received the first-ever Intercom Award for Outstanding Magazine Article for her co-authored article, "Telling the Right Story: Proving the Business Value of Content," in the May 2013 issue of *Intercom*, STC's monthly magazine.

Jennifer Carrigan Laning, MS civil engineering '98, was promoted to associate vice president of Pennoni Associates, an award-winning engineering, design and consulting firm.

Robert E. Caulfield, BS accounting '90, chief operating officer and chief financial officer of Jefferson's Ferry Lifecare Retirement Community, was recognized as CFO of the Year in the Not-for-Profit category by *Long Island Business News*.



Donn R. DeBoard, MS technical and science communication '91, was named a fellow of The Society for Technical Communication, one of the highest ranks that the society confers upon a member.

Christine M. Fiori, BS civil engineering '92, MS '94, MS engineering geology '97, PhD civil engineering '97, professor of practice and associate director of the Myers-Lawson School of Construction at Virginia Tech, was named a Preston and Catherine White Fellow by the Virginia Tech Board of Visitors.

David J. Glass, PhD law and psychology '97, a family law, mental health law and probate litigator in Los Angeles, moved his practice to the law firm of Enenstein, Ribakoff, LaVina and Pham where he will be a partner/shareholder.

Joni L. Henderson, MS arts administration '92, was named a member of the NEA Foundation's board of directors as vice president of corporate partnerships at Discovery Education.

Alexander Lawrence, BS electrical engineering '92, was appointed to the State Bar of California Examining Committee. Lawrence has been assistant dean of MBA admissions and financial aid at the UCLA Anderson School of Management since 2012.

Jeffrey S. MacKay, BS civil engineering '99, MS '01, was named a 2014 40 Under 40 Award recipient by the *Central Penn Business Journal*.

John Natsis, BA architecture '96, of Johnsrud Architects, was promoted to principal.



Jennifer Wiser Lipski, BS technical and science communications '91, started a project called 8 Minutes of Awesome, a series of brief interviews where people speak to their passion, focus, journey and the message that others have to hear.

2000s

Yanatha Desouvre, BS business administration '01, authored his fifth book, "Savor the Moments: Inspired by True Stories."

Anthony M. Faragasso, PBC epidemiology and biostatistics '09, was hired as director, pharmacovigilance and consumer affairs by the pharmaceutical supplier Perrigo Co.

Nathan T. Fochtman, BS communication '08, was named a 2014 40 Under 40 Award recipient by the *Central Penn Business Journal*.

Scott C. Millhouse, BS mechanical engineering '04, was promoted to the rank of lieutenant commander in the U.S. Navy. He is currently serving as engineering advisor with Naval Forces Division, United States Military Training Mission.



R. Touhey Myer, BS mechanical engineering '06, an attorney at Caesar, Rivise, Bernstein, Cohen & Pokotilow, co-presented to more than 70 attorneys at *The Legal Intelligencer's* in-house CLE Program.

Thomas M. Raia, BS information systems '01, accepted a position at Thermo Fisher Scientific in Pittsburgh, Pennsylvania, as a mobile business analyst.

Beth Rapczynski Archer, BS communications '03, former vice president of Anne Klein Communications Group, has moved into a senior counselor position with the firm.

Thomas J. Raymond Jr., MBA business administration '05, authored his first book, "The Eloquent Investor."

Cameron R. Wicks, BS film and video production '06, joined Cenero, an audio visual solutions provider in Malvern, Pennsylvania, as an account representative in Cenero's Show Solutions division, serving meetings and events. He was also elected director of Membership Retention for the Philadelphia Area Chapter of Meeting Professionals International.

2010s

Ayush Gupta, BS information technology '12, accepted a position as a software engineer at Bally Technologies in Las Vegas.

Jory A. Hadsell, EdD educational leadership and management '12, joined the California Community Colleges Online Education Initiative as the chief academic affairs officer. The CCC OEI seeks to increase student access to high-demand, transfer-level courses by creating a statewide online infrastructure, support services, course exchange and basic skills support.



Chloe Yeung, BS business administration '12, is the digital marketing specialist for Delphic Digital, an agency specializing in interactive strategy, digital marketing, web development, web design and analytics.

BABY DRAGONS

Antonios Boulos Jr., BS electrical engineering '05, MS '05 and Pamela Panos Boulos, BS materials engineering '07, MS '07, welcomed a son, Lucas Antonios, on April 16.

Justin Caruso, BS computer engineering '05, BS electrical engineering '05, and April Caruso welcomed a daughter, Laura Sophia, on Feb. 24.

Yanatha Desouvre, BS business administration '01, and Amy Desouvre, welcomed a daughter, Jolie Beatrice Andrele, on Aug. 22.

FRIENDS WE'LL MISS

1930s

Wilfred Bereton Shaw, D/C secretarial '33
Marjorie Holstein Lindauer, D/C secretarial '38
William C. Joram Jr., BS mechanical engineering '34
Ellis E. Lapin, BS mechanical engineering '39
Charles Spahr Leedecker, D/C library science '37
Everett C. Post, BS mechanical engineering '39
Paul M. Stewart, BS mechanical engineering '35
Marian Urbanus Schonder, P-S/C nursing '39

1940s

Julia Benner Westley, BS home economics '45
Howard F. Bleakney, BS business administration '48
Mary C. Cargill, D/C library science '47
Walter Chroniak, MD medicine '47
Marjorie Conrad-Peattee, MD medicine '46
John E. Copeland, BS mechanical engineering '48
Leo R. Daiuta, BS civil engineering '44
G. Louise Brown Hall, D/C library science '45
Eleanor Burghner Golden, D/C library science '46
Irene Chipman Hewitt, BS home economics '42
Jeanne Cramblet Dwan, BS home economics '40
H. Kenneth Dicely, BS chemical engineering '43
Robert A. Donato, MD medicine '48
Irving A. Faye, BS electrical engineering '49
Caroline Fitz John, D/C library science '42
Gerard W. Geiger, BS business administration '48
Pyrrha Gladys Grodman, MD medicine '48
S. Mary T. Gruber, PS-C nursing '45
Ann Halas Ezekiel, BS secretarial '43
Mary Virginia Howse Miller, BS home economics '45
Dean S. Hoover, MD medicine '48
Robert L. James, D/C chemical engineering '49
William J. Keighley, D/C chemical engineering '49, BS '53
Junius S. Koiner Jr., BS chemical engineering '47
Rosemary Kuzner, RN nursing '49
Robert D. Lamborn, BS business administration '47
Paul T. Leibovitz, BS electrical engineering '47
Marion E. MacWilliams, Commerce Teacher '43
Bette Mathias Walton, RN nursing '46
Jane McVey Campbell, BS home economics '49, MS '58
Margaret McVicker Flick, D/C secretarial '43
Hyman B. Natkin, BS electrical engineering '49
Clara Opie Pickel, RN nursing '47
Thomas W. Pryor, BS business administration '48
Geraldine Roof James, MS library science '47
Joseph S. Seiberlich, BS electrical engineering '48
Richard M. Shuffstall, MD medicine '48
Anita Siegel Plotkin, BS retail management '42
Edith Thomas Edmunds, BS home economics '41
Rita Valecce, AS medical lab technician '41
Izora Whiskman Bowermaster, D/C library science '46
Dorothy Ziemer Norton, BS home economics '49

1950s

Carl O. Albrecht, BS mechanical engineering '54, MS aerospace engineering '57
Robert C. Altland, MD medicine '58
Rafael E. Arsuaga, MD medicine '45
David G. Ballentine, BS electrical engineering '59, MS electrical engineering '63
Catherine Black Miller, BS home economics '56
Watson M. Bitterlich, D/C electrical engineering '55, BS '58
Henry I. Boreen, BS electrical engineering '56, MS '58, Hon. '02
Richmond M. Bowen, D/C mechanical engineering '59
Edythe Buseck Holmes, BS retail management '52
Joseph C. Clarkson, BS electrical engineering '54

Susanne Conrow Bingham, BS home economics '51
Josephine A. Currie, D/C retail management '53
Alexander J. Diegidio, D/C electrical engineering '52, BS '55
William H. Dresher, BS chemical engineering '53
Norman H. Eckbold, MD medicine '54
Eugene T. Fleming Jr., BS civil engineering '51
James K. Fugate, Sr., MD medicine '56
Vincent J. Giafaglione, BS business administration '55
Fruma Winer Ginsburgh, MD medicine '51
Robert V. Gortner, BS commerce and engineering '52, MBA business administration '62
Suzanne Harrington Graham, RN nursing '58
Edwin F. Hussa Jr., D/C mechanical engineering '52, BS '55
Betty King Unger, BS home economics '56
Robert S. Klein, BS commerce and engineering '51
Robert H. McKinney Jr., BS civil engineering '51
Kenneth J. Miller, D/C electrical engineering '52
Mary E. Myers, MD medicine '52
Edgar W. Myers, BS business administration '51
Mervin H. Needell, MD medicine '50
Joseph M. Orlando, BS business teacher education '51
Vytautas A. Ramunas, BS mechanical engineering '57
Alice Rowett Pell, RN nursing '57
Francis E. Sajeski, D/C electrical engineering '59, BS '61
John L. Sbarbaro, MD medicine '55
Gilbert H. Showalter, D/C civil engineering '54, BS '55
Clyde K. Smith, BS business administration '51
George Speck, BS electrical engineering '55
John E. Stephan, MBA business administration '55
Donald G. Stewart, BS commerce and engineering '53
Geraldine Street Waskow, RN nursing '56
Frederick H. Stier Jr., BS business administration '55
James H. Waltz, D/C mechanical engineering '54, BS '55
Joseph F. Weber, BS chemical engineering '55
Joseph J. Welker, D/C electrical engineering '59, BS '61
Barbara Welsh White, BS home economics '52
Charles S. Williams, MD medicine '50
Gwynedd Wood Wade, MBA business administration '52
George P. Wormeck, AS mechanical engineering '50

1960s

Joel H. Bacher, MS mechanical engineering '68
Charles D. Birkhahn, BS electrical engineering '64
Nancy J. Bowles, MS library science '65
Joseph D. Carapico, BS mechanical engineering '62
George Chandler Jr., BS electrical engineering '67
Robert Edward Clark, BS metallurgical engineering '60
William J. Craig, MBA business administration '67
Lt. Col. Richard H. Duff, BS chemistry '68
Norman J. Friedman, BS chemistry '66
Edward S. Gallmeyer, D/C electrical engineering '60
Judy Gottfried Spitzer, PhD microbiology and immunology '63
Lawrence P. Gunshol, MS mechanical engineering '65
Bernadette Herbst Loeb, MD medicine '67
Richard S. Hodel, BS electrical engineering '63
Mary Jones Maier, BS business administration '67, MS information systems '92
Sondra Lee Jones Cossaboon, RN nursing '61
Walter Julia, MD medicine '63
Richard L. Kamenar, BS civil engineering '67
Joel D. Klein, MD medicine '68
Philip G. Lion, BS electrical engineering '60
George H. Lubeck, BS business administration '62
Albert Lusen, BS business administration '64, MBA '69
Adele Kuc Miksis, BS business for women '69
Robert G. Mahorter Jr., MS mechanical engineering '66
Walter D. Masterton, BS physics and atmospheric science '63
M. Eileen Matthews, BS home economics '60
Paul E. Matthews Jr., BS chemical engineering '62, MS engineering management '69

Richard J. McManus, BS business administration '65
Ralph P. Mersiowsky, BS commerce teacher '65
Judith Miller Feller, D/C library science '63
Donald E. Murphy, D/C mechanical engineering '66, BS '71
Charbil Norrett Smith, RN nursing '60
Edward M. Nusbickel Jr., BS electrical engineering '62
Edward P. Olewnik, BS electrical engineering '66
Joseph F. Schnell, BS mechanical engineering '68
Eleanore Springer Serinsky, MS library science '66
Clyde V. Stahle Jr., MS engineering management '66
Edmund F. Sweeney, MS electrical engineering '68
Ellen E. Thompson Hanna, RN nursing '63
Raymond J. Twisdorn, BS metallurgical engineering '62
Edmund B. Weis Jr., MS biomedical engineering and science '62
Martha Williams McDonald, MD medicine '63

1970s

Gerald F. Adams, BS electrical engineering '74
John R. Burns, BS electrical engineering '78
Martin Lewis Chivis, BS operations management '76
Michael C. Didonato, BS business administration '71
Richard L. Eppinger, BS business administration '73
David J. Fedor, MBA business administration '78
Dennis C. Grady, BS accounting '75
Ann Jordan Laeuchli, MS library science '73
Mary Ann Kelly, MS library science '75
Michele O. Krahn, BS business for women '72
Michael L. Levine, MHS physician assistant '76
Walter P. Marshall, BS business administration '71
Lorraine G. Picker, MS library science '72
Peter W. Schaul, BS chemical engineering '72, MS '75
Charles L. Seeburger, MS library science '72
James D. Sleeper Jr., MBA business administration '79
Glen Allen Smith, BS biological science '71, MS environmental science '73
Richard W. Soper, BS mathematics '71
Harriet C. Stearns, MS library science '70
Robert W. Taggart, BS electrical engineering '76
Robert E. Walder, BS mechanical engineering '76

1980s

Dudley C. Backup, MD medicine '80
Charlene Lucille Bembenek, BS electrical engineering '85, MS electrical engineering '90
Steven Charles Brin, MD medicine '80
Kevin DeRocili, BS construction management '88, MS finance '92
David Brian Ingersoll, BS accounting '83
Colleen Hutchinson Caton, AS nursing '87
Robert E. Lansinger, MS library science '83
Edward M. Podgorski Jr., MS biological science '80
Frederick M. Reed Jr., BS commerce and engineering '84
Peter A. Robson, MD medicine '87
Ann Salitsky, MS microbiology and immunology '84
Joan Leslie Schotte, BS dietetics '89

1990s

Jerome Dorsey, BS physician assistant '91
Raymond E. Florence, AS nursing '98
Laura A. Menditto, MPH public health '99
Gregory R. Parker, MBA business administration '98

2000s

Felicia M. Brown, MHS physician assistant '07
Dante Bucci, BS information systems '03
Uttam Ashwin Patel, BS information systems '05

2010s

Andrew T. Messina, MS information systems '11

Are You Ready for Alumni Weekend?

Attendees this year will share special new experiences — a rare look inside Drexel's costume collection for one — as well as old favorites. BY LARA GERAGI

The Drexel University Alumni Association isn't the only group celebrating a 50-year anniversary in 2015!

All members of the Class of 1965 are invited to come back to campus on Friday, May 1, for a special celebration of their 50-year reunion at Alumni Weekend.

The day will be filled with special events and opportunities for Golden Dragons to reconnect with old classmates, make new friends, and visit Drexel's ever-changing campus.

"I've had such a great time helping to plan our class reunion," says Fred Crotchfelt, BS '65, MBA '66, co-chair of the Golden Dragon Reunion Committee. "I can't wait to see it all come together in May. We're expecting a great group back on campus."

Alumni will start the day with a welcome breakfast in a familiar campus spot, the Main Building Great Court, where they'll see familiar faces and catch up on the past 50 years over a continental breakfast featuring mimosas and a bloody mary bar.

The Class of 1965 will be officially inducted into the Golden Dragon Society as class members are presented with society pins at a special ceremony. No need to bring a camera, photos of the induction ceremony, along with a group class photo on the Main Building staircase, will be sent to everyone in the weeks following Alumni Weekend.

Following the induction, the Class of 1965 will join other members of the Golden Dragon Society (graduates from the classes of 1964 and prior), for a three-course Golden Dragon Society Luncheon. Graduates will spend the afternoon visiting with old friends and reminiscing about their days as students.

The Alumni Association will finish the afternoon with a trolley tour of campus, led by current students, which will take alumni to some of the campus hotspots of yesterday and today. For some Golden Dragons, Drexel will be almost unrecognizable as it's been more than 50 years since they've been to campus.



ABOVE: Alumni are transported to Philadelphia's Chinatown neighborhood at Drexel After Dark 2014.

LEFT: Ed DiPolvere, BS '58, and his wife, Lucia, dance the night away during Alumni Weekend.



Several new events are planned for Friday afternoon and evening, including an open house at the Robert and Penny Fox Historic Costume Collection, an ROTC demonstration, a reception at the Gershon Benjamin exhibit

in the A.J. Drexel Picture Gallery, and a LeBow Hall of Fame event honoring former faculty.

Guests can look forward to one of the most popular annual events, the Alumni Wine Pairing Dinner in the Academic Bistro on Friday evening. This multi-course dinner, prepared by Drexel culinary students, will sell out fast.

"This year we wanted to do something special just for our young alumni on Friday night," says Cindy Leesman, BS '83, assistant vice president of alumni relations. "So we'll be hosting a Young Alumni Night Festival in the new Raymond G. Perelman Plaza, complete with music, great food, craft beers, and lots of space to hang out and have a great time."

Saturday will be packed with events for alumni and their families such as brunches, tours and open houses hosted by some of Drexel's colleges and schools.

On Saturday afternoon, the Alumni Association will continue

to celebrate reunions with a reception and Silver Dragon Society Induction Ceremony for the Class of 1990. Campus will be buzzing with other reunions on Saturday as well for fraternity and sorority alumni, Drexel couples, the Drexel Veterans Alumni Network and the Drexel University Black Alumni Council, just to name a few.

The weekend will close in the same place it began, with the Alumni Association's signature event, Drexel After Dark, in the Main Building Great Court.

"Last year we held Drexel After Dark for the first time and we were amazed by how much positive feedback we received," says Ira Taffer, BS '79, PhD '83, chair of the Alumni Association Board

of Governors. "We're already looking forward to an even bigger crowd in 2015 as we celebrate both Alumni Weekend and the 50th anniversary of the Alumni Association."

This year, Drexel After Dark will celebrate Drexel through the decades with themed floors and areas throughout the Main Building. From vintage candies and desserts, to '70s lava lamps, black-and-white films and '80s music — the entire evening will celebrate the evolving landscape of the University that we all know and love.

For more information about Alumni Weekend, and to register, visit drexel.edu/alumni. [D]

Alumni Weekend Events

Friday, May 1

Class of 1965 Golden Dragon Breakfast and Induction Ceremony
Great Court, Main Building
9 a.m.

Golden Dragon Society Luncheon
Behrakis Grand Hall, Creese Student Center
12:30 p.m.

Young Alumni Night Festival
Raymond G. Perelman Plaza
6 p.m.

Alumni Wine Pairing Dinner
Academic Bistro, Peck Problem Solving and Research Building
6:30 p.m.

Saturday, May 2

College and School Open Houses, Brunches and Tours
Various Campus Locations,
beginning at 11 a.m.

Class of 1990 Silver Dragon Reception and Induction Ceremony
Papadakis Integrated Sciences Building
4 p.m.

Alumni Association Awards Ceremony
Peck Alumni Center
5 p.m.

Drexel After Dark
Main Building
6 p.m.

BE A PART OF SOMETHING BIG IN 2015

**THE ALUMNI ASSOCIATION TURNED 50 IN 2015
AND WE'LL BE CELEBRATING ALL YEAR LONG!
JOIN US FOR THE 50TH ANNIVERSARY FUN.**

Make sure your contact information is up to date with the Alumni Association so you won't miss out on any of the exciting events, giveaways or celebrations that we have planned for our golden anniversary.

Update your home, business and email addresses by calling the Office of Alumni Relations at **1.888.DU.GRADS** or visit drexel.edu/alumni to update your profile in the Online Alumni Directory.

IT'S THAT SIMPLE.

We're giving away **32 GB iPad mini 2's** to three alumni between now and March 31. Just make sure your home or email address (or both!) is up to date with the Alumni Association to be eligible!

A “Brazen” New Way for Alumni to Connect

A new series of virtual networking hours makes it possible for alumni to engage with fellow graduates, faculty, students and potential employers from anywhere in the world. BY LARA GERAGI

A new partnership between Drexel University Alumni Association and Brazen Careerist will provide graduates with an entirely new way to connect with one another, network and advance professionally. Brazen Careerist is an innovative communications platform offered through Alumni Career Services that organizes online networking events for Drexel alumni.

“Our alumni community continues to grow around the world, and we simply can’t host events in every city where they are located,” says Lauren Villanueva, BA ’04, MS ’09, director of Alumni Career Services and Lifelong Learning in the Office of Alumni Relations. “We have already implemented some initiatives like the Global Night of Networking Virtual Site and online career services workshops to mitigate that barrier, and now Brazen will take us one step further to provide the rich networking component that alumni are looking for.”

The Alumni Association can now facilitate online speed networking events through Brazen, allowing alumni to connect in meaningful ways to share career advice, job opportunities or simply build their personal and professional networks.

The first step to utilizing this exciting new platform is to understand how it works. So, exactly what is a Brazen event?

Brazen events provide real time, one-on-one engagement, allowing alumni to network online with fellow grads, as well

as students, faculty, career counselors and potential employers, on a global scale. It offers all of the benefits of an in-person networking event without the common barriers that Drexel alumni struggle with: time, cost and geographic location.

This cloud-based, mobile-ready, interactive event platform connects alumni in text-based,



timed conversations from wherever they are.

In addition to hosting these conversations, Brazen allows alumni to rate their connections and take notes for future follow up with those that they had the strongest connections with or want to collaborate with further. They can view and download résumés and LinkedIn profiles of individuals with whom they connect, view conversation transcripts, and connect to the platform seamlessly through LinkedIn.

“Because the platform is online, alumni can participate from wherever is most convenient — at home, at the office, while on the road for business — through a computer or mobile device,” says Villanueva. “The events will be fast-paced, with participants having the opportunity to engage in eight-minute chats with one another.”

Upon signing in to a live event, participants will select an industry cluster, or a specific professional service they are in search of; for example, résumé critique. This ensures that their time at the event is well spent as they are able to interact with others who share their interests, career paths and experiences.

The Alumni Association hosted its first

Brazen event on Thursday, Jan. 29. It was a general networking event open to all alumni in which graduates had the opportunity share experiences with one another, exchange career advice and build their professional networks. To start, alumni were divided into six different industry-based groups, however they had the freedom to

visit more than one industry cluster over the course of the hour-long event.

The Alumni Association plans to offer at least one event per month. “Some of these will be general networking events in nature, like the one we did in January, while others will be more specific,” says Villanueva. “For example, we will focus on connecting alumni who work in the same industries, live in the same regions of the country, or

who have similar interests, such as those who work abroad.”

These are not limited to the alumni-to-alumni network, but can also be used to facilitate connections between alumni and current students. Especially as graduation draws near, students find the opportunity to network with Drexel graduates extremely valuable as they are looking for job opportunities or real-world advice.

As well, future events will focus on job search skills and will feature experts from the Drexel community including alumni, faculty and staff. These experts will facilitate sessions such as résumé critiques, mock interviews and LinkedIn profile reviews to assist in job search or career transition.

“As always, we are very interested to know what our alumni think of this new career-development resource,” says Villanueva. “Once they’ve had a chance to experience it, I encourage alumni to share their feedback, as well as ideas for future Brazen event topics.”

Questions, feedback, and suggestions for future events can be directed to Lauren Villanueva in the Office of Alumni Relations at lmr24@drexel.edu or 1.888.DU.GRADS. **[D]**

Still curious about what one of these events looks like? Check out this demo video that will walk you through the entire process of registering, logging in and making the most of your time: vimeo.com/111032374.

Party Through the Decades

This year marks the 50th anniversary of the Alumni Association, which can only mean one thing. It's time to celebrate! BY LARA GERAGI



The Alumni Association has an entire year of festivities planned to commemorate this golden anniversary, including special events, giveaways, videos and contests. Plus, alumni can take a walk down memory lane as the association highlights Drexel through the decades on Facebook, Twitter and Instagram.

Every two months the Alumni Association will celebrate a different decade, starting with the 1960s in January and February and ending with the 2010s in November and December. Participate on social media for playlists of top songs, photos and facts about popular Drexel fashion, a countdown of milestone university moments and more.

Alumni can also look forward to a video series featuring the adventures of Mario the Dragon from the 1960s and Mario the Dragon of today. Drexel's two beloved mascots will discover together the many ways the student experience at Drexel has changed over the past 50 years.

The Alumni Association released a 2015 edition 50th anniversary logo to mark this special occasion. The year will be filled with plenty of opportunities — like “50 Days of Giveaways,” raffles and online contests — for grads to get new Alumni Association swag to show off their blue and gold pride.

Alumni can update their contact information with the Alumni Association by calling the Office of Alumni Relations at 1.888.DU.GRADS or visiting the Online Alumni Directory. It's that simple to stay in the loop and be part of the anniversary fun!

For all the information on the 50th anniversary celebration in 2015, visit drexel.edu/alumni. [D]

50th Anniversary Events

MARCH

3/6 to 3/9: Men's Basketball CAA Tournament, Baltimore

3/12 to 3/15: Women's Basketball CAA Tournament, Upper Marlboro, Md.

3/19: Alumni Night at the Franklin Institute: The Brain, Philadelphia

3/21: Alumni Day at Phillies Spring Training, Clearwater, Fla.

APRIL

4/10: Young Alumni Sleepover at the Academy of Natural Sciences, Philadelphia. Stay tuned for details on the spring community service project with the Community Alumni Network at Drexel University (CAN DU) in Philadelphia this month!

MAY

5/1 and 5/2: Alumni Weekend, Philadelphia. Stay tuned for details on an alumni reception and campus master plan update on the West Coast this month!

JUNE

6/6: Alumni Day at the Zoo, Philadelphia

6/12 and 6/13: Peck Center Commencement Open Houses, Philadelphia

The Alumni Association might just be in your area this month welcoming incoming students and their families to the Drexel community!

JULY

7/18: Pageant of the Masters, Laguna Beach, Calif. Stay tuned for details on food tours and faculty speaking tours taking place around the country.

AUGUST

Stay tuned for details on food tours and faculty speaking tours taking place around the country.

SEPTEMBER

9/26: CAN DU Fall Community Service Project, Philadelphia and various sites nationwide.

OCTOBER

10/7: 5th Annual Drexel Alumni Global Night of Networking, various cities and online.

NOVEMBER

Stay tuned for details on an Alumni Association/Drexel Fund Reception this month!

DECEMBER

12/5: Alumni Association Gala, Philadelphia

12/17: Alumni Holiday Turkey Project, Philadelphia.



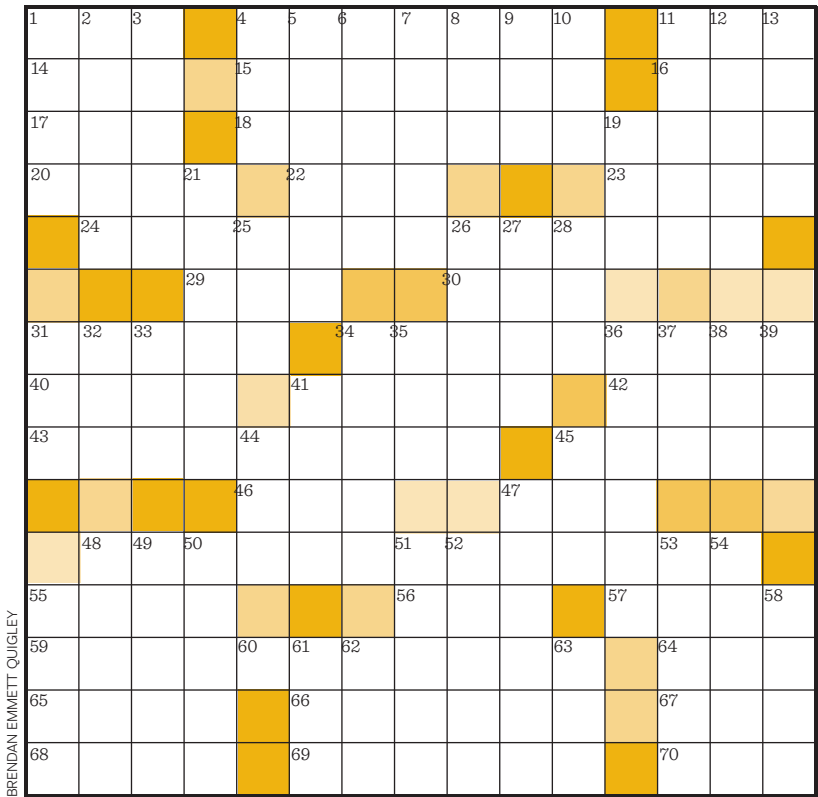
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THE BACK PAGE PUZZLE

Paleontology can be a lot like piecing together a puzzle. This issue's puzzle focuses on the mighty *Dreadnoughtus*, the gargantuan titanosaur discovered by Drexel scientists, who are gleaning endless data about this great plant-eating giant from the 145 bones they dug up in Patagonia, Argentina. Can you imagine encountering a beast with a body the size of your house?

ACROSS

- 1 Streaming alternatives
- 4 Amount take from a paycheck, colloquially
- 11 Sunblock stat
- 14 Pastels and such
- 15 Apply, as eye black
- 16 Laugh syllable
- 17 It's all wet
- 18 Drexel professor who discovered the 24-Across
- 20 Part of the 24-Across that stretched nearly 30 feet long
- 22 Part of NIMBY
- 23 Grace ender
- 24 Theme of this puzzle
- 29 Scale-singer's notes
- 30 Trigger men?
- 31 Off-the-wall shot
- 34 Argentine region where the 24-Across was discovered
- 40 Veal cordon ____
- 41 Slugger "Big Papi"
- 42 Oddball of a sort
- 43 Number of tons the 24-Across weighed
- 45 Social appointments
- 46 Turn down, as lights
- 47 South of Spain
- 48 Rough size, metaphorically, of the 24-Across
- 55 Clean's partner in weightlifting
- 56 Garden aid
- 57 Part of the 24-Across that stretched nearly 37 feet long
- 59 Drexel undergraduate who helped 18-Across in the dig of 24-Across
- 64 Sooner than
- 65 Land in "la mer"
- 66 1960 Bobby Rydell hit
- 67 "Dee-lish!"
- 68 Dropped drug
- 69 Consulate's cousin
- 70 Symbol of royalty in ancient Egypt



DOWN

- 1 Splint alternative
- 2 Extreme uneasiness
- 3 Elevating device
- 4 "Ba-a-ad!"
- 5 They're made when making up
- 6 Radio tube gas
- 7 Largest city in Md.
- 8 "The Stepford Wives" author Levin
- 9 It has a lot of chapters: Abbr.
- 10 Bowie's collaborator on the Berlin Trilogy
- 11 Big theme park star
- 12 Trims back on
- 13 Humorist Lebowitz
- 19 Cistern
- 21 Expand, as a waistband
- 25 Glasses may improve it
- 26 Loosen a skate
- 27 Austrian city
- 28 Vicious old woman
- 31 Its eye is on TV
- 32 He dethroned Foreman
- 33 Spot playmate
- 34 Carnera of boxing
- 35 Off-the-road getabout
- 36 Enjoying a can't-lose streak
- 37 ____ sales
- 38 Make mad
- 39 College sports execs
- 41 The wonder ____ all
- 44 Gridiron accumulation: Abbr.
- 45 Jack and Jill, e.g.
- 47 Glossy surfaces
- 48 Reveals
- 49 Contorted
- 50 Gives brief approval
- 51 Spinoff of "The Mary Tyler Moore Show"
- 52 Fluctuates
- 53 "Hasta la vista"
- 54 Hosiery shades
- 55 The clink
- 58 Dole's running mate, in 1996
- 60 Be in the red
- 61 Pilfer, old-style
- 62 Phillies org.
- 63 King of Spain

Think you've got all the answers?

If so, send your completed puzzle to the address at right to be entered into a drawing to win a great Drexel prize. And congratulations to the winner of our fall edition contest: Bruce Burgess '71 of Salem, New Hampshire.

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SEE THE WORLD WITH FELLOW DRAGONS



Alaska Passages: Seattle to Seattle



Radiant Rhythms: Buenos Aires to Rio de Janeiro



Machu Picchu, Cusco & the Sacred Valley

Funchal, Portugal

As part of its commitment to lifelong learning, the Drexel University Alumni Association offers alumni travel programs which combine educational forums and excursions to places of historical and cultural interest, with the opportunity to enjoy unplanned experiences and meet local people. Join fellow alumni in wonderful new destinations each year. You will be offered the highest quality travel experience through the Alumni Association's partnerships with experienced travel providers.

2015 TRIPS

Greece: Athens & The Island of Poros
April 22–May 2

Burgundy & Provence River Cruise
May 3–14

The Great Parks of California
May 23–31

Amalfi: The Divine Coast
June 2–10

Alaska Passages: Seattle to Seattle
July 14–24

Jewels of the Aegean & Holy Lands: Istanbul to Istanbul
Sept. 16–27

Sicily
Sept. 18–27

Spain: Valencia & Barcelona
October 12–21

Machu Picchu, Cusco & the Sacred Valley
November 1–6

Radiant Rhythms: Buenos Aires to Rio de Janeiro
Feb. 27–Mar. 11

Essence of the Atlantic: New York to Lisbon
May 14–28

2016 TRIPS